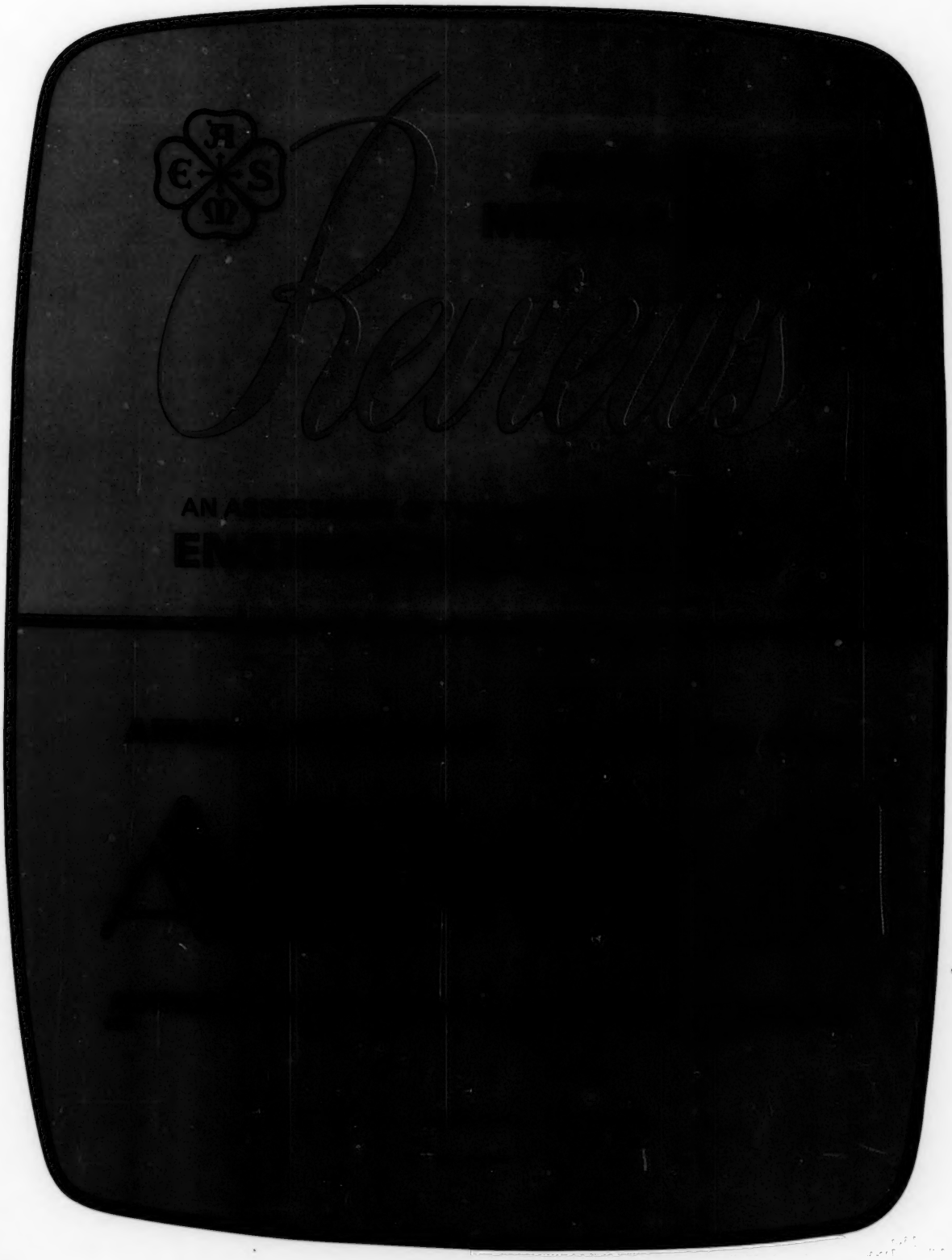


AMR

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ANNUAL INDEX

VOL. 35, 1982

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APPLIED MECHANICS Reviews

ANNUAL INDEX ISSUE **VOLUME 35, 1982**

AKWAS

AUTHORS and KEY WORDS in ALPHABETICAL SEQUENCE

TABLE OF CONTENTS

GUIDE TO AKWAS v

LIST OF INDEX TERMS ix

AKWAS (AUTHOR AND KEY WORDS IN ALPHA SEQUENCE) 1

LIST OF SUBJECT MAIN HEADINGS 592

LIST OF JOURNALS SCANNED 593

LIST OF AMR REVIEWERS 603

TRANSLITERATION CHART 610

GUIDE TO MONTHLY ENTRIES

JANUARY	1-1048	JULY	6034-7128
FEBRUARY	1049-1964	AUGUST	7129-8083
MARCH	1965-3073	SEPTEMBER	8084-9072
APRIL	3074-4120	OCTOBER	9073-9992
MAY	4121-4923	NOVEMBER	9993-10907
JUNE	4924-6033	DECEMBER	10908-12103

APPLIED MECHANICS REVIEWS, VOL. 35, 1982
ANNUAL INDEX

GUIDE TO AKWAS

(AUTHOR AND KEY WORDS IN ALPHA SEQUENCE)

A. Introduction

AKWAS, which provides subject and author access to AMR, is loosely based on indexing principles used for many years by Excerpta Medica, Amsterdam, one of the world's largest producers of printed Indexes. It also incorporates some features of WADEX (Word & Author InDEX) an experimental index of AMR.

Each review in this volume was indexed by a subject specialist. The indexing record was put into machine readable form and edited. Specially prepared computer programs were used to sort the entries and to generate the printed index through a Hendrix-Compugraphic typesetting system.

B. Vocabulary

The terms used in indexing are drawn from a controlled vocabulary, the List of Index Terms (LIT), prepared by AMR. This list is partially reproduced in the present volume. Terms not used for the 1981 index are not listed. Where the LIT did not contain all terms needed to fully describe a particular publication, the indexer could also use other terms. These additional free terms become candidates for inclusion in next year's LIT. The list also contains "see" and "see also" references.

In order to bring related topics together, some terms appear in an inverted form, e.g., "shells (cylindrical)" rather than "cylindrical shells". Certain LIT terms have been designated as "forbidden words" and are preceded by an asterisk. These are mostly non-specific terms that tend to occur rather frequently, such as "numerical results" or "theory". Forbidden words may also be terms which though not used frequently, would not be considered as search terms. The forbidden words do not generate subject entries in AKWAS, but appear as descriptive modifiers.

C. Description of Entry and Modifiers

The indexing terms may be single or composite. As many terms are used as are needed to describe a publication adequately. For each entry, all the LIT terms and free terms are arranged in a single alphabetical sequence followed by author(s) and item numbers as in the following example:

cardiovascular system, aortic valve, cavities, laminar flow, numerical methods, pipe flow, unsteady flow, valves, Gillani (N.V.), Swanson (W.M.), 3100

The string of subject terms in each group serves as a kind of "mini abstract" showing the major subject dealt with in the publication. The publication is also listed under several other entries, each additional entry being extracted from the above modifier group. The AKWAS is an alphabetically "rotated" index because most of the terms used to index a particular publication will be rotated alphabetically into the entry term position, the other terms appearing as modifiers in strict alphabetical sequence. Thus, the string of terms used in the previous example will generate the following additional subject entries:

cavities, aortic valve, cardiovascular system, laminar flow, numerical methods, pipe flow, unsteady flow, valves, Gillani (N.V.), Swanson (W.M.), 3100
Gillani (N.V.), aortic valve, cardiovascular system, cavities, laminar flow, numerical methods, pipe flow, unsteady flow, valves, Swanson (W.M.), 3100
laminar flow, aortic valve, cardiovascular system, cavities, numerical methods, pipe flow, unsteady flow, valves, Gillani (N.V.), Swanson (W.M.), 3100
Swanson (W.M.), see Gillani (N.V.), 3100
unsteady flow, aortic valve, cardiovascular system, cavities, laminar flow, numerical methods, pipe flow, valves, Gillani (N.V.), Swanson (W.M.), 3100
valves, aortic valve, cardiovascular system, cavities, laminar flow, numerical methods, pipe flow, unsteady flow, Gillani (N.V.), Swanson (W.M.), 3100

AKWAS is therefore a multi-access index since a publication indexed under multiple terms could conceivably appear under any one of them. There are two types of terms, however, that are never rotated into the entry term position—the free terms and the forbidden words. They are used only as modifiers and never generate their own entries. In the above example, the terms "numerical methods" and "pipe flow" are forbidden terms and "aortic valve" is a free term; thus, they do not appear as entries.

D. Formatting

1. Alphabetization Convention

The following convention was used: Space, parenthesis, period, hyphen, and apostrophe represent hypothetical letters preceding "a" in the alphabet; any other punctuation marks count as letters following the letter "z" in the alphabet.

2. Typography and Punctuation

A number of type faces have been employed in AKWAS to make it easier to use. All entry terms appear in bold face and all modifiers in a medium type font. Sanserif is used for names of authors and serif for subject terms. Item numbers appear in italics. (There is a total of five type fonts.)

Punctuation marks are avoided wherever possible, and capitalization is not used in subject terms; thus, Runge-Kutta Method appears as "runge-kutta method".

3. Multiple Entries

Publications listed under a single entry term are arranged in numerical sequence by their AMR review numbers. This is intended to aid the systematic searching of the annual volume of AMR and to reduce the need for the user to jump backwards and forwards from one monthly issue to another which would have been the case had an alphabetical sequencing by the first modifier been used.

Entry terms are not repeated. Instead, "bullets" are used in place of the entry term in the second and subsequent index entries, as in the example.

cardiovascular system, blood, cellular flow, Monti (R.), 1650
- cardiac output measurement, respiratory system, Homer (L.D.), Denysyk (B.), 1653
- aortic valve, cavities, laminar flow, numerical methods, pipe flow, unsteady flow, valves, Gillani (N.V.), Swanson (W.M.), 3100
- --- 4434
- --- 6282

4. Running Heads

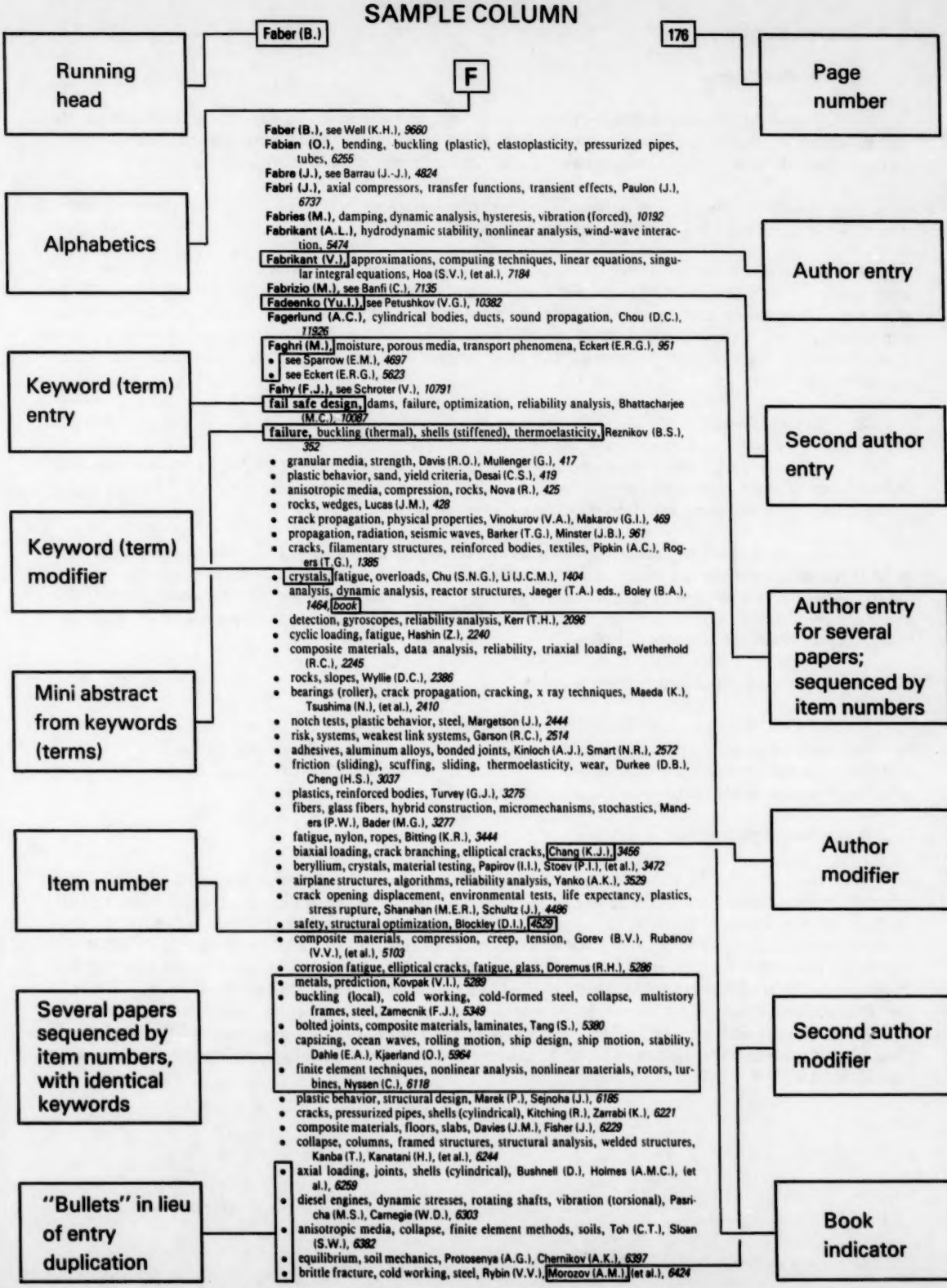
The first and last entry on a page is indicated with "running heads" on the upper left and right side of the page. If the first item on a page is "bulleted" then the left-hand running head is the last entry on the previous page. On those pages where only "bullets" appear (heavily used entry terms), the last entry on the previous page will be given on both left and right.

5. Sample Page

The figure indicates a sample column of AKWAS. The "legend" on the left-hand and right-hand side clarifies the elements of AKWAS.

AKWAS

SAMPLE COLUMN



E. Search Strategy

1. Author Search

Names of authors, like subject entries, are listed alphabetically. In papers with two authors, the second author is referred to the first author with the word "see," name of first author and the item number. In papers with three or more authors, "et al." is used for the third and consecutive authors.

Authors using unlike initials in different publications are listed as in the journals. Thus, Jones (A.), and Jones (A.B.) might be the same individual.

Some problems can occur in the searching of Russian names in AKWAS due to different transliteration systems. AMR uses the ANSI standard for the transliteration of cyrillic names. This might be different from the transliteration used by journals that are translated cover-to-cover or by the Russian author whose paper appears in a Western journal. AMR uses Russian names published in Roman alphabet in the form as they are printed. Thus, a name beginning "Ia" might appear also as "Ya" or "Ja". Similiarly "Io" could appear as "Yo" or "Jo.".

2. Subject Search

In developing a search strategy, it will be useful to look first at the LIT since this tool contains cross-references among terms whose meanings are related. When initiating a search in AKWAS under a particular keyword (term), some modifiers may suggest alternate approaches.

Search time will be reduced by investigating the frequency with which the indexing terms are used in AKWAS, and beginning the search under the term that occurs least frequently. For example, when searching for publications dealing with cardiovascular systems, valves, and unsteady flow, the search should start under "cardiovascular system", which may appear in an AKWAS 7 times, as compared to 21 times for "valves", and 184 times for "unsteady flow."

3. Locating Publications by Item Number

The AKWAS search yields item numbers (printed in italics). In the case of a subject entry which has many bulleted items the item numbers will be consecutive and thus easily located. In the case of several subject entries and/or authors the Guide to Monthly Entries (located on Table of Contents page as well as on back cover) should be consulted to find in which monthly issue to look.

F. Acknowledgements

The "rotated" alphabetical index approach as used by Excerpta Medica, was suggested by AMR Consultant F. Wilfrid Lancaster, Professor of Library Science at the University of Illinois. He contributed significantly to the development of AKWAS and also to the production of guidelines for indexers. AKWAS also contains several features of the earlier AMR experimental index called WADEX. The design of the AKWAS system was performed by Dr. James M. Knox of CyberSearch. Dr. Ching Yew and Dr. Parker Lamb of the University of Texas at Austin provided valuable assistance with the development of this volume of AKWAS. The Publications Processing Unit of SwRI handled the computer typesetting under the direction of Mr. Don W. Moore and Mrs. Billie Ford, and Ms. Maureen Funnell of Southwest Research Center was responsible for copyreading. The names of the 22 indexers and all subject specialists are listed on the masthead page of this AKWAS.

Stephen Juhasz
Editor

LIST OF INDEX TERMS (LIT)

A

ablation(*see also*:sublimation)
abrasion(*see also*:wear)
absorption
accelerated testing
*acceleration
acceleration waves
accelerators
accelerometers
acoustic emission
acoustic loading
acoustic measurements(*see also*:noise measurements)
acoustic properties
acoustic waves
acoustics(*see also*:aerothermodynamics, anechoic chambers, echos, far field radiation, hearing, helmholtz resonator, noise, sound, underwater acoustics, vibration)
acoustics (architectural)
acoustics (physiological)
acoustics (psychological)
actuator theory
actuators
adaptive systems(*see also*:automatic control, learning systems)
additives
adhesion
adhesives(*see also*:cements, bonded joints)
adiabatic processes
adsorption
aeration
aerodynamic coefficients(*see also*:drag coefficient, induced drag, lift coefficient, moment coefficient, stability derivatives)
aerodynamic excitation
aerodynamic heating
aerodynamic interference(*see also*:base pressure, ground effect)
aerodynamic loads(*see also*:drag, lift)
aerodynamic noise(*see*:noise (aerodynamic))
aerodynamic performance
aerodynamics
aeroelasticity(*see also*:flutter, gust loads, hydroelasticity, vibration (flow induced))
aeroelasticity (dynamic)
aerosols
aerospace
aerospace vehicles(*see also*:airplanes, space vehicles)
aerothermoacoustics
aerothermochemistry(*see also*:frozen flow, nonequilibrium flow)
aerothermodynamics(*see also*:aerodynamic heating, heat transfer)
afterbodies
afterburners(*see also*:combustors)
aggregates
aging
air
air conditioning(*see also*:cooling, heating, refrigeration)
air pollution
air water entry
aircraft(*see*:airplanes)
airfoil characteristics(*see also*:aerodynamic coefficients, stalling)
airfoil theory
airfoils(*see also*:leading edge, trailing edge, wings)
airplane performance
airplane structures
airplanes(*see also*:aeroelasticity, afterbodies, gliders, helicopters, hovercraft, pitching, rolling, yawing)
airships
alfven number
algorithms
alloys(*see also*:aluminum alloys, copper alloys, magnesium alloys, nickel alloys)
aluminum alloys
*amplification
analog computation
analog simulation
analogies(*see also*:electrical analogies, reynolds analogy)
*analysis(*see also*:electrical analysis, harmonic analysis)
*analytical methods
anchors
anechoic chambers
anelasticity
anemometers(*see also*:hot film, hot wire)
anisotropic beams(*see*:beams (anisotropic))
anisotropic media(*see also*:orthotropic materials)
anisotropic plates(*see*:plates (anisotropic))
anisotropic shells(*see*:shells (anisotropic))
anisotropic structures(*see also*:honeycomb structures)
anisotropy
annealing(*see*:stress relieving)
annular flow
annuli
antennas(*see also*:towers)
aorta
aortic valve
approximation methods(*see also*:chebyshev approximations)
approximation theory
approximations
approximations (higher order)
approximations (polynomial)
aquifers
arch bridges(*see*:bridges (arch))
arch dams
arches(*see also*:frames)
arcjet engines
arcjets
arcs
arcs (magnetically constrained)
argon
arrays
arteries(*see also*:aorta)
artificial intelligence
artificial satellites(*see also*:celestial mechanics, communication satellites, manned satellites, orbit mechanics, satellites, weather satellites)
asteroids
astrodynamical constants
astronautics(*see also*:artificial satellites, celestial mechanics, interplanetary probes, missiles, orbit mechanics, reentry, rockets, space vehicles)
astrophysics(*see also*:celestial mechanics, galactic system, orbit mechanics, solar system)
asymptotic behavior
asymptotic methods(*see also*:perturbation methods)
atmosphere(*see also*:planetary atmospheres, upper atmosphere)
atmospheric circulation
atomization(*see also*:sprays)
atomized liquids
attenuation(*see also*:damping)
attitude control
audiology(*see*:hearing)
augmentation
automatic control(*see also*:adaptive systems, biocontrol, control stability, cybernetics, guidance systems, data analysis, digital control, feedback, fluidics, gyroscopes, large scale systems, learning systems, man machine systems, modal control, numerical control, operational methods, robotics, servomechanisms, simulation, statistical control, steering, switching, time delay systems)
automatic control (optimal)(*see also*:control stability, dynamic programming, learning systems, linear programming, minimum fuel control, nonlinear programming, statistical control, suboptimal control, time delay systems, variational methods)
automation
automobiles
autonomous systems
averaging
axial compressors
axial fans
axial flow(*see also*:helical flow, rotational flow)
axial loading
axial pumps
axial turbines
axial waves
axisymmetric flow
axisymmetric loading

B

baffles
balance system
balancing
ball bearings (*see*: bearings (ball))
ballistics (*see also:* deflagration, detonation, explosives, guns, missiles, penetration, projectiles)
ballistics (exterior)
ballistics (interior)
ballistics (terminal) (*see also:* ricochet)
balloons (*see also:* airships)
banach space
bang-bang control
baroclinic instability
baroclinic waves

*Term is a "forbidden term". It is used as a modifier, but not as an entry.

barriers
bars (*see also:* curved bars)
base flow (*see also:* wakes)
base pressure
bauschinger effect
beaches (*see also:* coasts)
beam columns
beam plasma interactions
beams (*see also:* elastic foundations, energy methods, girders, rails, rotary inertia, sandwich construction, shear lag, statically indeterminate structures, thermoelasticity)
beams (anisotropic)
beams (box)
beams (cantilever)
beams (composite)
beams (continuous)
beams (curved)
beams (elastic)
beams (flexural)
beams (intersecting)
beams (nonhomogeneous)
beams (open section)
beams (plastic)
beams (prestressed)
beams (sandwich)
beams (thin section)
beams (timoshenko)
beams (torsional)
beams (variable cross section)
bearing capacity
bearings (*see also:* lubrication)
bearings (ball)
bearings (foil)
bearings (gas lubricated)
bearings (hydrodynamic)
bearings (hydrostatic)
bearings (journal)
bearings (liquid lubricated)
bearings (magnetic)
bearings (porous metal)
bearings (roller)
bearings (slider)
bearings (spherical)
bearings (thrust)
bearings (tilted pad)
bearings (unlubricated)
bed load
bellows
belts (*see also:* cables, chains)
bending (*see also:* flexure)
bending (elastic)
bending (plastic)
bending (viscoelastic)
bending (viscoplastic)
bending elements
bends (*see also:* ducts, pipes)
bessel functions
bgk model
biaxial loading
bibliography
bifurcation
biharmonic equation
bilinear systems
bimodulus materials
binary flow
biocontrol (*see also:* man machine systems)
biodynamics (*see also:* human engineering, sports medicine)
biological joints
biomaterials
biomathematics
biomechanics (*see also:* biological joints, bones, heat transfer (biological), human engineering, kinematics, locomotion, man machine systems, restraint systems)
biot number
birefringence
birefringent materials
blades
blast effects (*see also:* explosions, explosive loading)
blast loading (*see:* explosive loading)
blast waves (*see also:* explosions, explosive loading)
blasting
blood
blood flow (*see also:* stenoses)
blood vessels (*see also:* arteries, cardiovascular system, peristaltic flow)
blowdown
blowers (*see:* compressors)
blowing (*see:* fluid injection)
blowoff (*see also:* combustion, flashback)
blunt bodies
bodies (liquid filled)
bodies of revolution (*see also:* ogives, shells, spherical bodies)
body force convection
boilers (*see also:* heat exchangers, refractories)
boiling (*see also:* film boiling, leidenfrost phenomenon, nucleate boiling, pool boiling, rewetting, transition boiling)
bolted joints
bolts
boltzmann equation
bond characteristics
bond graphs
bonded joints (*see also:* adhesives)
bonding
bones (*see also:* collagen, joints, knees, spine)
boreholes
bores
boron
bottom irregularities
boundary conditions
boundary elements
boundary integral methods
boundary layer (*see also:* aerodynamic heating, aerothermochemistry, cooling, falkner-skan equation, heat transfer, mass transfer, reynolds analogy, shear layer, skin friction, slots, sublayers, swimming propulsion, transpiration, wakes)
boundary layer (atmospheric)
boundary layer (control) (*see also:* fluid injection, suction)
boundary layer (thermal)
boundary layer (three dimensional)
boundary layer (turbulent)
boundary lubrication (*see:* lubrication (boundary))
boundary roughness
boundary value problems (*see also:* cauchy problem, dirichlet problem, eigenvalue problems)
bounded media
bounded variables
boussinesq equation
box beams (*see:* beams (box))
box girder bridges (*see:* bridges (box girder))
brain
brakes
brazed joints
breakers (*see also:* surf)
breakwater
bridges (*see also:* cable stayed bridges, foundations, piers)
bridges (arch)
bridges (box girder)
bridges (highway)
bridges (railroad)
bridges (suspension)
bridges (truss)
brittle fracture (*see also:* fracture toughness)
brittle materials
brownian motion
bubble dynamics
bubbly flow
buckling (*see also:* postbuckling behavior, prebuckling behavior, snap-through, structural stability, viscous buckling, warping)
buckling (experimental)
buckling (large amplitude)
buckling (local)
buckling (nonlinear)
buckling (plastic)
buckling (shear)
buckling (thermal)
buckling (torsional)
buckling (variable section)
buffeting (*see:* gust loads)
buildings (*see also:* foundations, structures, windows)
buildings (tall) (*see also:* shear walls)
buoyancy
buoyant flow
buoys
burgers equation
burmester configuration
burners
burning rate
burning velocity
butt welding

C

cable stayed bridges
cable supported structures
cables (*see also:* belts, strings, towing cables)
calibration
calorimeters
calorimetry
cams
canals (*see also:* channels)
capillary flow
capillary waves
carbides
carbon dioxide
cardiovascular system (*see also:* blood, heart)
cartilage
cascades
cast steel
casting
catalyzed ignition
catastrophe theory
cauchy problem

*Term is a "forbidden term". It is used as a modifier, but not as an entry.

caustics
cavitation (*see also:* bubble dynamics, erosion, fretting, wear)
cavitation flow
cavitation inception
cavities
celestial mechanics (*see also:* artificial satellites, interplanetary probes, kepler orbits, n body problems, orbit mechanics, reentry, three body problem)
cell behavior
cellular flow
cellular motions
cements
central nervous system (*see:* nervous system)
centrifugal compressors
centrifugal fans
centrifugal pumps
centrifugal turbines
centrifugation
ceramics
cermets
chains
channel flow (*see also:* closed conduit flow, duct flow)
channels (*see also:* canals, irrigation, pipe flow, streams)
channels (closed)
characteristic methods (*see also:* slip line methods)
charged particles
charpy tests
chatter
chebyshev approximations
chemical kinetics
chemical propulsion
chemical reactions (*see also:* decomposition, exothermic reactions, oxidation)
chemical reactors
chemical thermodynamics
chemically reactive flow
chimneys (*see also:* thermal plumes, towers)
chip formation
choked flow
circuits
circulation (*see also:* microcirculation, recirculation)
circulatory systems
circumnavigation
cladding
classification
clay
climatology (*see also:* meteorology)
closed conduit flow (*see also:* channel flow, duct flow)
closed cycle
closure (*see also:* crack closure)
cloud physics
clouds (*see also:* meteorology, precipitation)
clutches
coagulation
coal (*see also:* gasification)
coastal engineering
coasts (*see also:* beaches, harbors, lakes)
coatings (*see also:* cladding, films, lubricants)
coaxial jets
cochlea (*see also:* ear)
codes
coding (*see also:* computer programming, computing techniques, linear programming, nonlinear programming)
coherent structure
cold working (*see also:* work hardening)
collagen
collapse
collision models
collocation
colloids (*see also:* surfactants, suspensions)
columns (*see also:* beams, beam columns, masts)
columns (eccentrically loaded)
columns (variable cross section)
combined loading
combustion (*see also:* afterburners, blowoff, boilers, burners, burning rate, chemical kinetics, deflagration, detonation, dissociation, explosions, fire, flames, flue gases, fuel economy, fuels, furnaces, ignition, knocking, propellants, rockets, sprays, stabilization)
combustion (oscillatory)
combustion (submerged)
combustion (turbulent)
combustion (unsteady)
combustion chambers (*see also:* combustors)
combustion instability
combustion products
combustors (*see also:* afterburners, combustion chambers)
comminution (*see also:* crushing, grinding)
communication satellites
compaction
complex variables (*see also:* conformal mapping, pole placement)
composite materials (*see also:* delamination, laminates, metallic composites, polycrystalline materials)
composite pressure vessels
composite structures
composite vessels
compressibility
compressible flow (*see also:* aerothermoacoustics, aerothermochemistry, aerothermodynamics, boundary layer, deflagration, detonation, diffusers, jets, rarefied gases, shock waves, spherical waves)
compression (*see also:* expansion)
compressional waves
compressors (*see also:* axial compressors, centrifugal compressors, mixed flow compressors, superchargers, turbines, turbomachinery)
computational techniques (*see:* computing techniques)
computer aided design
computer aided manufacturing
computer algebra
computer graphics
computer programming (*see also:* coding)
computing techniques (*see also:* analog computation, boundary integral methods, coding, data analysis, digital analog computation, finite element techniques, simulation)
concentration
concrete (*see also:* foundations, masonry, precast concrete, prestressed concrete, reinforced concrete, walls)
condensation
condensation (dropwise)
condensation (filmwise)
condensers
conducting fluid
conduction
conduction (heat)
conduction (steady)
conduction (unsteady)
conductivity (*see also:* electrical conductivity)
conduits (*see also:* closed conduit flow)
confined jets
conformal mapping (*see also:* complex variables)
conical bodies (*see also:* shells (conical))
conical flow
connections
conservation laws
consolidation (*see also:* soil consolidation)
constant velocity couplings
constitutive equations
constitutive relations
constraints
construction
contact angle
contact fronts
contact problems
contact resistance
contact stresses
containers (*see also:* tanks)
containers (partially filled)
containment
contamination
continuous systems
continuum mechanics (*see also:* cosserat solids, elasticity, internal state variables, micropolar media, plasticity, rheology, viscoelasticity)
continuum theory
contraction (*see also:* expansion)
control (*see also:* automatic control, bang-bang control, biocontrol, fuzzy control, optimal control, remote control)
control stability (*see also:* automatic control, limit cycles)
control surfaces
controllability
convection (*see also:* convection (benard), nusselt number, peclet number, plates (vertical))
convection (benard) (*see also:* rayleigh benard instability)
convection (forced)
convection (free) (*see also:* boussinesq equation, richardson number, thermal plumes)
convergence
*conversion
convex programming
conveyors
coolers
cooling (*see also:* film cooling, impingement cooling, surface jets, transpiration cooling)

*Term is a "forbidden term". It is used as a modifier, but not as an entry.

cooling towers
*coordinate systems
copper
copper alloys
coriolis forces
corners
*corrections
*correlation
corrosion (*see also:* oxidation, stress corrosion)
corrosion fatigue
cosserat solids (*see also:* micropolar media)
couette flow
counterflow (*see also:* heat exchangers (crossflow))
couple stresses
couplings
crack arrest
crack branching
crack closure
crack coalescence
crack control
crack growth
crack initiation
crack opening displacement
crack penetration
crack propagation (*see also:* brittle fracture, fatigue, fracture)
crack resistance
crack retardation
crack tip geometry (*see also:* surface flaws)
crack tip opening (*see:* crack opening displacement)
cracking
cracks (*see also:* edge cracks, griffith cracks, flaws, interface cracks, microcracks, multiple cracks)
cranes
crankshafts
cratering
crazing
creep (*see also:* buckling, relaxation, stress relaxation, stresses, viscoelasticity)
creep buckling
creep rupture
creeping flow
critical flow (*see also:* supercritical flow)
critical heat flux
critical load
critical phenomena
critical region
critical speed
crossflow
crushing
cryogenics (*see also:* heat transfer, low temperature)
crystallography (*see also:* dislocations)
crystals
culverts
cumulative damage (*see:* damage (cumulative))
currents (*see also:* density currents, eddy currents)
curvature
curve fitting (*see also:* smoothing of data)
curved bars
curved surfaces
cushioning materials
cutting (*see also:* chip formation, cutting (three dimensional), drilling, grinding, milling, shaping, turning)
cutting (three dimensional)
cybernetics (*see also:* biocontrol, human engineering, learning systems, man machine systems)
cycles (*see also:* heat engines, isentropic processes, isobaric processes, isothermal processes, polytropic processes, refrigeration, stirling cycles)
cyclic loading
cyclic testing
cyclones (*see also:* micromeritics)
cylindrical bodies (*see also:* shells (cylindrical))
cylindrical waves

D

damage (*see also:* injuries)
damage (cumulative)
damping
damping capacity (*see also:* cushioning materials, impact, vibration)
dams (*see also:* arch dams, earth dams, embankments, spillways)
darcy flow
data acquisition
data analysis (*see also:* automatic control, computing techniques)
data processing (*see:* data analysis)
data reduction
decay
decelerators (*see also:* drag, lift, parachutes)
decision theory
decking
decomposition
decoupling
defects
deflagration (*see also:* detonation)
deflections
deformable bodies
deformation
deformation (finite)
deformation (plastic)
delamination
delay systems (*see:* time delay systems)
delta wings
density
density currents
deposition
derivatives
desalination
descent
design (*see also:* fail safe design)
design (earthquake resistant) (*see:* earthquake resistant structures)
design (elastic)
design (limit) (*see:* limit design)
design (minimum weight)
design (optimum)
design (ultimate strength)
design criteria
*detection
determinants
detonation (*see also:* deflagration, explosions)
detonation (condensed phase)
detonation (two phase)
detonative ignition
developing flow
diagnostics
diaphragms
dielectrics
dies
diesel engines
difference differential equations (*see also:* functional equations)
difference equations (*see also:* functional equations)
differential equations (*see also:* decoupling)
differential equations (ordinary) (*see also:* bessel functions, boundary value problems, eigenvalue problems, functional equations, initial value problems, matrix methods, riccati equation)
differential equations (partial) (*see also:* cauchy problem, dirichlet problem, elliptic equations, functional equations, hyperbolic equations, laplace equation, parabolic equations, special functions, wiener-hopf technique)
differential games
differentiation
diffraction
diffusers (*see also:* choked flow, inlets, nozzles, pressure recovery)
diffusion (*see also:* molecular diffusion, thermal diffusion, transport phenomena)
diffusion bonding
diffusion coefficient
diffusion pumps
digital analog computation
digital computation (*see:* computing techniques)
digital control
digital simulation
dilatancy
dilute solutions
dimensional analysis (*see also:* scale effects)
diodes
direction
dirichlet problem
discharges
disclinations (*see also:* screw dislocations)
discontinuities
discrete systems
disks (*see also:* blades, rotating disks)
dislocations (*see also:* creep, crystallography, crystals, edge dislocations, elastic dislocations, plasticity, screw dislocations)
dispersed flow
dispersion
dispersion coefficient
dispersion hardening
dispersion relation
*displacement (*see also:* in-plane displacement, large displacement)
displacement gages
dissipation
dissociation
distillation
distributed parameters
distributed systems
divergence
docks

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domes
doppler effect
downwash
drag (*see also:* boundary layer, induced drag, lift)
drag coefficient
drag reduction (*see also:* additives)
drainage
drawing (*see also:* extrusion, forging, forming, rolling)
drift waves
drilling (*see also:* boreholes, wells)
drives (*see also:* belts, chains, friction drives, gear trains, gears)
drops (*see also:* rainfall, sprays)
drying (*see also:* freezing)
duality
duct flow (*see also:* channel flow, closed conduit flow)
ducted fans
ducted propellers
ductile fracture
ductility (*see also:* strain hardening)
ducts (*see also:* pipes)
ducts (constant area)
ducts (curved)
ducts (variable area)
dugdale model
dust (*see also:* particles)
dynamic analysis
dynamic behavior
dynamic contact
dynamic effects
dynamic fracture
dynamic instability (*see:* dynamic stability)
dynamic interaction
dynamic loads
dynamic plasticity
dynamic programming (*see also:* automatic control (optimal))
dynamic properties
dynamic response
dynamic stability
dynamic stresses
dynamic testing
dynamic viscoelasticity
dynamics (*see also:* biodynamics, electrodynamics, group theory, hamiltonian equations, impact, impulse, kinematics, nonconservative systems, particle dynamics)

E

ear (*see also:* cochlea)
earth
earth dams (*see also:* embankments)
earth pressure
earthquake effects
earthquake engineering (*see also:* waves)
earthquake resistant structures
earthquakes
eccentric loading
echos
eddies
eddy currents
eddy diffusivity
eddy viscosity
edge cracks
edge dislocations
edge effects
effective elastic moduli
eigenvalue problems (*see also:* boundary value problems)
eigenvalues
ejectors
ekman layer
elastic behavior
elastic bodies
elastic constants (*see also:* effective elastic moduli)
elastic dislocations
elastic foundations
elastic waves
elasticity (*see also:* aeroelasticity, anisotropic media, bending, biharmonic equation, contact problems, continuum mechanics, dislocations, elasticity (three dimensional), electroelasticity, energy methods, hydroelasticity, inelasticity, interference fits, magnetoelasticity, photoelasticity, photothermoelasticity, photoviscoelasticity, saint venants equation, strain energy, stresses, thermoelasticity, torsion)
elasticity (linear)
elasticity (nonhomogeneous)
elasticity (nonlinear)
elasticity (nonlocal)
elasticity (three dimensional)
elastodynamics (*see also:* dynamic response)
elastomers (*see also:* rubber)
elastoplasticity
elastoviscoplasticity
electric effects
electric power
electric propulsion
electric resistance
electric spark discharge (*see also:* machining (electrochemical))
electrical analogies
electrical analysis
electrical components
electrical conductivity
electrical instruments
electrical properties
electro fluid dynamics (*see also:* energy conversion, magneto fluid dynamics)
electro magneto fluid dynamics (*see:* electro fluid dynamics)
electrochemical mass transfer
electrodynamics
electroelasticity
electromagnetic loading
electromagnetic waves
electromechanical components
electron beam welding
electron beams
ellipsoids
elliptic equations
elliptical bodies
elliptical cracks
embankments (*see also:* dams)
emissions (*see also:* exhaust gases)
emissivity (*see also:* acoustic emission)
empirical methods
end effects
endochronic theory
endurance limit
energy (*see also:* geothermal energy, thermonuclear energy)
energy conservation
energy conversion (*see also:* magneto fluid dynamics, solar cells)
energy density
energy dissipation (*see also:* damping capacity)
energy dissipators
energy methods
energy spectrum
energy storage (*see also:* magneto fluid dynamics)
energy theorems
energy transport
engines (*see also:* diesel engines, heat engines, internal combustion engines, jet engines, low thrust engines, motors, solar engines, spark ignition engines, steam engines, wave engines)
enthalpy (*see also:* high enthalpy)
entrainment
entrance region
entropy
environmental control (*see also:* contamination)
environmental tests
epoxy resins (*see:* resins)
*equations (*see also:* constitutive equations, difference differential equations, difference equations, differential equations, fredholm equations, functional equations, integro differential equations, lagrange equations, linear equations, singular integral equations, transcendental equations, vlasov equation, volterra equations)
equations of motion
equations of state
equilibrium
*equipment
equivalence techniques
erosion
*error (*see also:* random error)
estimation
estuaries (*see also:* rivers, streams)
euler equations
evaporated films
evaporation (*see also:* mass transfer)
evasion
evolution equations
excavation
excitation
exhaust gases (*see also:* emissions)
existence theorems
exothermic reactions
expansion (*see also:* compression, contraction, sudden expansion, thermal expansion)
experimental mechanics (*see also:* holography, interferometry, optical techniques, photoelasticity, photoplasticity, photothermoelasticity, photoviscoelasticity, strain, strain gages, x ray techniques)
experimental methods
*experimental results
explosions (*see also:* blast waves, deflagration, detonation, implosion, spherical waves, thermal explosions)
explosions (underwater)
explosive forming
explosive loading
explosive solid interactions
explosive welding
explosives

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extended surfaces (*see also:* fins)
extension
extensometers
external flow
extinguishment
extrusion (*see also:* drawing, forging, forming, rolling)
eyes (*see also:* ocular system)

F

fabrics (*see:* textiles)
fail safe design
failure (*see also:* cracks, fatigue, life expectancy)
falkner-skan equation
fans (*see also:* axial fans, centrifugal fans, ducted fans)
far field radiation
fast fourier transform
fasteners
fatigue (*see also:* corrosion fatigue, crack propagation, creep, endurance limit, fracture, fretting, high cycle fatigue, life expectancy, low cycle fatigue, multiaxial fatigue, thermal fatigue, wear, weibull statistics)
faults
feedback
feedforward control
feeding mechanisms
ferrography
ferrous metals (*see also:* iron, steel)
fiber optics
fibers (*see also:* boron, glass fibers, graphite, paper, textiles)
field tests
filament winding
filamentary structures
filaments
film boiling
film cooling (*see also:* transpiration cooling)
film flow
film thickness
films (*see also:* coatings, evaporated films, oil films, thin films)
filters
filtration
finishing (*see also:* grinding, lapping)
finite amplitude
finite difference methods
*finite element methods
finite element methods (hybrid)
finite element techniques (*see also:* boundary elements, mesh generation, substructuring)
finite strain
fins (*see also:* control surfaces, extended surfaces)
fire (*see also:* forest fires)
fire control
fire spread
flame holders
flame propagation
flames (*see also:* combustion)
flames (diffusion)
flames (laminar)
flames (turbulent)
flammability
flanges
flaps
flashback (*see also:* blowoff)
flaw detection
flaws
flexibility
flexible bodies
flexible walls
flexural loading
flexural waves
flexure (*see also:* bending, torsion)
flight
flight (unsteady)
flight control
flight loads
flight path (*see also:* orbits, trajectories)
flight stability
flight tests
floating bodies
floating structures
floculation
flood flow
flood routing
flood waves
floods
floors
flotation
*flow (*see also:* axial flow, axisymmetric flow, binary flow, blood flow, buoyant flow, capillary flow, cavitation flow, cellular flow, channel flow, chemically reactive flow, closed conduit flow, compressible flow, couette flow, critical flow, crossflow, duct flow, external flow, flood flow, frozen flow, helical flow, high speed flow, incompressible flow, inlet flow, internal flow, ionic flow, laminar flow, low density flow, mass flow, mixed flow, multicomponent flow, multifluid flow, multiphase flow, non newtonian flow, non steady flow, one dimensional flow, orr sommerfeld equation, particle fluid flow, particulate flow, peristaltic flow, pipe flow, piston driven flow, plane flow, plastic flow, radiating flow, rarefied flow, rheology, rotational flow, secondary flow, shear flow, slip flow, spray flow, stability curve, stratified flow, streamlines, surface flow, three dimensional flow, transition flow, transonic flow, two dimensional flow, two phase flow, unsteady flow, viscid inviscid flow, viscous flow)
flow irregularities
flow measurement (*see also:* anemometers, laser doppler velocimeters, probes)
flow obstructions
flow reversal
*fluctuations
flue gases
fluid boundaries
fluid conveyance
fluid injection
fluid mechanics
fluid power
fluid-structure interaction
fluidics
fluidized beds (*see also:* packed beds, spouted beds)
fluids (*see also:* pseudoplastic fluids, rheology, second order fluids, viscoelastic fluids, working fluids)
flutter (*see also:* galloping, oscillations, unsteady flow, vibration)
flywheels
foam
focusing (*see also:* reflection)
folds
follower forces
footings (*see also:* foundations)
force
forced convection (*see:* convection (forced))
forced systems
forecasting
forest fires
forging (*see also:* drawing, extrusion, forming, rolling, upset forging, dies)
forming (*see also:* drawing, dies, explosive forming, extrusion, forging, rolling, stamping)
foundations (*see also:* elastic foundations, footings, grillages, piers, piles, settlements, soil mechanics, winkler foundation)
four bar linkage
fourier series
fourier transform
fractographic tests
fractography
fracture (*see also:* brittle fracture, brittle materials, crack propagation, crazing, ductile fracture, dugdale model, dynamic fracture, fatigue, fracture angle, fracture control, fracture criteria, fracture mechanics, fracture toughness, mixed mode fracture, path integrals, stress corrosion, stress rupture)
fracture angle
fracture control
fracture criteria (*see also:* notch sensitivity)
fracture energy
fracture mechanics
fracture toughness
framed structures
frames (*see also:* arches, multistory frames, portal frames, space frames)
fredholm equations
free boundary (*see also:* cavities, channel flow, hodograph methods, wakes)
free convection (*see:* convection (free))
free jets
free molecule flow (*see:* rarefied gases)
free shear layer (*see also:* cavities, jets, mixing layers, plumes, shear layer, wakes)
free surface (*see:* free boundary)
freezing (*see also:* drying, thawing)
frequencies
frequency domain techniques
frequency response
fretting (*see also:* corrosion, fatigue, wear)
friction (*see also:* additives, damping capacity, traction)
friction (internal)
friction (rolling)
friction (skin)
friction (sliding)
friction (solid fluid)

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friction (solid solid)
friction drives
friction factor
frost (*see also:* thawing)
froude number
frozen flow
fuel economy
fuel elements
fuel jets
fuels (*see also:* coal, combustion, gaseous fuels, hybrid fuels, liquid fuels, nuclear fuels, petroleum, powdered fuels, propellants, solid fuels)
functional analyis (*see also:* duality, vector methods)
functional equations
furnaces (*see also:* solar furnaces)
fusio (*see also:* nuclear fusion)
fuzzy control

G

gages (*see also:* displacement gages, extensometers, strain gages, thermocouples, torque gages, transducers)
gait
galactic system
galerkin method
galloping (*see also:* gait)
games (*see also:* differential games)
gas dynamics (*see:* compressible flow)
gas solid interface
gas surface interaction
gas turbines
gas wells
gaseous fuels
gases (*see also:* air, carbon dioxide, flue gases, helium, hydrogen, inert gases, ionized gases, methane, natural gas, rarefied gases)
gasification
gates (*see also:* valves)
gear teeth
gear trains (*see also:* drives)
gears (*see also:* landing gears)
gears (spur)
gears (worm)
generation
generators
geneva mechanisms
geomechanics (*see also:* deposition, faults, mantle)
geometric nonlinearities
geometric programming
geometrical properties (*see also:* oblateness)
geomorphology
geophysics (*see also:* turbulence (geophysical))
geostrophic flow
geosynchronous orbits
geothermal energy
geothermal reservoirs
girders (*see also:* beams)
girders (curved)
girders (plate)
glass
glass fibers
gliders
glued joints (*see:* bonded joints)
gradient techniques
graetz problem
grain boundaries
granular media (*see also:* particles, pneumatic transport, porous media)
graph theory
graphical methods
graphite (*see also:* fibers)
grashof number
gravimetrics
gravitational stabilization
gravity
gravity waves (*see also:* breakwater, docks, hydraulic structures, nonlinear waves, swell, tidal waves)
gravity waves (breaking)
gravity waves (cnoidal)
gravity waves (finite depth)
gravity waves (internal)
gravity waves (shallow water)
gravity waves (solitary)
gravity waves (stratified)
gravity waves (surface)
grease
green function
green theorem
grids (*see also:* screens)
griffith cracks
grillages
grinding (*see also:* abrasion, comminution, cutting, finishing)
grinding wheels
ground effect (*see also:* near ground effects)
groundwater
group theory
group velocity
guidance (*see also:* inertial guidance, navigation)
guidance optimization
guidance systems
guidance theory
guided missiles (*see:* missiles)
guns
gust loads (*see also:* wind loads)
gyrodynamics
gyroscopes (*see also:* guidance systems, inertial guidance)
gyroscopes (rotary)
gyroscopic stabilization

H

half space
hall effect
hamilton principle
hamiltonian equations
harbors
hardening (*see also:* cold working, work hardening)
hardness
harmonic analysis
harmonic balance
harmonic waves
head (*see also:* eyes)
hearing (*see also:* acoustics (physiological), ear)
heart (*see also:* cardiovascular system)
heat (*see also:* latent heat, specific heat)
heat addition
heat engines
heat exchangers (*see also:* boilers, regenerators, tube bundles)
heat exchangers (crossflow) (*see also:* counterflow)
heat exchangers (multipass)
heat pipes
heat pumps (*see also:* air conditioning, refrigeration)
heat shields
heat sources
heat transfer (*see also:* ablation, aerodynamic heating, aerothermodynamics, boilers, boundary layer, combustion, conduction (heat), convection, cryogenics, drying, freezing, furnaces, heat pipes, liquid metals, mass transfer, melting, radiation, reynolds analogy, thermal diffusion, thermodynamics, thermoelasticity, thermophysical properties, turbines)
heat transfer (atmospheric)
heat transfer (biological) (*see also:* thermography)
heat transfer (combined modes)
heat transfer (direct contact)
heat treatment (*see also:* hardening, stress relieving)
heating (*see also:* air conditioning, refrigeration, ventilation)
heaving
helical flow
helicopters (*see also:* hovering)
helium
helmholtz equation
helmholtz resonator
high cycle fatigue
high enthalpy
high pressure (*see also:* pressure vessels, thermodynamics, thermophysical properties)
*high speed
high speed flow
high strength
high temperature
high viscosity
higher order theories
highways (*see also:* bridges, runways)
hilbert space
hinged bodies
hips (*see also:* musculoskeletal system)
history
hodograph methods (*see also:* characteristic methods)
holes
holography (*see also:* lasers)
honeycomb structures
hopkinson bar
hoppers
hot film
hot wire
hovercraft
hovering
hull propeller interaction
hulls
human body
human engineering (*see also:* biodynamics, biomechanics, man machine systems, sports medicine)
hybrid construction
hybrid element methods
hybrid fuels
hybrid simulation
hybrid techniques
hydraulic instruments
hydraulic jump
hydraulic machinery

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hydraulic structures (*see also:* breakwater, conduits, dams, docks, earth dams, gates, pipes, spillways, tubes, valves, water tunnels, weirs)
hydraulic transport (*see also:* sediment transport)
hydraulic turbines
hydraulics (*see also:* aquifers, buoyancy, canals, capillary flow, cavitation, channels, discharges, drainage, fluid power, free boundary, gates, hydraulic jump, hydraulic structures, pipe flow, seepage, steps, streams, submerged bodies, valves, water hammer)
hydrocarbons
hydrodynamic pressure
hydrodynamic stability (*see also:* taylor instability)
hydrodynamics
hydroelasticity
hydroelectric power
hydrofoils (*see also:* stol, vtol)
hydrogen
hydrogen embrittlement
hydrology (*see also:* meteorology, oceanography, seepage, snow, thermal plumes, wells)
hydromagnetic stability
hydrostatics
hygrothermal effects
hyperbolic equations
hypergolic propellants
hypersonic flow
hypervelocity
hysteresis

I

ice
ice mechanics
icebergs
icebreakers
identification (*see also:* observability)
ignition (*see also:* catalyzed ignition, combustion, detonative ignition, self ignition, spark ignition)
ignition sensitivity
ill posed problems
immiscible fluids
impact (*see also:* ballistics (terminal), explosive forming, shock waves)
impact jets
impedance
impedance methods
imperfection sensitivity
imperfections
impingement
impingement cooling
implosion
impulse
impulsive loading
impulsive propulsion
impulsive transfers
in-plane displacement
inclusions
incompressible flow (*see also:* cavitation, hydraulics, hydrology, jets, multiphase flow, potential theory, rotational flow, turbulence, vortex flow, wakes)
indentation
induced drag
inelasticity
inequalities
inequality constraints
inert gas welding (*see:* shielded arc welding)
inert gases (*see also:* argon, helium)
*inertia
inertial guidance
inertial waves
infiltration
infinite medium
inflammability (*see:* flammability)
inflatable structures (*see also:* membranes (inflatable))
influence coefficients
information theory (*see also:* probability theory)
infrasonics
inhibition
inhomogeneities
initial stresses (*see:* residual stresses)
initial value problems (*see also:* differential equations)
*initiation
injection (*see also:* fluid injection)
injection systems
injectors
injuries
inlet flow
inlets
*inspection (*see also:* nondestructive tests)
*instruments (*see also:* gages, hydraulic instruments, mechanical instruments, optical instruments, thermocouples, transducers)
insulating materials (acoustical)
insulating materials (thermal)
insulation (*see also:* vibration isolation)
integral equations (*see:* fredholm equations, singular integral equations, volterra equations)
integral methods (*see also:* green function)
integral transforms (*see:* operational methods)
integration
integro differential equations
*interaction
interception
interface cracks
interface phenomena (*see also:* gas solid interface, liquid liquid interface, liquid solid interface, liquid vapor interface, solid solid interface)
interface waves (*see also:* love waves, rayleigh waves, stonely waves)
interfaces
interfacial bonding (*see:* bonding)
interference (*see also:* aerodynamic interference)
interference fits
interferometry
interlaminar stresses
intermittency
internal combustion engines
internal flow
internal friction (*see:* damping capacity)
internal sources
internal state variables
internal stresses
internal waves
interplanetary probes
interpolation
invariant imbedding (*see also:* quasilinearization)
inverse method
inverse problems
inversion (*see also:* matrix inversion)
inviscid fluid
ion generators
ionic flow
ionic propulsion
ionization
ionized gases
iron
irrigation
irrotational flow (*see also:* potential flow)
isentropic processes
isobaric processes
isolation
isothermal processes
isotope tracers
isotopes
*iteration
iterative methods (*see also:* newton method, rayleigh ritz method)
izod tests (*see:* charpy tests)

J

j-integral
jet boundaries
jet engines (*see also:* afterburners, arcjet engines, combustors, ramjet engines, scramjets, turbofan engines, turbojet engines)
jet flaps
jet propulsion
jet pumps
jet streams
jets (*see also:* arcjets, coaxial jets, confined jets, free jets, fuel jets, impact jets, nozzles, plasma jets, pulsejets, ramjets, scramjets, surface jets, turbojet engines, wall jets)
joints (*see also:* biological joints, bolted joints, bonded joints, brazed joints, glued joints, hips, mechanical joints, nailed joints, pinned joints, riveted joints, soldered joints, threaded joints, welded joints)
journal bearings (*see:* bearings (journal))
jump conditions
junctions

K

kalman filters
kelvin waves
kelvin-helmholtz instability
kepler orbits
kidneys
kilns (*see:* furnaces)
kinematics (*see also:* biomechanics, dynamics, locomotion, mechanisms)
kinetic theory (*see also:* rarefied gases, statistical mechanics, vlasov equation)

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kinetic theory (relativistic)
kinetics (*see also:* chemical kinetics)
knees
knocking
korteweg de vries equation

L

labyrinth seals
lagrange equations
lagrange multiplier
lakes
lamb problem
laminar flames (*see:* flames (laminar))
laminar flow (*see also:* capillary flow)
laminar mixing
laminates (*see also:* delamination, interlaminar stresses, sandwich construction)
landing (*see also:* descent)
landing devices
landing gears
landslides (*see also:* soil mechanics)
laplace equation
laplace transform
lapping (*see:* grinding)
large displacement
large scale systems
laser doppler velocimeters
laser plasma interaction
lasers (*see also:* holography)
lasers (gasdynamic)
latent heat
lateral pressure
lateral stability
lattices
launching
layered media
lead
leading edge
leak detection
leaks
learning systems (*see also:* adaptive systems, pattern recognition)
least squares
leidenfrost phenomenon
libration theory
life expectancy (*see also:* failure)
lift (*see also:* drag, uplift)
lift coefficient
lifting bodies
lifting surfaces
limit analysis
limit cycles
limit design
linear equations
linear programming (*see also:* convex programming, dynamic programming)
linear systems
linear theory
*linearization
liners
linkages
liquefaction
liquid crystal (*see also:* magnetic fluids)
liquid crystals (cholesteric)
liquid crystals (nematic)
liquid fuels
liquid gas mixture
liquid liquid interface
liquid liquid systems
liquid metals
liquid solid interface
liquid surface waves (*see:* gravity waves)
liquid vapor interface
liquid vapor mixture
liquids
loads (*see also:* acoustic loading, aerodynamic loads, axial loading, axisymmetric loading, biaxial loading, combined loading, cyclic loading, dynamic loads, eccentric loading, electromagnetic loading, explosive loading, flexural loading, flight loads, gust loads, impulsive loading, mixed mode loading, moving loads, overloads, programmed loading, radial loading, random loading, repeated loading, seismic loading, shear loading, spectral loading, stresses, thermal loading, transient loading, triaxial loading, unloading, variable loading, wind loads)
locomotion
locomotives (*see also:* railroads, trains (railroad))
longitudinal stability
*losses
love waves
low cycle fatigue
low gravity
low temperature
low temperature properties (*see also:* cryogenics)
low thrust engines
lubricants (*see also:* grease)
lubricants (dry film)
lubricants (gas)
lubricants (liquid)
lubricants (solid)
lubrication (*see also:* bearings, friction, gears, squeeze films, wear)
lubrication (boundary)
lubrication (elastohydrodynamic)
lubrication (hydrodynamic)
lubrication (hydrostatic)
lubrication (solid)
ludwig tubes (*see also:* shock tubes, wind tunnels)
lumped systems
lungs
lyapunov's functions

M

mach stem
machinability
machine design (*see also:* belts, cams, chains, clutches, couplings, crankshafts, gears, kinematics, linkages, screws, seals, splines, springs)
machine elements
machine tools (*see:* tools)
machinery
machining (*see:* cutting, drilling, grinding, milling, scoring, shaping, turning)
machining (electrochemical) (*see also:* electric spark discharge)
macroscopic characterization
magnesium alloys
magnetic field (*see also:* monopoles)
magnetic fluids
magnetic stabilization
magneto fluid dynamics (*see also:* arcs, conducting fluid, energy conversion, ionic propulsion)
magneto hydro dynamics (*see:* magneto fluid dynamics)
magneto plasma dynamics
magnetoelastic waves
magnetoelasticity
man machine systems (*see also:* biocontrol, human engineering)
maneuverability (*see also:* ship maneuvers)
manifolds
manipulators (*see also:* robotics)
manned satellites
manometers
mantle
maraging steel
marine engineering (*see also:* hydroelasticity, hulls, hydrofoils, propellers, rudders, shafts, ship structures, ships, submerged bodies)
markov processes
masonry (*see also:* concrete)
mass flow
mass transfer (*see also:* ablation, condensation, diffusion, drying, electrochemical mass transfer, evaporation, film cooling, freezing, heat transfer, melting, mixing)
mass transportation
masts
material nonlinearities
material testing (*see also:* charpy tests)
*materials (*see also:* brittle materials)
materials possessing memory (*see also:* thixotropic media)
materials processing
materials properties (*see also:* fracture toughness, hardness, necking, tensile strength)
mathematical methods
mathematical models
mathematical programming (*see also:* automatic control, dynamic programming, linear programming, nonlinear programming)
*mathematical theory
matrices
matrices (sparse)
matrix inversion
matrix methods (*see also:* linear programming, nonlinear programming, tensor methods, vector methods)
maximum principle
*measurements
measurements (dynamic)
mechanical analysis
mechanical components
mechanical design
mechanical instruments
mechanical joints
mechanical properties
mechanical stabilization
mechanical systems
mechanics
mechanisms (*see also:* feeding mechanisms, geneva mechanisms, manipulators)
mechanisms (planes)
mechanisms (spatial)

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melting (*see also:* thawing)
membrane theory
membranes
membranes (inflatable)
membranes (permeable)
meniscus
mesh generation
metallic composites
metallography
metallurgy (*see also:* powder metallurgy)
metals
meteorology (*see also:* astrophysics, atmosphere, baroclinic instability, baroclinic waves, climatology, ekman layer, ground effect, hydrology, oceanography, rossby waves, tides, weather forecasting, weather satellites, wind generation)
meteorology (physical)
meteorology (synoptic)
meters (*see also:* volumetric meters)
methane
microcirculation
microcracks
micromechanics
micromechanisms
micromeritics (*see also:* aerosols, bubble dynamics, contamination, cyclones, drops, dust, granular media, particle fluid flow, particles, porous media, sediment transport, sedimentation, sprays)
microphones
micropolar media (*see also:* polar fluids)
microprocessors
microstructures
milling
mindlin plates
mines
minimax techniques
minimization
minimum fuel control
minimum weight design (*see:* design (minimum weight))
mining (*see also:* excavation, oil shale)
misalignment
missile structures
missiles (*see also:* afterbodies, rockets, space vehicles)
mission analysis
mixed flow
mixed flow compressors
mixed flow turbines
mixed mode fracture
mixed mode loading
mixing (*see also:* laminar mixing, mass transfer, turbulent mixing)
mixing layers
mixing length theory
mixture theories
mixtures
mobility
modal analysis
modal control
model reduction
model reference systems
modeling
models (*see also:* mathematical models, scale effects, scale models)
modes
modulated systems
moire methods
moisture (*see also:* hygrothermal effects)
molding (*see:* casting)
molecular beams
molecular diffusion
molecular theory
moment coefficient
moment distribution
monitoring
monopoles
monte carlo analysis
mooring
*motion
motors (*see also:* engines)
moving loads
moving media
moving surfaces
multiaxial fatigue
multicomponent flow (*see also:* two component flow)
multifluid flow
multilayer
multiphase flow (*see also:* slug flow, slurries, two phase flow)
multiphase media
multiple cracks
multiple degree of freedom
multiple scales
multistory frames
multivariable systems
muscles
musculoskeletal system (*see also:* tendons)

N

n body problems (*see also:* three body problem, two body problem)
nailed joints
natural gas
natural satellites (*see:* satellites)
naval architecture (*see:* marine engineering)
naval mechanics
navier stokes equation
navigation (*see also:* guidance)
near ground effects
necking
nervous system (*see also:* brain, ocular system)
networks
neural nets
neurons
newton method
nickel alloys
noise (*see also:* acoustics, hearing, sound)
noise (aerodynamic)
noise (random)
noise (traffic)
noise abatement (*see also:* liners)
noise control (*see:* noise abatement)
noise measurements
non newtonian flow (*see also:* power law fluids)
non newtonian suspensions
non steady flow (*see:* unsteady flow)
noncircular pipes
nonconservative systems
nondestructive tests (*see also:* acoustic emission, flaw detection, ultrasonics, x ray techniques)
nonequilibrium effects
nonequilibrium flow
nonequilibrium thermodynamics (*see:* thermodynamics (nonequilibrium))
nonhomogeneous media (*see also:* anisotropic media)
nonhomogeneous soils
nonlinear analysis
nonlinear characteristics
nonlinear materials
nonlinear mechanics
nonlinear methods
nonlinear programming
nonlinear structures
nonlinear systems
nonlinear theory
nonlinear waves (*see also:* gravity waves)
*nonlinearities (*see also:* geometric nonlinearities, material nonlinearities)
nonmetals
nonuniform flow
normal stress (*see:* stresses (normal))
norms
notch sensitivity
notch tests (*see also:* charpy tests, fracture)
nozzles (*see also:* diffusers)
nuclear fuels (*see also:* pinch effect)
nuclear fusion
nuclear power
nuclear radiation
nuclear reactors (*see also:* blowdown, fuel elements)
nucleate boiling
nucleation
*numerical analysis (*see also:* difference equations)
numerical control
numerical methods (*see also:* inverse method, iterative methods, runge kutta method)
nusselt number
nyquist theory

O

oblateness
observability
observers
ocean
ocean air interaction
ocean bed
ocean waves
oceanography (*see also:* currents, gravity waves, hydrology, meteorology, rossby waves, tides)
ocular system (*see also:* eyes)
offshore structures
ogives
oil films
oil removal
oil shale
oil wells
on off systems (*see also:* bang-bang control, relay systems)
one dimensional flow
one dimensional waves
open loop systems
operational methods (*see also:* differential equations)

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operations research (*see also:* dynamic programming, games, linear programming, nonlinear programming, queue theory)
optical analysis
optical instruments
optical techniques (*see also:* caustics, holography, photoelasticity, photoplasticity)
optimal control (*see also:* bang-bang control, riccati equation)
optimization (*see also:* design (minimum weight), minimization, penalty function, structural optimization)
orbit correction
orbit decay
orbit determination
orbit mechanics (*see also:* geosynchronous orbits, interplanetary probes, reentry, satellites, space vehicles, windows)
orbit stability
orbit transfer
orbits (*see also:* periodic orbits, trajectories)
organs (*see also:* blood vessels, tissues)
orifices
orr sommerfeld equation
orthogonal functions
orthotropic materials
oscillating bodies
oscillations (*see also:* flutter, unsteady flow, vibration, waves)
oscillators
oscillatory flow
overloads
oxidation
oxidizers
oxygen

P

packed beds (*see also:* fluidized beds, spouted beds)
pade approximation
panels (*see also:* plates)
panels (curved)
panels (flat)
panels (stiffened)
paper
parabolic equations
parachutes (*see also:* decelerators)
parallel plates (*see:* plates (parallel))
partial differential equations (*see:* differential equations (partial))
particle dynamics
particle fluid flow
particle size
particles (*see also:* charged particles, drops, dust, granular media, sprays)
particulate damping
particulate flow
particulate reinforcements (*see:* composite materials)
path integrals
pattern recognition
pavements (*see:* highways, runways)
peclet number
penalty function
pendulums
penetration (*see also:* impact)
penny shaped crack
percolation (*see:* filtration)
*performance
periodic orbits
peristaltic flow (*see also:* pulsatile flow)
permeability
permeable membranes (*see:* membranes (permeable))
perturbation methods
perturbation theory
*perturbations (*see also:* singular perturbations)
petroleum
petroleum deposits
pharmacokinetics
phase changes
phase locked loops
phase velocity
photoelasticity
photoelasticity (dynamic)
photoelasticity (three dimensional)
photography
photoplasticity
photothermoelasticity
photoviscoelasticity
physical properties
piercing
piers
piezoelectric devices
piezoelectrics
piles
pinch effect
pinned joints
pipe flow (*see also:* peristaltic flow, slug flow)
pipelines
pipes (*see also:* ducts, heat pipes, noncircular pipes, pressure vessels, pressurized pipes, tubes)
piping systems (*see also:* pipelines)
piston driven flow
piston rings
pitching (*see also:* rolling, yawing)
pitot tube
plane flow
plane strain
plane stress
plane surfaces
plane waves
planetary atmospheres
planetary entry
planetary satellites
planetary theory
planing surfaces (*see also:* hydrofoils)
plasma (*see also:* arcs, energy conversion, magneto fluid dynamics, pinch effect)
plasma (blood) (*see:* blood)
plasma (toroidal)
plasma jets
plastic behavior
plastic flow
plastic waves
plasticity (*see also:* buckling (plastic), creep, deformation (plastic), dislocations, drawing, ductility, elastoplasticity, energy methods, extrusion, indentation, inelasticity, limit design, photoplasticity, rolling, shells (plastic), strain hardening, stresses, superplastics, thermoplasticity, torsion (plastic), viscoelasticity, viscoplasticity)
plastics (*see also:* polymers)
plates (*see also:* disks, panels, sandwich construction, shells)
plates (anisotropic)
plates (annular)
plates (circular)
plates (folded)
plates (holed)
plates (isotropic)
plates (nonhomogeneous)
plates (nonlinear)
plates (orthotropic)
plates (parallel)
plates (perforated)
plates (rectangular)
plates (reinforced)
plates (sandwich)
plates (simply supported)
plates (skew)
plates (stiffened)
plates (thick)
plates (vertical)
plates (weakened)
plumes (*see also:* thermal plumes)
pneumatic components
pneumatic transport
poiseuille flow
poisson equation
polar fluids
pole placement
poles
pollution (*see also:* air pollution, water pollution)
polycrystalline materials
polymers (*see also:* cements, plastics)
polytropic processes
pool boiling
pore pressure
porous media (*see also:* boussinesq equation, filtration, fluidized beds, granular media, infiltration, micromeritics, oil shale, permeability, seepage, soil mechanics, void fraction)
porous surfaces
porous walls
portal frames
positive displacement pumps
postbuckling behavior
postbuckling theory
potential flow (*see also:* irrotational flow)
potential theory
powder metallurgy
powdered fuels
powders
power generation
power law fluids
power law geometrics
power plants (*see also:* fluid power, hydroelectric power, nuclear reactors, steam gas power plants, steam power plants)
prandtl number
prebuckling behavior
precast concrete
precipitation (*see also:* hydrology, rainfall, snow)
*prediction
premixed fuel air
pressure (*see also:* hydrodynamic pressure, lateral pressure)
pressure change
pressure distribution
pressure drop

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pressure gradient
pressure measurement (*see also:* flow measurement, manometers, piezoelectrics, preston tubes, transducers)
pressure recovery
pressure vessels (*see also:* boilers, composite pressure vessels, high pressure, nozzles, pipes, tube sheets, tubes)
pressure waves (*see:* compressional waves)
pressurized components
pressurized pipes
preston tubes
prestressed concrete
prestressed structures (*see also:* beams (prestressed))
probabilistic design
probability
probability theory (*see also:* failure)
probes (*see:* fiber optics)
process control
processes
processing (*see also:* data processing)
programmed loading
programming (*see also:* computer programming, convex programming, dynamic programming, geometric programming, linear programming, mathematical programming, nonlinear programming, quadratic programming)
projectiles (*see also:* missiles, penetration)
propagation
propagation velocity
propellants (*see also:* combustion, fuels, hydrocarbons, hypergolic propellants, ignition, propulsion, solid propellants)
propellers (*see also:* rotors)
propellers (marine)
*properties (*see also:* electrical properties, mechanical properties, physical properties, thermal properties)
propulsion (*see also:* chemical propulsion, electric propulsion, impulsive propulsion, ionic propulsion, jet propulsion, swimming propulsion)
prosthetic devices
protective coatings (*see:* coatings)
pseudoplastic fluids
pulmonary system (*see:* lungs)
pulsatile flow (*see also:* peristaltic flow)
pulsejets
pumps (*see also:* axial pumps, centrifugal pumps, diffusion pumps, ejectors, jet pumps, positive displacement pumps)
punch problems (*see also:* piercing)
pursuit
pyrolysis

Q

quadratic programming
quasilinearization (*see also:* invariant imbedding)
quenching
queue theory
quicksand

R

radial loading
radial turbines
radial waves
radiant interchange
radiating flow
radiation (*see also:* nuclear radiation)
radiation pressure
radiation properties
radiators
radioactive isotopes (*see:* isotopes)
radioactivity
radiography (*see also:* x ray techniques)
rafts
railroads (*see also:* locomotives, trains (railroad))
rails
raindrops (*see:* drops)
rainfall
ramjet engines
ramjets
random error
random excitation
random loading
random media
random processes (*see:* stochastic processes)
random search
rarefied flow
rarefied gases (*see also:* molecular beams)
rate sensitivity
rational mechanics (*see:* continuum mechanics)
rayleigh benard instability
rayleigh method
rayleigh number
rayleigh ritz method
rayleigh taylor instability
rayleigh waves
reaction kinetics
reaction rates
reactor structures
reactors (*see also:* chemical reactors, heat exchangers, nuclear reactors, pressure vessels, sodium)
real gas effects
real time solution
realization
reattachment
recirculation
recoil
recovery systems
recuperators
reduction
redundant structures (*see:* statically indeterminate structures)
reentry (*see also:* orbit mechanics)
reflection (*see also:* focusing, interface phenomena, refraction)
refraction (*see also:* interface phenomena, reflection)
refractories (*see also:* furnaces)
refrigeration (*see also:* air conditioning, cooling, freezing, heat pumps)
regenerators
regression rate
regularization
regulator problem
reinforced bodies
reinforced concrete (*see also:* arches, beams, columns, foundations, masonry, plates, shells, stresses, structures)
reinforced openings
relativity
relaxation
relaxation methods
relaxing media
relay systems (*see also:* on off systems)
reliability (*see also:* endurance limit, life expectancy)
reliability analysis
reliability design
remote control
renal system (*see:* kidneys)
rendezvous (*see also:* orbit mechanics)
repeated loading
reservoir engineering (*see also:* filtration, geophysics, porous media, seepage, wells)
reservoirs
residual strength
residual stresses
resins
resistance (*see also:* electric resistance)
resonance (*see also:* helmholtz resonator)
respiratory system (*see also:* lungs)
*response
restraint systems
restricted three body problem
retaining walls
return flow
reverberation
rewetting
reynolds analogy
reynolds equation
reynolds equation (lubrication)
reynolds equation (turbulence)
reynolds number
reynolds number (critical)
reynolds number (high)
reynolds number (small) (*see also:* creeping flow)
reynolds stresses
rheology (*see also:* continuum mechanics, liquid crystal, magnetic fluids, non newtonian flow, plasticity, second order fluids, slug flow, stresses (normal), surfactants, viscoelasticity, viscoplasticity)
riccati equation
richardson number
ricochet
rigid bodies
rings (*see also:* arches)
risk
river beds
rivers (*see also:* estuaries, streams)
riveted joints
road beds (*see:* highways)
robotics (*see also:* manipulators)
rock mechanics (*see also:* soil mechanics)
rockets (*see also:* chemical propulsion, fuels, meteorology, missiles, propulsion, satellites, space vehicles, variable mass, thrust)
rocks
rods
roller bearings (*see:* bearings (roller))
rolling (*see also:* drawing, extrusion, forging, forming)

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rolling contact
rolling motion (*see also:* pitching, yawing)
roofs
root loci
ropes
rossby waves
rotary inertia
rotating bodies
rotating cylinders
rotating disks
rotating flow (*see:* rotational flow)
rotating fluids
rotating shafts
rotating stall
rotational flow (*see also:* axial flow, swirl flow, vortex flow)
rotors (*see also:* windmills)
roughness
rubber (*see also:* elastomers)
rubber elasticity
rudders
runge kutta method
runoff
runways (*see also:* highways)
rupture (*see also:* creep rupture, stress rupture)

S

safety
saint venant principle
saint venants equation
sampled data systems
sampling
sand (*see also:* quicksand)
sandwich construction (*see also:* beams (sandwich), plates (sandwich), shells (sandwich))
satellites (*see also:* artificial satellites, celestial mechanics, communication satellites, interplanetary probes, manned satellites, natural satellites, planetary satellites, orbit mechanics, spinning bodies, weather satellites)
saturation
scale effects (*see also:* scale models)
scale models
scattered light
scattering
schlieren methods
scoring
scour
scramjets
screens (*see also:* grids)
screw dislocations (*see also:* disclinations)
screws (*see also:* bolts)
sea (*see:* ocean)
seals (*see also:* labyrinth seals)
second order analysis
second order fluids
secondary flow
sediment transport (*see also:* channel flow, pipe flow, scour, silting)
sedimentation
seepage (*see also:* hydraulic transport, wells)
seismic loading
seismic waves
self excitation
self ignition
semi infinite media
semiconductors (*see also:* diodes, oscillators)
sensitivity
separated flow (*see also:* strouhal number)
separation (*see also:* reattachment)
series (*see also:* fourier series)
series expansion
servomechanisms
settlements
sewerage
sh waves
shadowgraphic methods
shafts (*see also:* crankshafts, whirling shafts)
shakedown structures
shallow water
*shape
shape factors
shaping
shear
shear flow
shear lag
shear layer (*see also:* boundary layer, free shear layer, jets, preston tubes, wakes)
shear loading
shear strength
shear stress
shear transfer
shear walls
shear waves
sheet metal
sheet stringer panels (*see:* plates (stiffened))
shells (*see also:* pipes, shells (outer), tubes)
shells (anisotropic)
shells (axisymmetric)
shells (conical)
shells (cylindrical)
shells (ellipsoidal)
shells (fluid-filled)
shells (hyperbolic)
shells (hyperbolic paraboloid)
shells (long)
shells (nonhomogeneous)
shells (nonlinear)
shells (of revolution)
shells (orthotropic)
shells (outer)
shells (plastic)
shells (sandwich)
shells (shallow)
shells (spherical)
shells (stiffened)
shells (thick)
shells (thin)
shells (torispherical)
shells (toroidal)
shells (viscoelastic)
shielded arc welding
ship design
ship dynamics
ship hulls (*see:* hulls)
ship maneuvers (*see also:* steering)
ship motion
ship performance
ship resistance
ship slamming (*see also:* heaving)
ship structures
ship towing
ship waves (*see:* wavemaking resistance)
ships (*see also:* pitching, rolling, yawing)
shock (*see also:* impact, thermal shock, vibration)
shock absorbers
shock layer
shock tubes
shock tubes (electromagnetic)
shock waves (*see also:* mach stem)
shock waves (normal)
shock waves (oblique)
shrinkage
silencers
silting
similarity methods
similitude (*see:* dimensional analysis)
simply supported structures (*see also:* plates (simply supported))
simulation (*see also:* analog simulation, computing techniques, digital simulation, hybrid simulation)
singular control
singular integral equations
singular perturbations
singular waves
singularities
siphons
skeletal system (*see:* musculoskeletal system)
skin
skin friction (*see:* friction (skin))
slabs
slender bodies
slender wings
sliding
slip flow
slip line methods (*see also:* characteristic methods)
slopes
sloping bottom
sloshing (*see also:* solids with liquids)
slots
slug flow
slurries
smoke stacks
smoke tunnels
smoothing of data
snap-through
snow
sodium
soil consolidation
soil mechanics (*see also:* bearing capacity, clay, dams, deposition, excavation, foundations, highways, hydrology, pore pressure, quicksand, sand, sedimentation, seepage, soil consolidation, thawing, tunnels)
soil stability
soil structure interaction
soils (*see also:* nonhomogeneous soils)
solar cells
solar collectors
solar distillation
solar energy
solar engines
solar furnaces
solar pressure
solar radiation
solar system
solar wind
soldered joints (*see also:* brazed joints)
soldering

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solid boundaries
solid fuels
solid mechanics
solid propellants
solid solid interface
solidfluid interaction (*see also:* fluid-structure interaction)
solidification
*solids
solids (fluid immersed)
solids with liquids
solitary waves
solutions (material) (*see also:* dilute solutions)
sonic booms
soot
soot formation
sound (*see also:* acoustics, aerothermoacoustics, hearing, impedance, interface phenomena, noise, sonic booms, turbulence, ultrasonics)
sound (random) (*see also:* noise)
sound fields
sound flow interaction
sound generation
sound propagation
sound speed
*space
space conditioning (*see:* air conditioning)
space frames
space shuttle
space vehicle structures
space vehicles (*see also:* interplanetary probes)
spacecraft (*see:* space vehicles)
spallation (*see also:* delamination, fracture)
spark discharge (*see also:* electric spark discharge)
spark ignition
spark ignition engines
spatial mechanisms
special functions (*see also:* bessel functions)
specific heat
specimen design
spectra
spectral analysis (*see also:* spectroscopy)
spectral density
spectral loading
spectroscopy (*see also:* spectral analysis)
speed of sound (*see:* sound speed)
spherical bodies (*see also:* shells (spherical))
spherical waves
spikes
spillways (*see also:* dams)
spin recovery
spine
spinning (*see:* spin recovery)
spinning bodies
splines
spoilers
sports medicine
spouted beds (*see also:* fluidized beds, packed beds)
spray flow
sprays
springs
spur gears (*see:* gears)
squeeze films
*stability (*see also:* combustion instability, dynamic stability, hydrodynamic stability, hydromagnetic stability, kelvin-helmholtz instability, lateral stability, longitudinal stability, nonconservative systems)
stability (control) (*see:* control stability)
stability (numerical)
stability curve
stability derivatives
stability theory (*see also:* control stability)
stabilization (*see also:* combustion, gravitational stabilization, magnetic stabilization, mechanical stabilization)
stagnation point
stalling (*see also:* rotating stall)
stamping
standing waves
state space techniques
statically indeterminate structures
statics
statistical continuum mechanics
statistical control
statistical design
statistical mechanics (*see also:* group theory, kinetic theory)
statistical theory (*see also:* data analysis, information theory, operations research, reliability, statistical control, statistical design, stochastic processes)
steam
steam engines
steam gas power plants
steam generators (*see:* boilers)
steam power plants
steam tables
steam turbines
steel (*see also:* cast steel, maraging steel)
steering
stefan problem
stenoses
steps
stiffened structures (*see also:* panels (stiffened), plates (stiffened), shells (stiffened))
stiffness
stiffness matrix
stilling basins
stirling cycles
stochastic control (*see also:* kalman filters)
stochastic processes (*see also:* markov processes, statistical control)
stochastic systems
stochastics
stokes flow
stol (*see also:* hydrofoils, vtol)
stonely waves
storage
strain (*see also:* finite strain, plane strain, stresses)
strain analysis
strain energy
strain gages
strain hardening (*see:* work hardening)
strain measurement
strain rate
strain softening
strakes
stratification
stratified flow
stratified waves
stream function
streamlines
streams (*see also:* jet streams, rivers)
strength (*see also:* high strength, ultimate strength)
stress analysis
stress concentration
stress corrosion
stress intensity factor
stress relaxation
stress relieving (*see also:* heat treatment)
stress rupture
stress strain relationships
stresses (*see also:* contact stresses, couple stresses, dynamic stresses, experimental mechanics, high temperature, holography, internal stresses, low temperature properties, photoelasticity, photoplasticity, residual stresses, shear stress, strain, thermal stresses, thermoelasticity, thermoplasticity, traction)
stresses (normal)
stretching
strings (*see also:* cables)
strips
strouhal number
structural analysis
structural design
structural elements
structural materials
structural optimization
structural response (*see also:* sway)
structural stability (*see also:* snap-through)
structural support
structure
structured continua
structures (*see also:* airplane structures, arches, bridges, cable supported structures, composite structures, concrete, cranes, culverts, dams, docks, earthquake resistant structures, fail safe design, filamentary structures, flexibility, floating structures, foundations, framed structures, frames, grillages, highways, honeycomb structures, hydraulic structures, inflatable structures, joints, limit design, loads, masts, missile structures, nonlinear structures, offshore structures, piping systems, plates, prestressed concrete, prestressed structures, reactor structures, reinforced concrete, sandwich construction, shakedown structures, ship structures, simply supported structures, space vehicle structures, statically indeterminate structures, stiffened structures, tanks, thin walled structures, towers, trusses, tunnels, walled structures, walls, wood structures)
subgrade design
sublayers
sublimation (*see also:* ablation, latent heat)
submarine
submerged bodies (*see also:* hydraulics)

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suboptimal control
subsidence (*see also:* soil consolidation)
subsonic flow
substructuring (*see also:* finite element techniques)
suction
sudden expansion
superchargers
supercritical flow
superfluids
superplastics
supersonic flow
suppression
surf (*see also:* breakers)
surface barrier
surface coatings (*see:* coatings)
surface effect
surface flaws
surface flow
surface jets
surface profiles
surface tension (*see also:* contact angle)
surface waves (*see also:* gravity waves (surface), rayleigh waves)
*surfaces (*see also:* curved surfaces, extended surfaces, moving surfaces, plane surfaces, planing surfaces, porous surfaces)
surfactants
surge
*survey
surveys
suspension bridges (*see:* bridges (suspension))
suspension systems
suspensions (*see also:* aerosols, centrifugation, coagulation, colloids, dispersion, floculation, flotation, non newtonian suspensions, sediment transport, sedimentation)
sway
swell
swept wings
swimming propulsion
swirl (*see also:* cellular motions)
swirl flow
switching
synthesis
systems
systems engineering

T

tails
tanks (*see also:* containers)
taylor instability
taylor number
taylor vortices
tectonics (*see also:* folds)
*temperature (*see also:* flames, heat, heat transfer, high temperature, low temperature, thermocouples)
tendons
tensile strength
tension (*see also:* stretching)
tensor methods
testing equipment
*tests (*see also:* charpy tests, cyclic testing, dynamic testing, environmental tests, field tests, flight tests, fractographic tests, nondestructive tests, notch tests, triaxial tests)
textiles (*see also:* fibers)
texture
thawing (*see also:* freezing, melting)
theorems (*see also:* energy theorems)
*theory
thermal buckling (*see:* buckling (thermal))
thermal conductivity (*see:* conductivity)
thermal contact resistance
thermal diffusion
thermal effects
thermal excitation
thermal expansion
thermal explosions
thermal fatigue
thermal instability
thermal loading
thermal measurements (*see also:* thermography)
thermal plumes
thermal properties
thermal sciences
thermal shock
thermal stresses
thermal waves
thermocline
thermocouples
thermodynamic functions
thermodynamic processes (*see also:* adiabatic processes, closed cycle, isentropic processes, isobaric processes, isothermal processes)
thermodynamic properties
thermodynamics (*see also:* absorption, adsorption, aerothermochemistry, aerothermodynamics, air conditioning, boilers, boiling, calorimeters, chemical thermodynamics, combustion, compressors, cycles, diffusion, dissociation, energy conversion, engines, entropy, flames, freezing, heat engines, heat transfer, internal state variables, kinetic theory, phase changes, power plants, refrigeration, thermophysical properties, turbines, vortex tubes)
thermodynamics (irreversible)
thermodynamics (nonequilibrium)
thermodynamics (statistical)
thermoelasticity (*see also:* photothermoelasticity, thermal waves)
thermoelasticity (nonlinear)
thermoelasticity (steady)
thermoelasticity (transient)
thermoelectric phenomena (*see also:* thermocouples)
thermography
thermomagnetic phenomena
thermonuclear energy (*see also:* pinch effect)
thermophysical properties (*see also:* latent heat)
thermoplasticity
thermosyphons
thermoviscoelasticity
thin films
thin walled structures
thixotropic media
threaded joints
three body problem
three dimensional elasticity (*see:* elasticity (three dimensional))
three dimensional flow (*see also:* axial flow)
*three dimensional formulation
thrust (*see also:* propulsion)
thrust bearings (*see:* bearings (thrust))
thrusters
tidal waves
tides
time delay systems
time dependence
time domain techniques
time invariant systems
time lag
time optimal systems
time varying systems
tires
tissues (*see also:* collagen, organs, skin)
titanium
tokamak
tollmien schlichting waves
tool wear
tools
topological techniques
tornados
toroids
*torque
torque gages
torsion (*see also:* flexure)
torsion (plastic)
torsional waves
toughness (*see also:* fracture, fracture toughness)
towed body dynamics (*see also:* ship towing)
towers (*see also:* chimneys, cooling towers)
towing cables
towing tanks
tracking
traction
traffic noise (*see:* noise (traffic))
trailing edge
trains (railroad)
trajectories (*see also:* orbits)
trajectory optimization
transcendental equations
transducers (*see also:* accelerometers, gages, piezoelectrics, thermocouples)
transducers (displacement)
transducers (load)
transducers (pressure)
transducers (ultrasonic)
transfer functions
transformation (*see also:* regularization)
transforms (*see also:* laplace transform)
*transient
transient effects
transient loading
transition (*see also:* reynolds number (critical), tollmien schlichting waves)
transition (reverse)
transition boiling
transition flow
transmission
transmissions
transmissions (planetary)
transonic flow
transpiration
transpiration cooling (*see also:* film cooling)

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transport
transport mechanisms
transport phenomena (*see also:* diffusion)
transport properties
transportation (*see:* transport)
transportation devices (*see also:* drives)
travelling waves
triaxial loading
triaxial tests
tribology (*see also:* friction, lubrication, wear)
trucks
trusses (*see also:* frames)
tsunami
tsunamis generation
tube bundles
tube sheets
tubes (*see also:* pipes)
tunneling
tunnels (*see also:* smoke tunnels, water tunnels, wind tunnels)
turbines (*see also:* axial turbines, centrifugal turbines, compressors, gas turbines, hydraulic turbines, mixed flow turbines, radial turbines, steam turbines, turbomachinery)
turbofan engines
turbojet engines
turbomachinery (*see also:* actuator theory, cascades, compressors, fans, pumps)
turbulence (*see also:* boundary layer, closure, coherent structure, eddies, heat transfer, mass transfer, meteorology, mixing, reynolds equation (turbulence), reynolds stresses, shear layer, turbulent flow, wakes)
turbulence (anisotropic)
turbulence (correlations)
turbulence (free)
turbulence (freestream)
turbulence (geophysical)
turbulence (homogeneous)
turbulence (isotropic)
turbulence (mechanisms)
turbulence (structure)
turbulence (transport) (*see also:* reynolds stresses)
turbulence model (*see also:* multiple scales)
turbulent flames (*see:* flames (turbulent))
turbulent flow (*see also:* duct flow, pipe flow)
turbulent mixing
turning
twisting
two body problem
two component flow
two dimensional flow
two dimensional waves
two phase flow

U

ultimate strength
ultrasonic welding
ultrasonics (*see also:* nondestructive tests, transducers)
underground
underwater acoustics
underwater structures
uniqueness
unloading
*unsteady effects
unsteady flow (*see also:* nonuniform flow, oscillations, oscillatory flow)
unsteady state
uplift
upper atmosphere
upset forging

V

vacuum
vacuum technology
valves (*see also:* gates)
vapor pressure
vaporization (*see also:* evaporation, latent heat, mass transfer)
variable area flow
variable fluid properties
variable loading
variable mass
variable properties (material)
variable section
variable thermal properties
variational methods (*see also:* hamilton principle)
vector methods (*see also:* banach space, hilbert space, matrix methods, tensor methods)
vehicles (*see also:* airplanes, automobiles, locomotives, marine engineering, near ground effects, railroads, ships, space vehicles, submarine, suspension systems, trains (railroad), trucks)
velocimeters (*see also:* laser doppler velocimeters)
velocity measurement
velocity profiles
ventilation (*see also:* air conditioning, cooling, heating)
vessels
vibration (*see also:* acoustics, automatic control, damping capacity, discrete systems, distributed systems, flutter, impact, impedance, limit cycles, modal analysis, noise, oscillations, shock waves, virtual mass, waves)
vibration (electromechanical)
vibration (flow induced)
vibration (forced)
vibration (free)
vibration (nonlinear)
vibration (parametric)
vibration (random)
vibration (self excited)
vibration (thermally excited)
vibration (torsional)
vibration (viscoelastic)
vibration isolation
vibrators
virtual mass
virtual work methods
viscid inviscid flow
viscoelastic fluids
viscoelastic materials
viscoelastic waves
viscoelasticity (*see also:* anelasticity, continuum mechanics, creep, dislocations, ice mechanics, indentation, vibration (viscoelastic), viscoplasticity)
viscoelasticity (dynamic)
viscoelastoplasticity (*see:* elastoviscoplasticity)
viscometry
viscoplasticity (*see also:* inelasticity)
viscosity (*see also:* high viscosity, preston tubes, thermophysical properties, viscous effects)
viscous buckling
viscous effects
viscous flow (*see also:* high viscosity)
vision (*see:* eyes)
visualization (*see also:* smoke tunnels)
vlasov equation
void fraction
void growth
volcanology
volterra equations
volterra series
volumetric meters
vortex flow
vortex lines
vortex rings
vortex shedding
vortex sheets
vortex tubes
vortices
vorticity
vtol (*see also:* hydrofoils, stol)

W

wakes
walking (*see:* gait)
wall jets
walled structures
walls (*see also:* flexible walls, porous walls, retaining walls, wavy walls)
warping (*see also:* buckling)
water (*see also:* groundwater, shallow water)
water hammer
water pollution
water tunnels
water waves (*see:* gravity waves)
watersheds
waterways (*see also:* canals, estuaries, rivers, streams)
wave absorbers
wave energy
wave engines
wave equations
wave generation
wave interactions
wave loads
wave machines
wave trains
waveguides
wavemakers
wavemaking resistance
waves (*see also:* acoustic waves, baroclinic waves, blast waves, capillary waves, compressional waves, cylindrical waves, drift waves, elastic waves, flexural waves, flood waves, impact, interface phenomena, interface waves, inertial waves, lamb problem, love waves, magnetoelastic

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waves, modal analysis, ocean waves, one dimensional waves, oscillations, plane waves, plastic waves, radial waves, rayleigh waves, seismic waves, shear waves, shock waves, singular waves, solitary waves, standing waves, stratified waves, surface waves, thermal waves, tidal waves, tollmien schlichting waves, two dimensional waves, vibration, viscoelastic waves)
wavy walls
wear (*see also:* abrasion, bearings, cavitation, erosion, fretting, friction, lubrication, tool wear)
weather forecasting (*see also:* meteorology)
weather satellites
web openings (*see also:* beams (open section))
wedges
weibull statistics
weighted residual methods
weirs
welded joints
welded structures
welding (*see also:* butt welding, electron beam welding, explosive welding, heat treatment, joints, shielded arc welding, soldering, ultrasonic welding)
wells (*see also:* drilling, gas wells, oil wells)
wheels (*see also:* kinematics)
whirling shafts
wick
wiener-hopf technique
wind
wind generation
wind loads (*see also:* gust loads)
wind power
wind pressure
wind tunnels (*see also:* cryogenics, shock tubes)
wind tunnels (environmental)
wind turbines
wind-wave interaction
winding (*see also:* filament winding)
windmills (*see:* wind turbines)
windows
wing body combinations
wings (*see also:* aerodynamic interference, airfoils, delta wings, flutter, leading edge, oscillations, slender wings, slots, stalling, swept wings, trailing edge, vortex shedding)
winkler foundation
wires
wirewound vessels (*see also:* filament winding)
wood
wood structures
work hardening (*see also:* cold working)
working fluids
wrapping
wrinkling

X

x ray techniques (*see also:* radiography)

Y

yarn (*see also:* fibers)
yawing (*see also:* pitching, rolling)
yield condition
yield criteria

Z

zero g phenomena (*see also:* low gravity)

*Term is a "forbidden term". It is used as a modifier, but not as an entry.

A

Abarbanel (S.), compressible flow, computing techniques, finite difference methods, navier stokes equation, Gottlieb (D.), *1526*

Abate (A.), see Smith (B.S.), *6527*

Abbiss (C.P.), clay, elastic constants, field tests, shear waves, *1318*

Abbs (A.F.), foundations, sand, tanks, Sinclair (T.J.E.), *3413*

Abdel Aziz (M.M.), annular flow, cables, cooling, electrical components, joints, thermal effects, Riege (H.), *7845*

Abdel Monsim (M.E.), cutting, mathematical models, rock mechanics, Castillo (E.A.), (et al.), *8365*

Abdel-Gaid (M.A.), cylindrical bodies, kinetic theory, rarefied flow, rarefied gases, Khidr (M.A.), (et al.), *1528*

- magnetic field, non newtonian flow, porous surfaces, suction, Khider (M.A.), (et al.), *6645*
- see Khidr (M.A.), *11454*

Abdel-Gawad (H.), see Khiet (T.), *9803*

Abdel-Ghaffar (A.M.), earth dams, earthquake effects, vibration, Koh (A.-S.), *1890*

Abdel-Rahman (A.R.O.), forging, gear teeth, gears (spur), grinding, mechanical properties, metallurgy, Dean (T.A.), *5274*

Abdel-Rahman (T.M.), see Hughes (P.C.), *2922*

Abdel-Wahed (R.M.), thermal measurements, thermal properties, transport properties, Bligh (T.P.), (et al.), *5526*

- experimental methods, soils, thermal measurements, transport properties, Pfender (E.), (et al.), *5527*

Abdelhamid (A.N.), centrifugal compressors, diffusers, rotating stall, unsteady flow, *1633*

- centrifugal compressors, diffusers, oscillatory flow, rotating stall, Bertrand (J.), *3744*

Abdelmessih (A.H.), condensation (dropwise), conductivity, surface effect, thermal properties, Rotenberg (Y.), (et al.), *10577*

Abdollahian (D.), see Levy (S.), *8692*

Abdul Khader (M.H.), breakwater, models, submerged bodies, wave trains, Rai (S.P.), *677*

Abdul-Shafi (A.), bars, frames, structural analysis, *1226*

Abdullin (R.Z.), stability theory, Anapolskii (L.Iu.), *126*

Abe (H.), see Hayashi (K.), *9373*

Abe (K.), see Sato (M.), *4317*

Abedi-Hayati (S.), control, hydraulic machinery, shaking tables, Auslander (D.M.), *220*

Abelson (H.I.), chemically reactive flow, cycles, energy transport, heat pumps, thermodynamic processes, Horowitz (J.S.), *6752*

Aberg (S.), see Karlsson (H.T.), *10686*

Abernathy (F.H.), fluctuations, laminar flow, polymers, strain rate, two dimensional flow, Bertschy (J.R.), (et al.), *8508*

Abey (A.E.), deformation, models, porous media, rocks, saturation, *7450*

Abeyaratne (R.), finite strain, imperfections, plane strain, shear bands, shear stress, Triantafyllidis (N.), *231*

- crack opening displacement, deformation (finite), elliptic equations, hyperbolic equations, *8398*

Ablamskii (V.A.), axial turbines, cascades, mathematical models, rotors, separated flow, *6733*

ablation, cylindrical bodies, stability (numerical), Parks (P.B.), *795*

- ellipsoids, heat transfer, three dimensional flow, Apshtein (E.Z.), Pilyugin (N.N.), *796*
- boundary layer (turbulent), heat transfer, mass transfer, space vehicles, transpiration, Suzuki (K.), *3867*
- aerodynamic heating, film thickness, heat transfer, Znamenskii (V.V.), Lunev (V.V.), *5607*
- conservation laws, interplanetary probes, planetary atmospheres, shock layer, Moss (J.N.), Simmonds (A.L.), (et al.), *7777*
- finite difference methods, heat transfer, nucleate boiling, space vehicles, Sutton (G.W.), *8771*
- fluid mechanics, heat transfer, melting, Omelchenko (K.G.), Trenev (M.G.), *8774*
- boundary layer, heat transfer, injection, mass transfer, radiant interchange, radiating flow, stagnation point, Rolin (M.N.), Solioukhin (R.I.), (et al.), *10608*

Ablowitz (M.J.), boussinesq equation, differential equations (partial), korteweg de vries equation, nonlinear waves, scattering, solitary waves, Segur (H.), *10017*

Abou-Sayed (I.S.), see Zahoor (A.), *1375*

- impact, interface cracks, stress intensity factor, Burgers (P.), (et al.), *3470*

Aboudi (J.), composite materials, constitutive relations, fibers, stiffness, vibration, *1207*

- constitutive relations, crack propagation, viscoplasticity, work hardening, Achenbach (J.D.), *1377*
- elastoviscoplasticity, laminates, stiffness, work hardening, *2250*
- see Benveniste (Y.), *7142*
- dynamic response, elastoviscoplasticity, laminates, nonlinear analysis, work hardening, Benveniste (Y.), *7407*

Aboul-Ella (F.), dynamic response, elastic foundations, piles, vibration (forced), Novak (M.), *386*

Abouseif (G.E.), chemical reactions, deflagration, kinetic theory, nonlinear waves, transport phenomena, Toong (T.Y.), *6708*

Abouzeid (A.-Z.M.), see Khalaf (F.), *7449*

- containers, particulate flow, rotating shafts, transport phenomena, Fuerstenau (D.W.), (et al.), *8917*

Abraham (O.), jets, molecular beams, nozzles, supersonic flow, Binn (J.H.), (et al.), *623*

Abraham (P.B.), see Carter (G.C.), *3945*

Abrahamsen (A.R.), bubbly flow, fluidized beds, powders, Geldart (D.), *7014*

Abramczyk (H.), see Reimschussel (W.), *3854*

Abramenko (A.N.), see Vasilev (L.L.), *4721*

Abramov (A.A.), condensation, evaporation, excitation, molecular theory, Makashev (N.K.), *11442*

Abramov (A.Kh.), optimization, queue theory, Dagkesamanskii (N.D.), *2100*

Abramov (Yu.I.), drops, film flow, hydrodynamic stability, jets, viscous flow, *11592*

- axial flow, design, leaks, seals, steam turbines, stresses, Smirnov (S.A.), *11746*

Abramovich (H.), see Rosen (A.), *4364*

Abrams (R.), see Mitchell (B.), *10057*

Abramson (H.N.), see Rogers (A.C.), *4685*

Abramson (N.), deformation, displacement, holography, moire methods, vibration, Bjelkhagen (H.), *9420*

Abramyants (T.G.), differential games, optimization, pursuit, sensitivity, Maslov (E.P.), (et al.), *2128*

Abrashin (V.N.), compressible flow, numerical methods, one dimensional flow, *10418*

abrasion, cutting, metals, microstructures, wear, Ramalingam (S.), Wright (P.K.), *435*

- particle size, sliding, wear, Bayer (R.G.), *1927*
- erosion, hardness, particle size, wear, Misra (A.), Finnie (I.), *1928*
- hardening, tillage implements, wear, Wingate-Hill (R.), *1934*
- blades, centrifugal compressors, dust, Ris (V.F.), *2755*
- indentation, plastic flow, ploughing, wear, De Vathaire (M.), Delamare (F.), (et al.), *3035*
- cavitation, erosion, impact, wear, Preece (C.M.) ed., *3038, book*
- brittle materials, ductility, friction (sliding), hardness, wear, Beckmann (G.), Westermier (G.), *4106*
- deformation (plastic), friction (sliding), metals, wear, Miyoshi (K.), Buckley (D.H.), *4891*
- stress strain relationships, textiles, trials, wear, Raheel (M.), *5136*
- hardness, heat treatment, mechanical properties, steel, wear, Sorokin (G.M.), Milancheva (N.V.), *5334*
- erosion, particles, wear, Rabinowicz (E.), *5977*
- finishing, grinding, materials processing, tribology, Kunz (P.), *6411*
- design (optimum), grinding, grinding wheels, optimization, Prasad (B.), Haftka (R.T.), (et al.), *6552*
- metals, wear, Bhansali (K.), Miller (A.E.), *7087*
- chip formation, cutting, grinding, tool wear, Kita (Y.), Ido (M.), (et al.), *9377*
- explosives, friction (solid solid), ignition, Amosov (A.P.), *9772*
- friction (sliding), lubrication (boundary), wear, Jahanmir (S.), *9947*
- friction (sliding), metals, wear, Spurr (R.T.), *9951*
- experimental methods, rocks, schmidt hammer, Janach (W.), Merminod (A.), *10264*

absorption, film cooling, heat transfer, mass transfer, Nakoryakov (V.Ye.), Grigoryeva (N.I.), *798*

- particle fluid flow, Purcell (E.M.), *809*
- chemical reactions, interface phenomena, models, packed beds, Patwardhan (V.S.), *832*
- attenuation, barriers, noise abatement, Czarnecki (S.), *916*
- acoustics, anechoic chambers, noise abatement, vegetation, Martens (M.J.M.), *917*
- radiant interchange, reflection, scattering, Yuen (W.W.), Wong (L.W.), *1706*
- acoustics, adaptive systems, Gaudefroy (A.), *1800*
- bubble dynamics, two component flow, two phase flow, Wild (G.), Schlunder (N.), (et al.), *1864*
- sound propagation, surface waves, Kligman (R.L.), *2361*
- conduction (heat), conductivity, dispersed flow, Oshima (N.), *2813*
- anisotropic media, radiant interchange, scattering, Modest (M.F.), Azad (F.H.), *2824*
- cavities, ducts, porous media, silencers, sound propagation, Yoshida (H.), *2934*
- acoustic measurements, porous media, reflection, Nakamura (T.), Nakamura (A.), (et al.), *2954*
- conduction (heat), nonlinear materials, thermal waves, Granik (I.S.), Martinson (L.K.), *3814*
- coatings, radiant interchange, radiation properties, reflection, scattering, Shafey (H.M.), Kunitomo (T.), *3827*
- acoustics (architectural), sound propagation, transmission, Hurst (C.J.), *4776*
- acoustic properties, cavities, noise abatement, resonance, Velizhanina (K.A.), Oborotov (V.A.), *4783*
- acoustic waves, fibers, reflection, Mathew (J.), Alfredson (R.J.), *4798*
- geometrical properties, noise abatement, reverberation, Bartel (T.W.), *4800*
- damping, noise abatement, statistical theory, Maidanik (G.), *4807*
- energy storage, radiant interchange, solar collectors, solar ponds, thermal instability, Tabor (H.), *5602*

- experimental results, implosion, laser plasma interaction, nuclear fusion, thermonuclear energy, Bekiarian (A.), Decroisette (M.), *5688*
- lasers, sound generation, underwater acoustics, Hunter (S.D.), Jones (W.V.), (et al.), *5717*
- chemical reactions, ocean, underwater acoustics, Mellen (R.H.), Browning (D.G.), (et al.), *5719*
- diffusion, heating, lasers, metals, Boiko (V.I.), Bunkin (F.V.), (et al.), *5808*
- hydrogen, hydrogen embrittlement, steel, Ekilik (V.V.), Grigorev (V.P.), (et al.), *6427*
- atmosphere, spectral analysis, spectroscopy, Emerry (R.J.), Moffat (P.H.), (et al.), *6756*
- coatings, heat shields, radiant interchange, solar radiation, space vehicles, spectral analysis, thermal loading, Bosma (J.), Levadou (F.), *6807*
- ducts, modal analysis, sound propagation, Nilsson (B.), Brander (O.), *6926*
- reverberation, series expansion, Joyce (W.B.), *6932*
- concentration, deposition, particles, Goldberg (I.S.), *6961*
- mass transfer, sound, Wei (R.-J.), Wu (J.-R.), *6996*
- cylindrical bodies, particles, radiant interchange, radiation properties, Felske (J.D.), Lee (K.M.), *7860*
- cylindrical bodies, emissivity, radiant interchange, radiation properties, Young (S.J.), *7861*
- coolers, solar energy, Grossman (G.), Bourne (J.R.), (et al.), *7869*
- emissions, hydrocarbons, internal combustion engines, oil films, Carrier (G.), Fendell (F.), (et al.), *7873*
- mixed flow, porous media, Tsabek (L.K.), *7974*
- experimental methods, tissues, ultrasonics, Christman (C.L.), *8082*
- chemical kinetics, drilling, rocks, Mills (J.J.), Westwood (A.R.C.), *8353*
- drops, evaporation, radiant interchange, Harpole (G.M.), *8741*
- radiant interchange, scattering, Ozisik (M.N.), Sutton (W.H.), *8742*
- diffusion, galerkin method, moisture, soils, Tolikas (P.K.), Tzimopoulos (C.D.), (et al.), *8780*
- collision models, energy conversion, laser plasma interaction, resonance, Guillaneux (P.), *8832*
- boundary layer, diffusion, drops, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *8896*
- bacterial cells, cell behavior, membranes (permeable), Brunn (P.O.), *9065*
- convection, convection (free), heat addition, radiant interchange, thermal plumes, Yucel (A.), Bayazitoglu (Y.), *9727*
- conduction (heat), heat transfer (combined modes), radiant interchange, radiation properties, reflection, Stepanov (S.V.), Bityukov (V.K.), *10602*
- gases, radiant interchange, radiation, transmission, Yuen (W.W.), *10604*
- radiant interchange, radiating flow, variable thermal properties, Reznichenko (V.V.), Smirnov (V.N.), *10609*
- air conditioning, dehumidifying system, drying, evaporated films, film flow, fins, low temperature, Peng (C.S.P.), Howell (J.R.), *10641*
- film flow, mass transfer, Pedersen (H.), Prenosil (J.E.), *10678*
- acoustic properties, acoustic waves, decay, reverberation, Lyle (C.D.), *10787*
- adhesives, bonded joints, composite materials, laminates, optical techniques, swelling stresses, water, Sargent (J.P.), Ashbee (K.H.G.), *11343*
- integral methods, radiant interchange, reflection, scattering, slabs, Stramigioli (C.), Santarelli (F.), (et al.), *11766*
- attenuation, ducts, sound propagation, Krizan (P.), Kuscer (I.), *11917*
- attenuation, diffusers, sound propagation, Holger (D.K.), *11961*

Abu-Ghannam (B.J.), boundary layer, pressure gradient, transition flow, turbulence, Shaw (R.), *2633*

Acaccia (G.M.), artificial satellites, attitude control, optimization, Cepolina Molfino (R.), *2921*

accelerated testing, creep, life expectancy, material testing, Fraifeld (V.E.), Sorokin (O.V.), *2229*
- polymers, relaxing media, viscoelastic materials, Askadskii (A.A.), Todadze (T.V.), *3256*
- correlation, endurance limit, frequencies, high cycle fatigue, Kuzmenko (V.A.), *10339*

acceleration waves, elastic bodies, energy theorems, Borejko (P.), Chadwick (P.), *395*
- axial flow, capillary waves, jets, Ingebo (R.D.), *3694*
- cosserat solids, shock waves, thermoelasticity (transient), Nistor (I.), *4129*
- dynamic analysis, mathematical methods, membranes, Pop (J.J.), Wang (C.-C.), *4421*
- elasticity (nonlinear), nonlinear waves, Lustman (L.), *4441*
- constitutive equations, granular media, Jaric (J.), Rankovic (S.), *5098*

accelerators, discharges, magneto plasma dynamics, shock tubes (electromagnetic), similarity methods, Beloshitskii (V.V.), Komelkov (V.S.), (et al.), *2900*
- control, lasers (gasdynamic), vibration, vibrational control, Meerkov (S.M.), *5064*

accelerometers, calibration, dynamic testing, frequency response, Yu (Z.-M.), Li (W.-L.), (et al.), *1269*
- aerodynamic coefficients, digital simulation, reentry, spinning bodies, Mcdowell (J.L.), Williamson (W.E.) Jr., *3924*

Achard (J.L.), friction (skin), laminar flow, pipe flow, unsteady flow, Lespinard (G.M.), *8565*

Achari (R.M.), see Misra (J.C.), *2964*
- see Misra (J.C.), *3993*
- see Misra (J.C.), *4815*

Acharya (S.), see Sparrow (E.M.), *1709*
- convection, extended surfaces, fins, grashof number, laminar flow, Patankar (S.V.), *8684*

Achasov (O.V.), compressible flow, lasers (gasdynamic), simulation, Blaga (Ya.), (et al.), *3641*

Achenbach (J.D.), see Aboudi (J.), *1377*
- crack arrest, crack opening displacement, dugdale model, dynamic fracture, Neimitz (A.), *3471*
- see Adler (L.), *4454*
- diffraction, penny shaped crack, ultrasonics, Adler (L.), (et al.), *4778*
- see Dunayevsky (V.), *5308*
- see Mendelsohn (D.A.), *6348*
- scattering, surface flaws, surface waves, Brind (R.J.), *8333*
- crack tip geometry, elastodynamics, stress intensity factor, surface flaws, Brind (R.J.), *10290*

Achenback (E.), critical flow, cylindrical bodies, drag coefficient, roughness, strouhal number, vortex shedding, wakes, Heinecke (E.), *6621*

Achenback (J.D.), corners, cracks, diffraction, elastic waves, interference, Norris (A.N.), *1305*

Achwal (S.K.) Shenoy (A.V.), annular flow, dispersion coefficient, dispersion relation, thermal diffusion, *5620*

Aci Committee 309, concrete, consolidation, rheology, vibration, *5352*

Ackermann (N.L.), see Shen (H.T.), *1493*

acoustic emission, rocks, triaxial tests, yield condition, Gowd (T.N.), *433*
- crack growth, detection, Arora (A.), Tangri (K.), *1307*
- crack growth, nondestructive tests, pressure vessels, rupture, Ohtsuka (N.), Nakano (M.), (et al.), *1398*
- crack propagation, monitoring, Chelyshev (N.A.), Chervov (G.A.), (et al.), *2464*
- aluminum alloys, deformation, nondestructive tests, Green (G.), Clark (G.), *2482*
- elastic constants, resonance, Boileau (P.E.), Grenier (M.), (et al.), *2489*
- hydrogen embrittlement, inorganic materials, materials properties, Cuthrell (R.E.), Randich (E.), *3451*
- crack growth, rock mechanics, Sano (O.), *3467*
- crack propagation, fracture, pressure vessels, shear, Finkel (V.M.), Muravin (G.B.), (et al.), *3506*
- piezoelectrics, transducers, Hill (E.K.), Egle (D.M.), *3964*
- acoustic measurements, transducers, Hill (R.), Adams (N.L.), *3985*
- composite materials, laminates, material testing, nondestructive tests, Prakash (R.), *4360*
- continuum mechanics, elastic waves, Pardee (W.J.), *4456*
- soils, Lord (A.E.) Jr., Koerner (R.M.), *5255*
- ductile fracture, triaxial loading, Shoji (T.), Khan (M.A.), (et al.), *5307*
- damage, elastic waves, microcracks, Rice (J.R.), *6355*
- damage, laminates, Mohan (R.), Prathap (G.), *6356*
- fracture, rocks, tests, Radu (C.), Rugina (I.), (et al.), *6401*
- crack growth, material testing, x ray techniques, Kuksenko (V.S.), Orlov (L.G.), (et al.), *6438*
- dislocations, iron, nondestructive tests, strain, Bassim (M.N.), Veillette (M.), *6463*
- duct flow, heat transfer, pipe flow, resonance, turbulent flow, unsteady flow, Andre (P.), Creff (R.), *6764*
- crack growth, crack propagation, energy density, Mandorini (V.), Ghelardoni (E.), (et al.), *7528*
- cleavage, fracture toughness, microcracks, stability, Khan (M.A.), Shoji (T.), (et al.), *7568*
- aluminum alloys, fatigue, low cycle fatigue, nondestructive tests, tension, Baram (J.), Rosen (M.), *7569*
- decay, dislocations, elastic waves, Clifton (R.J.), Markenscoff (X.), *8332*
- random media, transient effects, Beltzer (A.I.), *9299*
- crack propagation, kinetics, nucleation, Kuranov (V.N.), Ivanov (V.I.), (et al.), *9412*
- generation, nondestructive tests, propagation, Kolerus (J.), *9424*
- brittle fracture, brittle materials, cracks, inclusions, surface waves, Rose (L.R.F.), *9436*
- experimental methods, monitoring, rocks, Koerner (R.M.), Mccabe (W.M.), (et al.), *10265*
- computing techniques, flaw detection, newton method, nondestructive tests, Vasilev (A.M.), Maslov (B.Ya.), *10317*
- cyclic loading, high cycle fatigue, steel, Hamel (F.), Bailon (J.P.), (et al.), *10318*
- elastic waves, plates, Caranoglu (A.N.), Pao (Y.-H.), *11174*

acoustic loading, acoustics, conical bodies, loudspeakers, membranes, Van Der Pauw (L.J.), *2949*
- ducts, dynamic response, rods, vibration (forced), Lin (W.-H.), *5308*
- aerosols, aggregates, Chou (K.H.), Lee (P.S.), (et al.), *6999*
- biodynamics, human body, vibration, Meister (F.J.), *8081*
- frequency domain techniques, piping systems, vibration (forced), El-Raheb (M.), *8295*
- airplane structures, fatigue, galerkin method, monte carlo analysis, panels, Maekawa (S.), *8434*
- fluid-structure interaction, shells (cylindrical), wave equations, Gordienko (V.I.), Kubenko (V.D.), (et al.), *9336*
- oscillating bodies, tube bundles, Lin (W.H.), *11641*

- buckling, shells (axisymmetric), Kornev (V.M.), Stepanenko (M.V.), *11643*
- fluid-structure interaction, shells (spherical), transient loading, Podstrigach (Ya.S.), Galazyuk (V.A.), (et al.), *11678*

acoustic measurements, acoustics, ducts, sound generation, Meyer (W.L.), Daniel (B.R.), (et al.), *900*
- acoustics, impedance, sound propagation, Panicker (V.B.), Munjal (M.L.), *902*
- impedance, layered media, Klein (C.), Cops (A.), *909*
- noise abatement, sandwich construction, Jones (R.E.), *911*
- airplanes, noise (traffic), sampling, Schomer (P.D.), De Vor (R.E.), *1814*
- machinery, noise abatement, sound propagation, Schirmer (W.), *1818*
- noise (traffic), noise abatement, sound propagation, Jones (H.W.), Stredulinsky (D.C.), (et al.), *1822*
- acoustics, filters, spectral analysis, Williams (J.R.), Ricker (G.G.), *1824*
- diffraction, lasers, sound fields, sound propagation, transducers, Kleszczewski (Z.), *1827*
- acoustics, calibration, transducers, Rudnick (I.), *1828*
- acoustics, arrays, holography, Sato (T.), Sasaki (K.), (et al.), *1829*
- atmospheric circulation, flow measurement, wind, Makarova (T.I.), *1919*
- acoustics (psychological), hearing, noise, Indlin (Yu.A.), *2204*
- bearings (ball), diagnostics, spectral analysis, vibration, vibroacoustics, Cempel (C.), *2480*
- impedance, materials properties, Nicholis (B.H.), *2953*
- absorption, porous media, reflection, Nakamura (T.), Nakamura (A.), (et al.), *2954*
- combustion (oscillatory), combustors, doppler effect, Caveny (L.H.), Collins (E.L.), (et al.), *3868*
- acoustic sources, sound generation, Billingsley (J.), *3935*
- combustion, ducts, spectral analysis, Miles (J.H.), Raftopoulos (D.D.), *3957*
- liquids, materials properties, molecular properties, Ernst (S.), Glinski (J.), *3968*
- acoustics, error, wave energy, Seybert (A.F.), *3969*
- interferometry, optical techniques, solids, sound speed, Thanh (V.), Burov (J.), (et al.), *3970*
- holography, reverberation, Dikshit (H.K.), Dikshit (K.D.), *3971*
- impedance, Keefe (D.H.), Benade (A.H.), *3972*
- ultrasonics, wave energy, Bindal (V.N.), Kumar (A.), *3975*
- optical techniques, transducers, Rashleigh (S.C.), *3979*
- optical techniques, transducers, waveguides, Carome (E.F.), Koo (K.P), *3980*
- transducers (pressure), Rasmussen (G.), *3981*
- transducers, ultrasonics, Widener (M.W.), *3983*
- acoustic emission, transducers, Hill (R.), Adams (N.L.), *3985*
- acoustoelasticity, oscillations, thickness oscillations, Hirao (M.), Miura (Y.), (et al.), *4508*
- velocimeters, Mccartney (M.L.), Mudd (C.P.), (et al.), *4789*
- calibration, scattering, underwater acoustics, Dragonette (L.R.), Numrich (S.K.), (et al.), *4801*
- ducts, sound (random), sound fields, spectral analysis, Seybert (A.F.), Soenarko (B.), *4802*
- coherent structure, ocean bed, reflection, underwater acoustics, Berkson (J.M.), *5749*
- noise, shallow water, underwater acoustics, Walker (A.W.), *5750*
- arrays, ocean, underwater acoustics, Harper (E.Y.), *5754*
- impulse, sound propagation, Gibbs (B.M.), Davies (J.C.), *5778*
- ducts, sound fields, Davies (P.O.A.L.), Bhattacharya (M.), (et al.), *5779*
- acoustic waves, arrays, radiation, reflection, Nefedov (N.N.), *5786*
- ferrites, nondestructive tests, polycrystalline materials, ultrasonics, void fraction, Guseva (E.K.), Kovarskaya (E.Z.), (et al.), *6481*
- defects, nondestructive tests, surface flaws, Polesskaya (L.M.), Grichuk (V.V.), (et al.), *6487*
- acoustic waves, defects, surface flaws, ultrasonics, Ermolov (I.N.), Razygraev (N.P.), (et al.), *6490*
- bubble dynamics, ocean bed, saturation, sedimentation, Anderson (A.L.), Hampton (L.D.), *6899*
- orifices, sound propagation, Lebedeva (I.V.), *6936*
- flaw detection, j-integral, microstructures, nondestructive tests, residual stresses, stress intensity factor, Kino (G.S.), Barnett (D.M.), (et al.), *7586*
- acoustic waves, impulse, scattering, spherical bodies, Deprez (G.), Hazebrouck (R.), *7941*
- acoustoelasticity, beams, residual stresses, rolling, transducers, Fukuoka (H.), Toda (H.), (et al.), *8428*
- echos, flaw detection, nondestructive tests, plates, Golubev (A.S.), Verevkin (V.M.), (et al.), *8435*
- brittle fracture, ceramics, life expectancy, probability, risk, Richardson (J.M.), Evans (A.G.), *9437*
- damping, machinery, vibration, Koss (L.L.), Moffatt (J.A.), *9851*
- acoustoelasticity, deformation (plastic), nondestructive tests, residual stresses, Johnson (G.C.), *10316*
- composite materials, flaw detection, fracture, Frolov (D.I.), Kilkeev (R.Sh.), (et al.), *10319*
- acoustic properties, acoustics (architectural), concert halls, reflection, Barron (M.), Marshall (A.H.), *10789*
- airplane structures, noise abatement, Barton (C.K.), Mixson (J.S.), *10805*
- cylindrical bodies, scattering, spherical bodies, Quentin (G.J.), De Billy (M.), (et al.), *11974*

acoustic properties, acoustic waves, sound speed, Kuczera (F.), *896*
- liquids, optical techniques, relaxation, spectroscopy, Gladkov (S.M.), Koroteev (N.I.), *919*
- acoustic waves, scattering, Twersky (V.), *3934*
- flaw detection, reflection, ultrasonics, Haines (N.F.), Langston (D.B.), *3940*
- absorption, cavities, noise abatement, resonance, Velizhanina (K.A.), Oborotov (V.A.), *4783*
- acousto-optical phenomena, materials properties, optical techniques, Kleszczewski (Z.), *8869*
- absorption, acoustic waves, decay, reverberation, Lyle (C.D.), *10787*
- acoustic measurements, acoustics (architectural), concert halls, reflection, Barron (M.), Marshall (A.H.), *10789*
- boiling, channel flow, hydrodynamic stability, two phase flow, Romberg (T.M.), Rees (N.W.), *11540*
- jets, thermal effects, Kantola (R.A.), *11962*
- networks, noise abatement, refraction, strips, Amram (M.), Stern (R.), *11969*
- layered media, porous surfaces, Ingard (K.U.), *11992*

acoustic waves, anisotropic media, finite amplitude, rayleigh waves, Planat (M.), *398*
- biomedical frequencies, nonlinear waves, ultrasonics, Muir (T.G.), Carstensen (E.L.), *890*
- biomedical frequencies, nonlinear waves, ultrasonics, Carstensen (E.L.), Law (W.K.), (et al.), *891*
- acoustic properties, sound speed, Kuczera (F.), *896*
- aeroacoustics, energy conservation, fluid mechanics, Pierce (A.D.), *897*
- arctic, layered media, sound propagation, Schulkin (M.), Garrison (G.R.), (et al.), *898*
- sound speed, steam, Droban (N.V.), Zaytsev (V.P.), (et al.), *899*
- acoustics, shock waves, travelling waves, turbulence, Chou (K.H.), Lee (P.S.), (et al.), *903*
- baffles, flexural waves, vibration, Ko (S.-H.), Sherman (C.H.), *915*
- mathematical methods, sublayers, ultrasonics, Basatskaya (L.V.), Ermolov (I.N.), *1294*
- diffraction, ocean, sound propagation, Esswein (R.), Flatte (S.M.), *1799*
- ocean, propagation, Blodgett (M.L.), Palmer (D.R.), *1801*
- cylindrical waves, diffraction, soils, sound propagation, Hebault (D.), Filippi (P.), *1808*
- layered media, reflection, transmission, Fokkema (J.T.), *2367*
- jets, waves, Thwaites (S.), Fletcher (N.H.), *2669*
- nonlinear waves, shock waves, Webster (D.A.), Blackstock (D.T.), *2704*
- alfven number, magneto fluid dynamics, nonlinear characteristics, shock waves, Lustman (L.), Geffen (N.), *2892*
- cylindrical bodies, vibration (flow induced), vortex shedding, Okamoto (S.), Hirose (T.), (et al.), *2931*
- nonlinear waves, sound generation, vibration, Ginsberg (J.H.), *2938*
- elastic bodies, sound generation, spherical bodies, Hasegawa (T.), Ochi (M.), (et al.), *2939*
- nonlinear waves, sound generation, vibration, Ginsberg (J.H.), *2940*
- nonlinear waves, scattering, sound fields, viscous effects, Woodsum (H.C.), Westervelt (P.J.), *2945*
- scattering, surface waves, Varavin (V.Yu.), Naugolnykh (K.A.), (et al.), *2946*
- cavities, eigenvalues, resonance, tube bundles, Planchard (J.), *2948*
- arrays, focusing, nonlinear waves, Tjotta (J.N.), Tjotta (S.), *2950*
- reflection, wavy walls, Wirgin (A.), *2951*
- free boundary, immiscible fluids, liquid liquid interface, Bedeaux (D.), Oppenheim (I.), *3713*
- reflection, scattering, transmission, waveguides, Bostrom (A.), *3932*
- barriers, diffraction, transmission, wave energy, Czarnecki (S.), Engel (Z.), (et al.), *3933*
- acoustic properties, scattering, Twersky (V.), *3934*
- barriers, diffraction, wedges, Poruchikov (V.B.), *3936*
- scattering, shells, Kachalov (A.P.), *3937*
- elastic bodies, scattering, spherical bodies, Bostrom (A.), *3938*
- nonlinear waves, pipes, reflection, Nakamura (T.), Nakamura (A.), (et al.), *3942*
- caustics, ocean, sound propagation, Kinney (W.A.), Pierce (A.D.), *3943*
- reflection, scattering, Norton (S.J.), *3946*
- differential equations (ordinary), oscillations, self excitation, Chernyshenko (S.I.), *4157*
- boreholes, elastic waves, Yang (C.-I.), Yu (S.-M.), *4452*
- half space, moving surfaces, reflection, sound fields, spectra, Hwang (Y.F.), Tichy (J.), *4763*
- fluids, scattering, spherical bodies, Gaunaurd (G.), Uberall (H.), *4774*
- cylindrical bodies, diffraction, Veksler (N.D.), *4775*
- elastic bodies, resonance, wave interactions, Fiorito (R.), Madigosky (W.), (et al.), *4779*
- barriers, diffraction, wedges, Borovikov (V.A.), *4780*
- half space, reflection, sound propagation, Nusayr (A.-M.), *4781*
- boundary conditions, scattering, Weaver (R.L.), Pao (Y.-H.), *4782*
- diffraction, reflection, Vovk (I.V.), *4784*
- modes, reflection, resonance, transmission, viscoelastic materials, Madigosky (W.), Fiorito (R.), *4787*
- scattering, Greenblatt (P.), *4795*
- scattering, Varadan (V.V.), Varadan (V.K.), *4796*

- response, scattering, waveguides, Smith (P.W.) Jr., *4797*
- absorption, fibers, reflection, Mathew (J.), Alfredson (R.J.), *4798*
- diffraction, electromagnetic waves, scale models, scattering, Mei (C.C.), Tuck (E.O.), *4967*
- dynamic stresses, flexural waves, plates, reflection, shear, wave equations, Dubbelday (P.S.), Rudgers (A.J.), *5209*
- diffraction, surface waves, Anisimkin (V.I.), Morozov (A.I.), (et al.), *5236*
- gaussian beams, interference, nonlinear waves, radiation, Fenlon (F.H.), *5736*
- focusing, ocean bed, transducers (ultrasonic), Ohgaki (M.), Shimizu (R.), (et al.), *5756*
- nonhomogeneous media, sound propagation, Clark (J.A.), *5757*
- far field radiation, sound generation, sound propagation, Levine (H.), *5765*
- nonhomogeneous media, sound propagation, Chivers (R.C.), *5769*
- finite element methods, waveguides, Oliver (W.A.), Dong (S.B.), (et al.), *5771*
- acoustics (architectural), cavities, modes, panels, transmission, Guy (R.W.), *5774*
- impedance, interface phenomena, jets, sound propagation, turbulence (geophysical), Daigle (G.A.), *5784*
- acoustic measurements, arrays, radiation, reflection, Nefedov (N.N.), *5786*
- finite element methods (hybrid), sound propagation, Fix (G.J.), Nicolaides (R.A.), *5787*
- diffraction, optical techniques, scattering, sound fields, Saiga (N.), Suzuki (T.), *5792*
- curved surfaces, rayleigh waves, resonance, ultrasonics, Lapin (A.D.), *6335*
- nonhomogeneous media, scattering, Lefebvre (J.), Frohly (J.), (et al.), *6349*
- fatigue, fracture mechanics, life expectancy, nondestructive tests, Tittmann (B.R.), Buck (O.), *6417*
- acoustic measurements, defects, surface flaws, ultrasonics, Ermolov (I.N.), Razygraev (N.P.), (et al.), *6490*
- nonlinear waves, sound propagation, Tokuoka (T.), *6903*
- internal waves, ocean, refraction, sound propagation, Uscinski (B.J.), *6908*
- gases, impedance, nonlinear characteristics, thermal effects, Artamonov (K.I.), Vorobev (A.P.), *6921*
- nonhomogeneous media, sound propagation, Chivers (R.C.), *6922*
- half space, impulse, reflection, Chambers (L.G.), *6930*
- cylindrical bodies, diffraction, Karpenko (V.V.), *6933*
- bodies of revolution, cylindrical bodies, scattering, Junger (M.C.), *7940*
- acoustic measurements, impulse, scattering, spherical bodies, Deprez (G.), Hazebrouck (R.), *7941*
- airplane structures, jet engines, numerical methods, scattering, Bayliss (A.), *7942*
- permeability, porous media, Nur (A.M.), Walls (J.D.), (et al.), *7989*
- anisotropy, high pressure, rocks, Levitova (F.M.), *8010*
- elastic waves, joints, structural elements, transmission, Rosenhouse (G.), Ertel (H.), (et al.), *8857*
- compressible flow, ducts (variable area), nozzles, transmission, Miles (J.H.), *8862*
- ground effect, impedance, reflection, sound propagation, surface waves, Habault (D.), Filippi (P.J.T.), *8865*
- fracture, random media, Strizhkov (S.A.), *8959*
- asymptotic methods, burgers equation, shock waves, Parker (D.F.), *9644*
- nonlinear theory, plasma, stability theory, wave energy, Khiet (T.), Abdel-Gawad (H.), *9803*
- acoustics, scattering, surface effect, Holford (R.L.), *9849*
- finite difference methods, parabolic equations, underwater acoustics, wave equations, Lee (D.), Botseas (G.), (et al.), *10043*
- acoustics, burgers equation, nonlinear waves, sound propagation, Enflo (B.O.), *10784*
- absorption, acoustic properties, decay, reverberation, Lyle (C.D.), *10787*
- boundary value problems, moving media, subsonic flow, wave equations, Krasilshchikova (E.A.), *10798*
- acoustics, barriers, diffraction, wedges, Bhattacharyya (S.), *10800*
- anisotropic media, calibration, transducers (ultrasonic), Brissaud (M.), Kleimann (H.), *11163*
- compressible flow, multiphase flow, nonequilibrium flow, numerical methods, rarefied flow, shock waves, Cook (T.L.), Demuth (R.B.), (et al.), *11426*
- fluid-structure interaction, submerged bodies, vibration, Clark (A.V.) Jr., Whitman (A.M.), *11634*
- barriers, liquid solid interface, plane waves, reflection, ultrasonics, Claeys (J.M.), Leroy (O.J.), (et al.), *11648*
- axisymmetric flow, fluid-structure interaction, plates, vibration, Woolley (B.L.), *11650*
- fluid-structure interaction, shells (cylindrical), shock waves, submerged bodies, Huang (H.), *11656*
- fluid-structure interaction, shells (cylindrical), submerged bodies, transient loading, Geers (T.L.), Yen (C.-L.), *11660*
- channel flow, ionized gases, propagation, shock waves, Levin (V.A.), *11811*
- ocean bed, reflection, sedimentation, underwater acoustics, Stoll (R.D.), Kan (T.-K.), *11907*
- modes, reflection, underwater acoustics, Weston (D.E.), Tindle (C.T.), *11913*
- cavities, elastic bodies, porous media, propagation, Junger (M.C.), *11922*
- arrays, nonhomogeneous media, propagation, Komissarova (N.N.), *11924*
- arrays, interference, microphones, transducers, Carnes (T.N.), Reynolds (D.D.), (et al.), *11927*
- layered media, reflection, transmission, viscoelasticity, waveguides, Stepanishen (P.R.), Strozeski (B.), *11966*
- focusing, oscillating bodies, transducers, Madsen (E.L.), Goodsitt (M.M.), (et al.), *11970*
- scattering, strips, Van Den Berg (P.M.), *11977*
- ellipsoids, scattering, Dassios (G.), *11979*
- scattering, spherical bodies, Roumeliotis (J.A.), Fikioris (J.G.), *11980*
- diffraction, elastic bodies, plates, spherical bodies, Saadat (H.), Filippi (P.), *11989*

acoustics, acoustic measurements, ducts, sound generation, Meyer (W.L.), Daniel (B.R.), (et al.), *900*

- reverberation, sound generation, Yousri Gerges (S.N.), *901*
- acoustic measurements, impedance, sound propagation, Panicker (V.B.), Munjal (M.L.), *902*
- acoustic waves, shock waves, travelling waves, turbulence, Chou (K.H.), Lee (P.S.), (et al.), *903*
- cylindrical bodies, resonance, scattering, spherical bodies, Flax (L.), Dragonette (L.R.), (et al.), *907*
- arrays, sound generation, Sullivan (E.J.) Jr., *908*
- jet engines, noise, sound generation, supersonic flow, Zhmulin (E.M.), Munin (A.G.), (et al.), *910*
- absorption, anechoic chambers, noise abatement, vegetation, Martens (M.J.M.), *917*
- absorption, adaptive systems, Gaudefroy (A.), *1800*
- arrays, ocean, shallow water, sound propagation, Buckingham (M.J.), *1802*
- ducts, gases, nonlinear waves, Kraiko (A.N.), Ni (A.L.), *1803*
- ducts, modes, nonhomogeneous media, waveguides, Felsen (L.B.), *1804*
- transducers, wave absorbers, Cavanagh (E.), Cook (B.D.), *1809*
- barriers, plates, Freedman (A.), *1810*
- attenuation, noise abatement, sound propagation, Attenborough (K.), *1811*
- attenuation, automobiles, ducts, exhaust gases, silencers, Prasad (M.G.), Crocker (M.J.), *1813*
- noise, noise abatement, Tudose (C.), Culea (D.), (et al.), *1819*
- acoustic measurements, filters, spectral analysis, Williams (J.R.), Ricker (G.G.), *1824*
- wave equations, Ursell (F.), *1825*
- parabolic equations, wave equations, Desanto (J.A.), Perkins (J.S.), (et al.), *1826*
- acoustic measurements, calibration, transducers, Rudnick (I.), *1828*
- acoustic measurements, arrays, holography, Sato (T.), Sasaki (K.), (et al.), *1829*
- elastic bodies, resonance, scattering, sound fields, Flax (L.), Raju (P.K.), (et al.), *2935*
- aerodynamic excitation, noise, nozzles, Knott (P.R.), Blozy (J.T.), (et al.), *2944*
- acoustic loading, conical bodies, loudspeakers, membranes, Van Der Pauw (L.J.), *2949*
- boundary value problems, mathematical methods, reynolds number (high), viscous flow, Geymonat (G.), Sanchez-Palencia (E.), *3104*
- atmosphere, sound propagation, stratification, Mitsumura (Y.), Makino (M.), *3929*
- estimation, sound propagation, source motion, Carter (G.C.), Abraham (P.B.), *3945*
- arrays, noise, Earwicker (M.J.), *3958*
- arrays, sound speed, Hinich (M.J.), *3959*
- estimation, harmonic waves, Eddy (T.W.), *3960*
- noise, underwater acoustics, Wolcin (J.J.), *3961*
- spectral analysis, Robertson (G.H.), *3962*
- spectral analysis, Altes (R.A.), *3963*
- arrays, sound fields, Cantoni (A.), Godara (L.C.), *3964*
- noise, spectral analysis, Robertson (G.H.), *3965*
- antennas, arrays, diffraction, sound fields, Adekola (S.A.), *3967*
- acoustic measurements, error, wave energy, Seybert (A.F.), *3969*
- energy spectrum, rockets, vortex shedding, wave energy, Brown (R.S.), Dunlap (R.), (et al.), *4769*
- sound propagation, wave equations, Mccoy (J.J.), *4812*
- boundary value problems, elliptic equations, harmonic waves, time dependence, Neittaanmaki (P.), Picard (R.), *5026*
- computing techniques, finite element techniques, survey, Fix (G.J.), Gunzburger (M.D.), *5038*
- gaussian beams, nonlinear waves, sound propagation, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *5734*
- resonance, viscoelastic fluids, Fiorito (R.), Madigosky (W.), (et al.), *5738*
- transducers, Tietjen (B.W.), *5739*
- bubble dynamics, sound propagation, Gaunaurd (G.C.), Uberall (H.), *5742*
- discrete systems, filters, fourier transform, spectral analysis, Williams (J.R.), *5790*
- cylindrical waves, impedance, Rdzanek (W.), *6896*
- acoustic streaming, hydrodynamics, nonlinear characteristics, Gusev (V.E.), Rudenko (O.V.), *6915*
- bubble dynamics, nonlinear characteristics, Gasenko (V.G.), Nakoryakov (V.E.), (et al.), *6917*
- continuum theory, elastoplasticity, Johnson (G.C.), *8328*
- rayleigh waves, residual stresses, surface waves, Hirao (M.), Fukuoka (H.), (et al.), *8334*

- boundary elements, finite element techniques, infinite medium, Felippa (C.A.), *9130*
- ducts, nonlinear characteristics, resonance, Rott (N.), *9845*
- attenuation, ducts, resonance, Cote-Dunajewski (T.), *9846*
- edge effects, impingement, jets, Holger (D.K.), Wilson (T.A.), (et al.), *9848*
- acoustic waves, scattering, surface effect, Holford (R.L.), *9849*
- dynamic effects, fluid-structure interaction, piping systems, Schwirian (R.E.), Karabin (M.E.), *10071*
- flaw detection, machinery, noise measurements, Chaturvedi (G.K.), Thomas (D.W.), *10374*
- acoustic waves, burgers equation, nonlinear waves, sound propagation, Enflo (B.O.), *10784*
- acoustic waves, barriers, diffraction, wedges, Bhattacharyya (S.), *10800*
- diagnostics, gear teeth, holography, vibration, Umezawa (K.), Houjoh (H.), *11339*
- burners, excitation, oscillations, Larionov (V.M.), *11800*
- bubble dynamics, cavitation, Apfel (R.E.), *11908*
- gas solid interface, nonlinear waves, shock waves, Babaev (A.E.), *11919*
- gases, sound generation, thermal effects, vibration (self excited), Kilchinskaya (G.A.), Protsenko (O.P.), *11920*
- burgers equation, nonhomogeneous media, sound propagation, Parker (D.F.), *11921*
- energy methods, reverberation, Maidanik (G.), Mega (L.J.), *11930*
- decay, energy methods, reverberation, Kawakami (F.), Yamaguchi (K.), *11931*
- dispersion, eigenvalue problems, nonlinear waves, Banerjee (P.P.), Korpel (A.), *11936*
- exhaust gases, vortex shedding, Rienstra (S.W.), *11960*
- elasticity, panels, plates (sandwich), Narayanan (S.), Shanbhag (R.L.), *11971*
- couplings, spherical bodies, vibration, Reese (J.M.), Thompson (W.) Jr., *11984*
- force, radiation, Anson (L.W.), Chivers (R.C.), *11985*
- cylindrical bodies, fluids, scattering, Bennett (C.L.), Mieras (H.), *11986*
- numerical methods, scattering, screens, De Smedt (R.), *11987*
- antennas, arrays, Adekola (S.A.), *11991*
- energy methods, noise abatement, Jessel (M.J.M.), *11995*
- attenuation, ducts, energy methods, noise abatement, Gaudefroy (A.), *11996*
- energy methods, finite element techniques, noise abatement, perforated bodies, Ross (D.F.), *11997*
- decay, reverberation, Lyle (C.D.), *12001*
- caustics, wave equations, Stickler (D.C.), Ahluwalia (D.S.), (et al.), *12003*

acoustics (architectural), sound propagation, Bodycombe (H.), *3930*
- absorption, sound propagation, transmission, Hurst (C.J.), *4776*
- acoustic waves, cavities, modes, panels, transmission, Guy (R.W.), *5774*
- eigenvalue problems, reverberation, Van Nieuwland (J.M.), Weber (C.), *5775*
- noise abatement, sound propagation, Heckl (M.), *10788*
- acoustic measurements, acoustic properties, concert halls, reflection, Barron (M.), Marshall (A.H.), *10789*
- energy methods, statistical mechanics, Maidanik (G.), *10792*
- reverberation, transfer functions, Davy (J.L.), *10799*
- barriers, noise abatement, Rosenhouse (G.), Bar-Ilan (M.), *11932*
- decay, diffusion, reverberation, Kuttruff (K.H.), *11938*

acoustics (physiological), fourier transform, spectra, Teaney (D.T.), Moruzzi (V.L.), (et al.), *5789*
- experimental methods, scattering, tissues, Braun (M.), Robinson (D.E.), *6012*
- arteries, blood flow, muscles, sound generation, Grigoryan (S.S.), Saakyan (Yu.Z.), (et al.), *8077*

acoustics (psychological), acoustic measurements, hearing, noise, Indlin (Yu.A.), *2204*
- human body, noise, Kryter (K.D.), Poza (F.), *3072*

Acrivos (A.), see Brady (J.F.), *8566*
- see Herbolzheimer (E.), *11358*

actuator theory, choked flow, compressors, flutter, Micklow (J.), Jeffers (J.), *7781*

actuators, control, design, feedback, pneumatic components, position control, Bender (E.), Kotschenreuther (P.), *9194*
- controllability, design, optimization, oscillations, space vehicle structures, Arbel (A.), *11047*

Adachi (H.), asymptotic methods, irrotational flow, ship resistance, slender bodies, wavemaking resistance, *10879*

Adachi (T.), see Hirama (T.), *1872*

Adachi (Y.), see Kita (Y.), *3667*

Adali (S.), beam columns, rotating bodies, structural optimization, *5173*

Adam (Y.), integration, nonlinear methods, numerical analysis, parabolic equations, *2049*

Adamczyk (Z.), deposition, particles, rotating disks, suspensions, Pomianowski (A.), *4822*

Adamenko (G.M.), algorithms, hybrid techniques, mathematical programming, minimization, Gaishun (I.V.), *5047*
- algorithms, iterative methods, numerical methods, optimization, *5059*

Adams (D.F.), see Schaffer (B.G.), *7273*

Adams (E.E.), cooling, cooling ponds, energy storage, power generation, transient effects, Koussis (A.D.), *9741*

Adams (G.G.), beams, contact problems, moving loads, Manor (H.), *5143*

Adams (J.H.), damage (cumulative), empirical methods, fatigue, life expectancy, prediction, titanium, *10327*

Adams (M.G.), see Harrison (J.V.), *5710*

Adams (M.L.), dynamic response, rotating bodies, vibration (nonlinear), *7403*
- galerkin method, navier stokes equation, rotating disks, stream function, vorticity, Szeri (A.Z.), *7665*

Adams (N.L.), see Hill (R.), *3985*

Adams (R.D.), see Cawley (P.), *451*
- see Vaughan (N.D.), *8293*
- see Pye (C.J.), *9254*
- see Pye (C.J.), *10310*

Adams (R.L.), fluidized beds, heat transfer, packed beds, *7018*
- bubble dynamics, fluidized beds, particle dynamics, potential flow, tubes, unsteady flow, *12036*

Adamson (M.J.), composite materials, resins, swell, thermal effects, thermal expansion, *10558*

Adamson (T.C.) Jr., see Messiter (A.F.), *10448*

adaptive systems, algorithms, prediction, stochastic processes, Tanttu (J.T.), *146*
- pole placement, regulator problem, Gawthrop (P.J.), *185*
- control, optimal control, pole placement, Wellstead (P.E.), Edmunds (J.M.), (et al.), *186*
- algorithms, control, lyapunov's functions, Fradkov (A.L.), *187*
- control, linear systems, time invariant systems, Kreisselmeier (G.), *188*
- digital control, furnaces, glass furnace, identification, process control, Keviczky (L.), Haber (R.), (et al.), *206*
- attenuation, dipoles, noise abatement, Eghtesadi (K.), Leventhall (H.G.), *912*
- absorption, acoustics, Gaudefroy (A.), *1800*
- estimation, filters, maximum principle, Skelton (R.E.), *2080*
- identification, synthesis, tracking, Baradello (C.S.), Neuman (C.P.), *2092*
- discrete systems, model reference systems, stability, Narendra (K.S.), Lin (Y.-H.), *2134*
- model reference systems, synthesis, Ichikawa (K.), *2135*
- algorithms, estimation, Tugnait (J.K.), *2136*
- control, flight control, stol, Nikiforuk (P.N.), Ohta (H.), (et al.), *2157*
- filters, identification, stochastic systems, Kushner (H.J.), *3147*
- sensitivity, stability theory, variable structure systems, Ulanov (G.M.), *3169*
- dynamic analysis, estimation, search-free systems, Nachinkina (G.N.), Shnaidman (M.A.), *3203*
- discrete systems, linear systems, stochastic control, stochastic systems, Yoshimura (T.), Kiyota (M.), (et al.), *3204*
- continuous systems, control, design, discrete systems, Kazakevich (V.V.), Shcherbina (Yu.V.), *3205*
- lyapunov's functions, model reference systems, optimal control, stability theory, Yadykin (I.B.), *3206*
- modal control, model reference systems, Eliseev (V.D.), *3208*
- algorithms, identification, nonlinear systems, Kopysov (O.Yu.), Prokopov (B.I.), *3210*
- arrays, error, frequency domain techniques, Keating (P.N.), *3955*
- design, linear systems, multivariable systems, process control, tracking, Davison (E.J.), *4236*
- algorithms, estimation, identification, model reference systems, Van De Ven (H.H.), Groenendaal (A.W.M.), *4255*
- algorithms, mathematical models, statistical modelling, stochastic control, stochastic systems, Minyaeva (L.N.), Sabinin (O.Y.), *4267*
- algorithms, estimation, stochastic processes, Rudenko (O.G.), Bodyanskii (E.V.), (et al.), *4270*
- algorithms, discrete systems, Kakabadze (D.P.), Kubintsev (G.M.), (et al.), *4312*
- estimation, optimization, Tugnait (J.K.), Haddad (A.H.), *4320*
- algorithms, identification, observers, Nuyan (S.), Carroll (R.L.), *4321*
- control, stability theory, synthesis, Russell (G.T.), Malcolm (J.M.), *4322*
- design, linear systems, observers, Westphal (L.C.), *4323*
- algorithms, gradient techniques, optimization, Polyak (B.T.), Tsypkin (Ya.Z.), *4325*
- control, man machine systems, Slutskii (L.I.), *5065*
- algorithms, design, discrete systems, lyapunov's functions, observers, Tamaki (S.), Omatu (S.), (et al.), *6132*
- algorithms, discrete systems, linear systems, multivariable systems, state space techniques, Goodwin (G.C.), Ramadge (P.J.), (et al.), *7233*
- aerospace vehicles, optimal control, synthesis, trajectories, Salmin (V.V.), *7248*
- flexible bodies, modal control, space vehicle structures, Johnson (C.R.) Jr., *8849*
- filters, nonlinear systems, nonlinear theory, Linzenkirchner (E.), *9193*
- digital control, microprocessors, nonlinear systems, observers, Sinha (N.K.), Law (S.S.Y.), (et al.), *10081*
- design, optimal control, time lag, time optimal systems, Kim (B.K.), Bien (Z.), *11073*
- distributed parameters, filters, stochastic systems, Watanabe (K.), Yoshimura (T.), (et al.), *11084*
- design, dynamic analysis, feedback, Corless (M.J.), Leitmann (G.), *11090*
- dynamic properties, one-armed bandit, optimal control, Kumar (P.R.), Seidman (T.I.), *11091*
- control, distributed parameters, stochastic systems, Tzafestas (S.G.), *11092*
- design, feedback, networks, pierce loop, queue theory, Yu (W.), Majithia (J.C.), *11093*

- model reference systems, stability theory, Landau (I.D.), *11094*
- discrete systems, identification, linear systems, observers, Suzuki (T.), Nakamura (T.), (et al.), *11095*
- control, model reference systems, stability theory, Johnstone (R.M.), Shah (S.L.), (et al.), *11096*

Adbelmessih (A.H.), see Martin (W.W.), *12040*

Addie (G.), see Carstens (M.R.), *10398*

additives, friction, lubricants (liquid), lubrication (boundary), wear, Kragelskii (I.V.), Rybakova (L.M.), (et al.), *1021*
- chemical reactions, friction, lubrication (boundary), metals, Sanin (P.I.), *1022*
- bearings (journal), graphite, polymers, wear, Korshak (V.V.), Gribova (I.A.), (et al.), *1023*
- adsorption, friction, lubrication (boundary), thermal effects, Matveeskii (R.M.), *1942*
- aluminum alloys, corrosion, lubrication (boundary), wear, Poole (W.), Sullivan (J.L.), *3041*
- permeability, polymers, porous media, water, Bakhitov (G.G.), Ogandzhanyants (V.G.), (et al.), *4022*
- drag, polymers, spherical bodies, structure, velocity profiles, Puris (B.I.), Polesskii (E.P.), (et al.), *5428*
- drag reduction, jets, Hoyt (J.W.), Taylor (J.J.), (et al.), *6669*
- dilute solutions, drag reduction, experimental results, micellar additives, Vocel (J.), Myska (J.), *8581*
- friction, lubricants (liquid), lubrication (boundary), scoring, Matveeskii (R.M.), Buyanovskii (I.A.), (et al.), *9036, book*
- antiwear films, chemical reactions, fatigue, films, lubrication (elastohydrodynamic), rolling contact, wear, Sakurai (T.), *9961*
- bearings (journal), lubrication (hydrodynamic), micropolar media, reynolds equation, Singh (C.), Sinha (P.), *9963*
- friction (rolling), friction (sliding), lubrication (boundary), wear, Martin (J.-M.), Georges (J.-M.), *9979*
- lubricants (liquid), lubrication (boundary), oil films, polar fluids, Okabe (H.), Kanno (T.), *10893*

Addlesee (A.J.), convection, friction (skin), heat transfer, reynolds number (critical), tubes, viscous flow, *7671*

Addy (A.L.), see Dutton (J.C.), *4624*

Addy (S.K.), see Dey (S.), *8954*

Adebiyi (A.), helical flow, uniqueness, vortex tubes, *1508*

Adegoke (C.W.), see Chang (C.S.), *422*

Adekola (A.O.), beams (prestressed), bending, shear lag, t-section, *294*
- beams (prestressed), design (optimum), effective widths, flanges, *3284*

Adekola (S.A.), acoustics, antennas, arrays, diffraction, sound fields, *3967*
- acoustics, antennas, arrays, *11991*

Adelfang (S.I.), see Smith (O.E.), *9819*

Adeli (H.), dynamic response, foundations, seismic loading, Hejazi (M.S.), (et al.), *7832*

Aderogba (K.), nonhomogeneous media, semi infinite media, thermal stresses, thermoelasticity (steady), *8887*

adhesion, anisotropic media, contact stresses, half space, indentation, Dhawan (G.K.), *250*
- force, grinding, mechanisms, Yossifon (S.), Rubenstein (C.), *438*
- contact problems, deformation, friction, Tabor (D.), *1000*
- contact resistance, metals, roughness, wear, Chowdhury (S.K.R.), Pollock (H.M.), *1007*
- bearings, friction, lubrication, traction, Dowson (D.) eds., Taylor (C.M.), (et al.), *1924, book*
- fibers, high speed, hopkinson bar, matrices, strain rate, testing equipment, Rybin (A.A.), *2496*
- effective elastic moduli, materials properties, metallic composites, resins, Spathis (G.D.), Sideridis (E.P.), (et al.), *5124*
- chemical reactions, friction, lubricants, lubrication, wear, Buckley (D.H.), *5972, book*
- composite materials, compression, fibers, strength, Martinez (G.M.), Piggott (M.R.), (et al.), *6190*
- composite materials, shear, strength, Rybin (A.A.), *7569*
- cutting, diffusion, magnetic field, tool wear, wear, Muju (M.K.), Ghosh (A.), *8068*
- friction (rolling), roughness, rubber, surfaces, Fuller (K.N.G.), Roberts (A.D.), *9950*
- friction (rolling), rails, rolling contact, wheels, Furmanik (K.), *9978*
- roughness, viscoelastic materials, Greenwood (J.A.), Johnson (K.L.), *10886*
- capillary flow, mass transfer, rarefied gases, Levdanskii (V.V.), Martynenko (O.G.), *11451*

adhesives, friction (sliding), plastics, polymers, Korshak (V.), Gribova (I.A.), *275*
- bonded joints, fracture energy, fracture mechanics, Kinloch (A.J.), Shaw (S.J.), *542*
- bonded joints, layered media, ultrasonics, Pilarski (A.), Pawlowski (Z.), *543*
- algorithms, bonded joints, nondestructive tests, ultrasonics, Rose (J.L.), Thomas (G.H.), *1479*
- bonded joints, capillary flow, Siekman (J.G.), *1481*
- biomechanics, sensor devices, skin, Margules (G.S.), Harris (D.L.), *1963*
- bonded joints, nonlinear materials, viscoelastic materials, Weitsman (Y.), *2227*
- aluminum alloys, bonded joints, failure, Kinloch (A.J.), Smart (N.R.), *2572*
- bonded joints, shear loading, River (B.H.), Gillespie (R.H.), *3596*
- airplane structures, bonded joints, composite materials, moisture, Delasi (R.J.), Schulte (R.L.), *3587*
- friction (sliding), lubricants (dry film), lubrication (boundary), metals, thin films, Iliuc (I.), *4889, book*
- bonding, stress analysis, textiles, Hearle (J.W.S.), Ozsanlav (V.), *5135*
- bonding, fibers, textiles, Hearle (J.W.S.), Ozsanlav (V.), *6202*
- bonded joints, viscoelastic materials, Nagaraja (Y.R.), Alwar (R.S.), *6568*
- textiles, twisting, yarn, Lord (P.R.), Parson (J.R.), (et al.), *7312*
- blades, bonding, dynamic loads, steam turbines, strain gages, Petrie (E.M.), *8427*
- bonded joints, finite element methods, interlaminar stresses, stiffness, time dependence, Gali (S.), Ishai (O.), *8483*
- composite materials, concrete, dislocations, interface phenomena, Kendall (K.), *9487*
- bending, composite materials, joints, shear stress, stress analysis, Yuceoglu (U.), Updike (D.P.), *9488*
- bonded joints, fatigue, finite element methods, strength, Sawyer (J.W.), Cooper (P.A.), *10383*
- absorption, bonded joints, composite materials, laminates, optical techniques, swelling stresses, water, Sargent (J.P.), Ashbee (K.H.G.), *11343*

Adhikari (S.K.), computing techniques, fredholm equations, iterative methods, pade approximation, *7185*

adiabatic processes, calorimeters, conduction (heat), thermal diffusion, Mcnabb (A.), *770*
- hamiltonian equations, particle dynamics, plasma, theory, Ott (E.), *1777*
- annular flow, liquid gas mixture, two phase flow, Andersen (P.S.), Wurtz (J.), *1858*
- magneto plasma dynamics, nonequilibrium effects, theory, variational methods, Pletnev (V.D.), Skuridin (G.A.), *2897*
- centrifugation, helium, liquid vapor mixture, two phase flow, Zhukovskiy (A.V.), *4014*
- bubble dynamics, two phase flow, Tokar (I.Ya.), Leshchinskiy (G.A.), (et al.), *6979*
- caratheodory's axiom, entropy, thermodynamic functions, Kuiken (G.D.C.), *7818*
- turbulence, two phase flow, viscosity, Van Der Welle (R.), *9876*
- discontinuities, plasma, theory, waves, Menon (V.V.), Sharma (V.D.), *10759*

Adin (M.A.), see Yankelevsky (D.Z.), *6361*

Adkins (G.G.) Jr., axial compressors, mixing, secondary flow, three dimensional flow, Smith (L.H.) Jr., *10523*

Adkins (R.C.), annuli, diffusers, experimental results, vortex flow, Matharu (D.S.), (et al.), *4628*

Adler (D.), measurements (dynamic), pressure measurement, velocity measurement, Taylor (P.M.), *1639*

Adler (L.), diffraction, elastic waves, elliptical cracks, Achenbach (J.D.), *4454*
- see Achenbach (J.D.), *4778*
- see Golan (S.), *7513*

Adler (P.M.), colloids, electro fluid dynamics, hydrodynamics, particle fluid flow, spherical bodies, *6580*

Adomaitis (E.I.), axisymmetric flow, boundary layer (turbulent), hot wire, turbulence, *649*

Adomian (G.), stochastic control, stochastic systems, volterra series, Sibul (L.H.), *10074*

Adrian (R.J.), see Tung (T.C.), *2687*

adsorption, immiscible fluids, liquid vapor interface, surface tension, Haung (K.Z.), Chai (C.P.), (et al.), *1657*
- additives, friction, lubrication (boundary), thermal effects, Matveeskii (R.M.), *1942*
- liquid vapor interface, plane surfaces, power law geometrics, Philip (J.R.), *3850*
- dispersion, porous media, rocks, transport phenomena, Sattar (A.), Shum (Y.M.), (et al.), *5834*
- cooling, energy conservation, latent heat, solar collectors, Peng (C.S.P.), Howell (J.R.), *8763*
- buoyant flow, convection (free), heat transfer (combined modes), radiant interchange, solar radiation, Fathelah (K.A.), Elsayed (M.M.), *9729*
- convection, dispersion, porous media, surfactants, Ramirez (W.F.), Shuler (P.J.), (et al.), *10690*

Adylov (K.A.), cables, elastoplasticity, waves, *7428*

Adzerikho (K.S.), emissivity, radiant interchange, scattering, two phase flow, Antsulevich (V.I.), (et al.), *777*
- see Blokh (A.G.), *5590*
- emissivity, radiant interchange, reflection, scattering, Blokh (A.G.), (et al.), *9721*

aeration, channels, particles, porous walls, two phase flow, Ishida (M.), Hatano (H.), (et al.), *4006*
- cavitation flow, separation, weirs, Berman (Ya.R.), *6605*
- bubble dynamics, two phase flow, Matsumoto (J.), Nakamura (M.), *6974*
- bubble dynamics, entrainment, Volkart (P.), *8908*
- free boundary, gravity waves, jets, weirs, Rogala (R.), *10392*

Aernoudt (E.), see Verpoest (I.), *2503*

aerodynamic coefficients, aerodynamic loads, blades, cascades, oscillating bodies, Hanamura (Y.), Tanaka (H.), (et al.), *2909*

- accelerometers, digital simulation, reentry, spinning bodies, Mcdowell (J.L.), Williamson (W.E.) Jr., *3924*
- airfoils, ground effect, lift, potential flow, two dimensional flow, Plotkin (A.), Kennell (C.G.), *5490*
- plates, rarefied gases, Gorelov (S.L.), Erofeev (A.I.), *11447*
- axial compressors, cascades, three dimensional flow, velocity profiles, Starke (J.), *11739*

aerodynamic excitation, eddies, jets, noise (aerodynamic), shear flow, turbulence, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- acoustics, noise, nozzles, Knott (P.R.), Blozy (J.T.), (et al.), *2944*

aerodynamic heating, boundary layer (three dimensional), friction (skin), hypersonic flow, leading edge, Dudin (G.N.), Neiland (V.Ya.), *598*
- blunt bodies, chemical reactions, fluid injection, Karashima (K.), Nakahashi (K.), *1733*
- ablation, film thickness, heat transfer, Znamenskii (V.V.), Lunev (V.V.), *5607*
- reentry, space vehicles, Wurster (K.E.), Eldred (C.H.), *6888*
- convection, heat transfer, surface temperature, thermography, wind tunnels, Balageas (D.L.), Ory (D.), *7816*
- aerodynamic loads, delta wings, space shuttle, structural analysis, Macconochie (I.O.), Lemessurier (R.W.), (et al.), *8643*

aerodynamic interference, blockage, transonic flow, wind tunnels, Chan (Y.Y.), *714*
- experimental methods, supersonic flow, wing-body, Vasenev (L.G.), Kharimonov (A.M.), *1624*
- jet propulsion, lift, wings, Maarsingh (R.A.), *2735*
- smoke stacks, strakes, vibration (flow induced), wind loads, wind tunnels, Ruscheweyh (H.), *2910*
- lift, spherical bodies, turbulent flow, walls, Willetts (B.B.), Murray (C.G.), *4670*
- airplane structures, fuselages, geometrical properties, helicopters, rotors, Wilby (P.G.), Young (C.), (et al.), *4673*
- airplanes, noise abatement, propellers, Muller (J.), Rouha (L.), *4690*
- cylindrical bodies, flutter, wakes, Tsui (Y.T.), Tsui (C.C.), *4752*
- aerodynamic performance, longitudinal stability, subsonic flow, visualization, wing body combinations, Lamar (J.E.), Frink (N.T.), *5494*
- design, helicopters, tails, Brocklehurst (A.), Taylor (P.), *5496*
- automobiles, blockage, flexible walls, models, wind tunnels, Stafford (L.G.), *5513*
- control, flexible walls, influence coefficients, wind tunnels, Dowell (E.H.), *5514*
- pressure gradient, thermal effects, wakes, wings, Peacock (R.E.), Hashem (A.A.F.), *6720*
- inlets, mathematical models, vortex sheets, wings, Shurygin (V.M.), *6723*
- canard, controllability, tails, wing body combinations, Agnew (J.W.), Hess (J.R.) Jr., *6724*
- aerodynamic loads, airplane structures, airplanes, external stores, stress analysis, Ronen (T.), Hanin (M.), *7789*
- nozzles, rockets, side forces, space vehicles, staging, Sadunas (J.A.), French (E.P.), (et al.), *7893*
- axial fans, noise (aerodynamic), turbofan engines, wakes, Shaw (L.M.), Glaser (F.W.), *7894*
- afterbodies, airplanes, jet engines, wind tunnels, Fanning (A.E.), Lucas (E.J.), *8642*
- blades, helicopters, noise (aerodynamic), vortex lines, Widnall (S.E.), Wolf (T.L.), *8648*
- design, inlet flow, models, wind, wind tunnels, Eckert (W.T.), Mort (K.W.), *8669*
- drag, spherical bodies, walls, wind tunnels, Awbi (H.B.), Tan (S.H.), *8672*
- combustion chambers, computer programming, diesel engines, thermal measurements, Gwinner (J.U.), *8803*
- blades, cascades, damping, oscillating bodies, separated flow, turbomachinery, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- aerodynamic performance, missiles, moving surfaces, surface waves, wings, Putilin (S.I.), *9655*
- propellers, transonic flow, wakes, wings, Rizk (M.H.), *9656*
- base pressure, blunt bodies, jets, wakes, Gai (S.L.), Kapoor (K.), *9657*
- airplanes, dynamic behavior, rolling motion, Sacha (G.), Fohrer (W.), *9659*
- flight (unsteady), ground effect, jets, moving surfaces, vtol, Kamman (J.H.), Hall (C.L.), (et al.), *9668*
- cascades, centrifugal compressors, diffusers, rotors, Fisher (E.H.), Inoue (M.), *9670*
- aerodynamic performance, airplanes, boundary layer (control), longitudinal stability, stol, thrust, Paulson (J.W.) Jr., *10511*
- fins, hypersonic flow, pressure distribution, projectiles, sabot discard, wind tunnels, Schmidt (E.M.), *10517*
- three dimensional flow, vortex lines, wind turbines, Schatzle (P.R.), Klimas (P.C.), (et al.), *10518*
- fins, launching, projectiles, trajectories, Schmidt (E.M.), *10519*
- aerodynamics, airfoils, blades, rotors, wind turbines, Klimas (P.C.), *10520*
- axial compressors, axial turbines, cascades, wakes, Mitchell (N.A.), *10524*
- channel flow, pressure measurement, walls, Heikal (H.), *10538*

aerodynamic loads, slender bodies, vortex shedding, wakes, Fidler (J.E.), *689*
- aeroelasticity, unsteady flow, wings, Dunn (H.J.), *1631*
- rolling motion, sideslip, vortex lines, wings, Javed (M.A.), Hancock (G.J.), *2727*
- lifting bodies, nonuniform flow, wakes, Gluck (D.), *2737*
- aerodynamic coefficients, blades, cascades, oscillating bodies, Hanamura (Y.), Tanaka (H.), (et al.), *2909*
- leading edge, lift, stalling, vortex lines, wings, Anderson (J.D.) Jr., Corda (S.), (et al.), *3737*
- computer programming, missiles, pressure distribution, supersonic flow, vortices, wing body combinations, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- airfoils, harmonic waves, incompressible flow, oscillating bodies, Filipkowski (S.), Nowak (M.), *3904*
- aeroelasticity (dynamic), bridges (suspension), dynamic stability, Petre (A.), Sofronie (R.), *3910*
- gust loads, nonlinear analysis, tails, Stapleford (R.L.), Dimarco (R.J.), *3912*
- bridges (suspension), flutter, oscillating bodies, Brancaleoni (F.), Brotton (D.M.), *4754*
- crossflow, cylindrical bodies, gust loads, So (R.M.C.), Savkar (S.D.), *4755*
- incompressible flow, slender bodies, yawing, Reding (J.P.), Ericsson (L.E.), *5496*
- random excitation, structures, Spanos (P.-T.D.), Chen (T.W.), *5697*
- buildings, geometrical properties, pressure distribution, unsteady flow, Sockel (H.), Taucher (R.), *5698*
- bodies of revolution, subsonic flow, vortex shedding, wings, Zhu (P.), Shou (W.), (et al.), *6717*
- aerodynamic interference, airplane structures, airplanes, external stores, stress analysis, Ronen (T.), Hanin (M.), *7789*
- control, helicopters, rotors, Mccloud (J.L.) III, *7797*
- axial compressors, inviscid fluid, stress analysis, unsteady flow, wind tunnels, Lambertz (J.), Wallmann (T.), (et al.), *7808*
- airfoils, damping, oscillating bodies, subsonic flow, Salmond (D.J.), *7904*
- aerodynamic heating, delta wings, space shuttle, structural analysis, Macconochie (I.O.), Lemessurier (R.W.), (et al.), *8643*
- drag, vegetation, wind loads, wind tunnels (environmental), wood, Johnson (R.C.) Jr., Ramey (G.E.), (et al.), *9662*
- axial compressors, axial turbines, incompressible flow, inviscid fluid, two dimensional flow, unsteady flow, Ispas (I.), Lucking (P.), *9671*
- cylindrical bodies, incompressible flow, inviscid fluid, lift, Yarmitskii (A.G.), *10520*
- solar collectors, wind loads, Randall (D.E.), Mcbride (D.D.), (et al.), *10874*

aerodynamic performance, conical flow, diffusers, entrance region, Sharma (P.C.), *626*
- ballistics (exterior), drag coefficient, rockets, Barbera (F.J.), *886*
- reynolds number, supersonic flow, wing body combinations, Stallings (R.L.) Jr., Lamb (M.), (et al.), *1628*
- axial turbines, blades, separated flow, Suachev (I.P.), Neuimin (V.M.), (et al.), *1632*
- diffusers, optimization, Ryabinkov (G.M.), *2653*
- cascades, endwall profiling, pressure distribution, turbines, Kopper (F.C.), Milano (R.), (et al.), *2655*
- discharge coefficients, discharges, flow measurement, nozzles, Ito (H.), Watanabe (Y.), (et al.), *2656*
- conical flow, delta wings, design, supersonic flow, Nastase (A.), *2731*
- flaps, mathematical models, wings, Ovchinnikov (V.A.), Osorgin (V.D.), (et al.), *2736*
- containers, ejectable containers, falling bodies, lift, pitching, Ramachandra (S.M.), Sudhakar (K.), (et al.), *2743*
- aerodynamics, numerical methods, subsonic flow, wings, An (J.-G.), *2747*
- cascades, numerical analysis, pressure distribution, Meauze (G.), *3677*
- noncircular pipes, nozzles, ventilation, Yetter (J.A.), Leavitt (L.D.), *3680*
- axial turbines, cooling, design, gas turbines, Yamamoto (A.), Takahara (K.), (et al.), *3741*
- airplanes, pressure measurement, subsonic flow, Larson (T.J.), Siemers (P.M.) III, *3753*
- nozzles, propulsion, swept wings, Capone (F.J.), *3885*
- airfoils, divergence, swept wings, Bland (S.R.), *3909*
- ballistics (exterior), control stability, missiles, rockets, Murphy (C.H.), *3926*
- airplanes, flight control, flutter, wind tunnels, Winther (B.A.), Shirley (W.A.), (et al.), *4326*
- cascades, drag, nozzles, optimization, relaxation drag, slender bodies, Schilling (H.), *4625*
- annuli, conical flow, diffusers, turbines, Kruse (H.), Quest (J.), *4629*
- data acquisition, digital analog computation, wind tunnels, Whitfield (J.D.), Pate (S.R.), (et al.), *4689*
- conical flow, diffusers, surveys, Klein (A.), *5444*
- diffusers, turbulence (freestream), Hoffmann (J.A.), *5445*
- aerodynamic interference, longitudinal stability, subsonic flow, visualization, wing body combinations, Lamar (J.E.), Frink (N.T.), *5494*
- centrifugal compressors, compressible flow, geometrical properties, reynolds number, Wachter (J.), Wohrl (B.), *5499*
- chimneys, tornados, wind turbines, Ayad (S.S.), *5502*
- automobiles, controllability, crossflow, drag reduction, lift, Gotz (H.), *6725*
- missiles, stability derivatives, transonic flow, viscous effects, Ericsson (L.E.), *6727*
- flight, helicopters, rotors, Azuma (A.), Saito (S.), (et al.), *6732*
- aerodynamics, axial turbines, geometrical properties, optimization, Macchi (E.), Perdichizzi (A.), *6736*

- ballistics (exterior), control stability, drag, missiles, Qasrawi (A.M.S.), East (R.A.), *6892*
- incompressible flow, vortex sheets, wings, Algazin (V.A.), *7784*
- attitude control, fans, propulsion, Betzina (M.D.), Kita (R.), *7790*
- downwash, helicopters, hovering, rotors, wakes, Andrew (M.J.), *7796*
- airplanes, dynamic loads, flexible bodies, modeling, structural response, Perry (B.) III, Kroll (R.I.), (et al.), *8647*
- airfoils, incompressible flow, inviscid fluid, Ando (S.), Lee (D.-H.), *9646*
- airplanes, design, geometrical properties, wings, Larson (E.S.), *9648*
- aerodynamic interference, missiles, moving surfaces, surface waves, wings, Putilin (S.I.), *9655*
- airplanes, maneuverability, optimization, stalling, Well (K.H.), Faber (B.), (et al.), *9660*
- airplanes, mathematical models, unsteady flow, Skoda (Z.), *9665*
- delta wings, drag, flaps, lift, Mattick (A.A.), Stollery (J.L.), *10498*
- aerodynamic interference, airplanes, boundary layer (control), longitudinal stability, stol, thrust, Paulson (J.W.) Jr., *10511*
- airplanes, jet flaps, numerical methods, Akentev (V.G.), Gulyaev (V.V.), *10513*
- axial compressors, cascades, geometrical properties, three dimensional flow, Stark (U.), Hoheisel (H.), *11741*
- blades, film cooling, gas turbines, pressure drop, Ito (S.), Eckert (E.R.G.), (et al.), *11743*
- centripetal flow, radial turbines, rotors, Gracheva (S.M.), Tikhonov (A.N.), (et al.), *11745*

aerodynamics, counterflow, finite difference methods, jets, Peck (R.E.), *630*
- boundary layer (three dimensional), numerical methods, turbulence, wings, Humphreys (D.A.), *646*
- computing techniques, Moretti (G.), *696*
- axial turbines, cooling, heat transfer, one dimensional flow, Sirotkin (Ya.A.), *701*
- centrifugal compressors, superchargers, turbomachinery, Kyrtatos (N.), Watson (N.), *703*
- flow measurement, liquid crystal, optical techniques, thermal measurements, Zharkova (G.M.), *725*
- cables, dynamic analysis, nonlinear analysis, towing cables, Karlsen (L.K.), *1215*
- compressible flow, numerical methods, reynolds number (high), survey, Le Balleur (J.C.), Peyret (R.), (et al.), *1527*
- fluidized beds, vibration (forced), Gupta (R.), Mujumdar (A.S.), *1871*
- algorithms, boundary layer, boundary value problems, singular perturbations, Calise (A.J.), *2120*
- compressible flow, inviscid fluid, perturbation methods, transonic flow, Seebass (A.R.), Yu (N.J.), (et al.), *2617*
- compressible flow, inlet flow, numerical methods, supersonic flow, Knight (D.D.), *2623*
- hypersonic flow, inlet flow, missiles, Dillon (J.L.), Marcum (D.C.) Jr., (et al.), *2742*
- aerodynamic performance, numerical methods, subsonic flow, wings, An (J.-G.), *2747*
- computing techniques, transonic flow, wings, Ballhaus (W.F.), Bailey (F.R.), *2748*
- blood flow, fluid mechanics, Krause (E.) ed., *3064, book*
- airfoils, compressible flow, numerical methods, transonic flow, Haidar (K.), *3637*
- drag coefficient, spoilers, trucks, vehicles, wind tunnels, Menneron (J.-C.), *3732*
- airplanes, engines, propellers, Larrabee (E.E.), *3750*
- bridges (suspension), gust loads, stochastics, wind loads, Sigbjornsson (R.), Hjorth-Hansen (E.), *3911*
- elliptical bodies, lifting surfaces, three dimensional flow, wings, Kida (T.), *4668*
- aerodynamic performance, axial turbines, geometrical properties, optimization, Macchi (E.), Perdichizzi (A.), *6736*
- combustion chambers, combustors, jets, mixing, Grigorenko (P.P.), Spiridonov (Yu.A.), (et al.), *6844*
- compressible flow, numerical methods, transonic flow, Belotserkovski (O.M.), *8549*
- compressible flow, supersonic flow, three dimensional flow, Ehlers (F.E.), Epton (M.A.), (et al.), *8552*
- axial compressors, blades, pressure distribution, rotors, three dimensional flow, Dring (R.P.), Joshyn (H.D.), (et al.), *8656*
- compressible flow, transonic flow, Schneider (W.) eds., Platzer (M.), *9547, book*
- compressible flow, potential flow, subsonic flow, turrets, Laderman (A.J.), De Jonckheere (R.), *9548*
- compressible flow, numerical methods, supersonic flow, three dimensional flow, Voskresenskii (G.P.), Chushkin (P.I.), *10421*
- aerodynamic interference, airfoils, blades, rotors, wind turbines, Klimas (P.C.), *10520*
- design, injection systems, swirl flow, vortex flow, Volchkov (E.P.), Kislykh (V.I.), (et al.), *10542*
- bodies of revolution, drag, supersonic flow, wing body combinations, Vasilchenko (V.I.), *11397*
- boundary value problems, compressible flow, numerical methods, Zhu (Y.L.), Chen (B.M.), *11398*
- disks, trajectories, wind, Frohlich (C.), *11731*

aeroelasticity, aerodynamic loads, unsteady flow, wings, Dunn (H.J.), *1631*
- gust loads, pressure distribution, separated flow, structural response, Forsching (H.), *2912*
- blunt bodies, models, nonlinear systems, oscillators, Dowell (E.H.), *3908*
- buildings, design, vibration (forced), wind tunnels, Templin (J.T.), Cooper (K.R.), *6871*
- design, flutter, panels, supersonic flow, Pierson (B.L.), Hajela (P.), *7907*
- blades, finite element techniques, helicopters, rotors, Straub (F.K.), Friedmann (P.P.), *9806*
- blades, flutter, turbofan engines, Ford (R.A.J.), *10762*

aeroelasticity (dynamic), aerodynamic loads, bridges (suspension), dynamic stability, Petre (A.), Sofronie (R.), *3910*

aerosols, orbits, zero g phenomena, Edwards (H.W.), *4016*
- laser velocimeter, turbulence (geophysical), velocimeters, velocity measurement, wind, Matvienko (G.G.), Samokhvalov (I.V.), *4093*
- electric effects, scattering, Kapustin (V.N.), Zagainov (V.A.), (et al.), *4833*
- meteorology, planetary atmospheres, radiant interchange, Konyukh (L.A.), Yurevich (F.B.), (et al.), *5586*
- measurements, microstructures, Veretennikov (V.V.), Kozlov (V.S.), (et al.), *5821*
- atmosphere, drops, particle size, refraction, Mathai (C.V.), Harrison (A.W.), *5960*
- approximation methods, asymptotic behavior, coagulation, particles, Tokar (Ya.I.), *6970*
- acoustic loading, aggregates, Chou (K.H.), Lee (P.S.), (et al.), *6999*
- experimental results, jets, nozzles, Hagele (J.), *7728*
- finite amplitude, heat transfer, plane waves, Borisov (A.A.), Vakhgelt (A.F.), (et al.), *7760*
- electric effects, measurements, optical techniques, properties, Straubel (H.), *8914*
- carbon, combustion, particles, Bukatyi (V.I.), Segalakov (A.M.), (et al.), *9769*
- chemically reactive flow, compressible flow, hypersonic flow, particle fluid flow, wakes, Dmitriev (L.M.), Markachev (Yu.E.), *11408*
- luminous energy, particulate damping, turbulence, turbulence (geophysical), Kolosov (V.V.), Kuzikovskiy (A.V.), *11555*
- deposition, diffusion, fibers, filters, Ingham (D.B.), *12051*
- measurements (dynamic), sampling, El-Shobokshy (M.S.), *12061*

aerospace, composite materials, hybrid construction, structural analysis, Zweben (C.), *10131*

aerospace vehicles, dynamic response, modal analysis, Niedbal (N.), *533*
- airplane structures, panels (stiffened), Anthony (F.M.), Helenbrook (R.G.), *3538*
- design, space vehicle structures, Hedgepeth (J.M.), Miller (R.K.), (et al.), *3562*
- space vehicle structures, Vaughan (D.H.), *3563*
- design, regulator problem, rotating bodies, structural response, Baloev (A.A.), *4307*
- optimal control, structural response, structures, synthesis, Vatolin (V.V.), Degtyarev (G.L.), (et al.), *4308*
- optimization, space platforms, space vehicle structures, Heard (W.L.) Jr., Bush (H.G.), (et al.), *6546*
- adaptive systems, optimal control, synthesis, trajectories, Salmin (V.V.), *7248*

aerothermoacoustics, incompressible flow, sound generation, wave equations, Meecham (W.C.), *9844*

aerothermochemistry, bifurcation, combustion, propagation, thermal waves, Sivashinsky (G.), *8789*

aerothermodynamics, elliptic equations, finite volume method, fluid mechanics, turbomachinery, Dutoya (D.), Michard (P.-J.), *5014*

Afanasev (B.A.), boiling, capillary flow, porous surfaces, Smirnov (G.F.), *9687*

Afanasev (V.N.), algorithms, lyapunov's functions, stochastic control, tracking, trajectories, wiener-hopf technique, Danilina (A.N.), *2137*

Afanasev (Yu.A.), anisotropic media, cooling, polymers, shells (cylindrical), shells (thick), thermal stresses, Ekelchik (V.S.), (et al.), *2971*

Afgan (N.H.), see Spalding (D.B.), *2854, book*

Afimiwala (K.A.), design, optimal control, synthesis, Mayne (R.W.), *227*

Afshar (R.), conduction (heat), gaseous ammonia, thermal properties, thermodynamic properties, Murad (S.), (et al.), *4692*

afterbodies, mathematical models, supersonic flow, wing body combinations, Vukelich (S.R.), Williams (J.E.) Jr., *2739*
- pressure gradient, separation, trailing edge, turbulence, Solignac (J.-L.), *4610*
- pressure gradient, separation, trailing edge, turbulence, Solignac (J.-L.), *4611*
- aerodynamic interference, airplanes, jet engines, wind tunnels, Fanning (A.E.), Lucas (E.J.), *8642*
- compressible flow, supersonic flow, turbulent flow, Yoshikawa (K.K.), Wray (A.A.), *11411*

afterburners, injection, oxygen, turbofan engines, Fishbein (B.D.), *5862*

Afzal (N.), heat transfer, matched asymptotic expansions, reynolds number (high), second order analysis, wall jets, *592*
- buoyant flow, convection, plumes, *2674*

Agaev (G.N.), boundary value problems, elasticity, galerkin method, Gamidov (V.S.), *4168*

Agarwal (B.L.), composite structures, panels (stiffened), postbuckling behavior, shear webs, *2288*

Agarwal (J.P.), see Naidu (G.M.), *7864*

Agarwal (M.C.), see Gupta (S.C.), *7896*

Agarwal (P.K.), blades, conformal mapping, potential flow, three dimensional flow, turbomachinery, Viktorov (G.V.), *4677*

Agarwal (R.S.), fluid injection, fluid mechanics, heat transfer, numerical methods, rotating disks, suction, Bhargava (R.), *10685*

Ageeva (N.S.), ocean bed, shallow water, sound fields, sound generation, Krupin (V.D.), *2933*

Aggarwal (J.K.), see Arya (V.K.) eds., *9907, book*

Aggarwal (K.R.), finite element techniques, fluid-structure interaction, plates, vibration, Sinhasan (R.), (et al.), *2714*

Aggarwal (S.K.), finite element methods, pressure vessels, shells, stress analysis, Nayak (G.C.), (et al.), *3566*

- cylindrical bodies, elastoplasticity, pressure vessels, Nayak (G.C.), *10368*

Aggarwala (B.D.), see Ariel (P.D.), *5672*

Aggour (M.S.), resonance, retaining walls, Brown (C.B.), *7043*

aggregates, acoustic loading, aerosols, Chou (K.H.), Lee (P.S.), (et al.), *6999*

- comminution, equipment, grinding, Krycer (I.), Hersey (J.A.), *12055*

aging, elastic constants, polymers, Baum (J.S.), Schultz (J.M.), *1403*

- concrete, strength, Naik (T.R.), *1440*
- skin, tissues, ultrasonics, Bhagat (P.K.), Kerrick (W.), (et al.), *6011*
- creep, plasticity, steel, Cho (U.W.), Findley (W.N.), *6174*
- beryllium, deformation (plastic), hydrogen embrittlement, strength, Lashuk (N.K.), Tkachenko (V.G.), (et al.), *7502*
- computer programming, laminates, viscoelastic materials, volterra equations, Huet (C.), *9250*

Agnew (J.W.), aerodynamic interference, canard, controllability, tails, wing body combinations, Hess (J.R.) Jr., *6724*

Agranat (V.M.), dissociation, heat transfer, real gas effects, stagnation point, thermal instability, Bertsun (V.N.), (et al.), *9704*

Agrawal (A.K.), coordinate systems, heat transfer, navier stokes equation, plane surfaces, three dimensional flow, Peckover (R.S.), *10415*

Agrawal (A.K.) eds., convection (free), cooling, heat transfer, nuclear reactors, Guppy (J.G.), *2797, book*

Agrawal (R.K.), gas turbines, mathematical models, optimization, starting regime, Yunis (M.), *10722*

Agrawal (S.B.), bridges (box girder), simply supported structures, structural analysis, Tamhankar (M.G.), *2531*

Ahlbeck (D.R.), dynamic testing, measurements (dynamic), rails, wheels, Harrison (H.D.), *16*

Ahlers (G.), see Walden (R.W.), *9534*

Ahlheim (M.), flames (diffusion), ionization, reaction zone, Gunther (R.), *10718*

Ahluwalia (D.S.), see Stickler (D.C.), *893*

- sound propagation, underwater acoustics, waveguides, Reiss (E.L.), (et al.), *6924*
- see Stickler (D.C.), *12003*

Ahluwalia (R.K.), boundary layer, chemically reactive flow, ignition, nonequilibrium flow, plates, vaporization, Chung (P.M.), *3866*

- see Im (K.H.), *8811*
- boundary layer (thermal), channel flow, heat transfer, magneto fluid dynamics, performance, Doss (E.D.), *8826*
- heat transfer (combined modes), magneto fluid dynamics, mie scattering, radiant interchange, radiating flow, scattering, three dimensional flow, Im (K.H.), *10612*
- see Im (K.H.), *11805*

Ahmad (J.), see Papaspyropoulos (V.), *477*

Ahmadi (G.), buildings (tall), seismic loading, stability, Mostaghel (N.), *4849*

- differential equations (partial), random media, stability theory, *4976*
- see Firoozbakhsh (K.), *5097*
- free shear layer, jets, turbulence, turbulence model, *7753*

Ahmed (A.M.), see Tencer (A.F.), *3055*

Ahn (B.H.), algorithms, iterative methods, market equilibrium, numerical methods, operations research, optimization, *7227*

Ahrabian (D.), see Bosman (C.), *9557*

Ahrendts (J.), equations of state, mathematical models, nonlinear analysis, Baehr (H.D.), *6744*

Ahrlin (U.), environmental control, noise, noise (traffic), Rylander (R.), *1816*

Ahuja (L.R.), internal flow, near ground effects, runoff, saturation, soil mechanics, Ross (J.D.), (et al.), *10831*

Aicher (W.), see Argyris (J.H.), *7380*

Aifantis (E.C.), boundary value problems, diffusion, maximum principle, parabolic equations, Hill (J.M.), *4973*

- diffusion, metals, mixture theories, solid mechanics, *6045*

Ainbinder (S.B.), friction, lubricants (solid), polymers, roughness, *1003*

- creep, equations of state, molecular theory, polymers, thermophysical properties, Tyunina (E.L.), (et al.), *10656*

Ainola (L.Ya.), compressible flow, numerical methods, pipe flow, unsteady flow, Lamp (Yu.Yu.), (et al.), *11417*

Ainsworth (L.), composite materials, fibers, pipes, reinforced bodies, *9466*

air, energy dissipation, entrainment, hydraulic structures, turbulence, Binder, Duport, (et al.), *3603*

- entrainment, suction, vortices, wells, Anwar (H.O.), Amphlett (M.B.), *5389*
- axisymmetric flow, cavitation, separation, water tunnels, Holl (J.W.), Carroll (J.A.), *6804*
- irrotational flow, siphons, streamlines, Ali (K.H.M.), Peterman (D.), *6613*
- conduction (heat), conductivity, hot wire, Scott (A.C.), Johns (A.I.), (et al.), *6754*
- bubble dynamics, cavitation inception, diffusion, laminar flow, separation, Parkin (B.R.), *11382*
- approximation methods, radiation, wakes, Pilyugin (N.N.), Tikhomirov (S.G.), (et al.), *11516*

air conditioning, cooling, radiant interchange, solar collectors, Jones (C.B.), Smetana (F.O.), *1722*

- analytical methods, cooling, heat exchangers, Sofrata (H.M.), *2838*
- closed conduit flow, similarity methods, Moog (W.), *3789*
- cooling, radiant interchange, scale models, variational methods, Miyagawa (Y.), *5564*
- air raid shelters, environmental control, environmental tests, Pnueli (D.), *5574*
- energy conservation, heat pumps, heating, solar energy, Veziroglu (T.N.) ed., *6818, book*
- cooling, heating, thermal loading, Urano (Y.), Nanri (H.), (et al.), *9742*
- heat pumps, heating, Von Cube (H.L.), Steimle (F.), *10614, book*
- absorption, dehumidifying system, drying, evaporated films, film flow, fins, low temperature, Peng (C.S.P.), Howell (J.R.), *10641*

air pollution, diesel engines, emulsions, fuels, heat engines, Thorp (I.), Armstrong (G.), (et al.), *1759*

- correlation, noise (traffic), noise abatement, Makarewicz (R.), Green (A.E.S.), *1815*
- Singh (H.B.), Salas (L.J.), (et al.), *1918*
- dispersion, galerkin method, numerical methods, Pepper (D.W.), Kern (C.D.), (et al.), *3028*
- computing techniques, interpolation, Miksad (R.W.), Long (G.E.), *3127*
- dispersion, plumes, Sheih (C.M.), *4057*
- boundary layer (atmospheric), dispersion, stratified flow, Tangermann (G.), *4080*
- monitoring, water pollution, Nazarov (I.M.), Fridman (Sh.D.), *4095*
- contamination, plumes, prediction, Bouchardy (A.-M.), *4637*
- boundary layer (atmospheric), plumes, smoke stacks, turbulence (geophysical), Ooms (G.), Mahieu (A.P.), *8028*
- control, linear programming, mathematical models, optimization, Kohn (R.E.), *10094, book*
- concentration, dispersion, plumes, prediction, Harrison (R.M.), Mccartney (H.A.), *11523*

air water entry, cavities, fredholm equations, inviscid fluid, wedges, Kuznetsov (A.V.), *5967*

Airapetov (A.B.), boundary layer (turbulent), coatings, compliant materials, interaction, surface flow, viscoelastic materials, *7698*

Airey (R.), see Briggs (A.), *9391*

airfoil characteristics, delta wings, drag, flaps, leading edge, vortex flaps, Marchman (J.F.) III, *683*

- design criteria, transonic flow, two dimensional flow, Nakamura (M.), *695*
- finite difference methods, reynolds equation, stratification, trailing vortices, turbulent flow, vortices, wakes, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- incompressible flow, pressure distribution, stagnation point, trailing edge, Baskaran (V.), Holla (V.S.), *1616*
- airfoils, oscillating bodies, pressure distribution, schlieren methods, shock waves, Benetka (J.), Pernica (Z.), *2733*
- flaps, pressure distribution, Wentz (W.H.) Jr., Fiscko (K.A.), *3730*
- blades, cascades, turbines, two dimensional flow, Pimsner (V.), Baran (N.), *4740*
- complex variables, incompressible flow, potential flow, two dimensional flow, White (J.W.), *7785*
- blades, helicopters, oscillating bodies, two dimensional flow, Maresca (C.A.), Favier (D.J.), (et al.), *10502*

airfoil theory, numerical methods, potential flow, transonic flow, Fort (J.), Kozel (K.), *3726*

- deformation, lift, oscillations, potential flow, Laporte (R.), *7787*
- conformal mapping, inviscid fluid, two dimensional flow, Prosnak (W.J.), Rokicki (J.), *8640*
- integral methods, numerical methods, transonic flow, Sachdev (P.L.), *8652*
- flow reversal, heart, moment coefficient, optimization, valves, Tuck (E.O.), *9513*
- nonconservative systems, potential flow, transonic flow, Baker (T.J.), *9545*
- laminar flow, oscillating bodies, supersonic flow, trailing edge, Brown (S.N.), Cheng (H.K.), *9651*
- cavitation, cavitation number, contact problems, membranes (inflatable), surface tension, weber number, Vanden-Broeck (J.-M.), *10402*
- design, incompressible flow, viscous flow, Berak (P.), *10604*

airfoils, boundary layer (turbulent), laser doppler velocimeters, transonic flow, Johnson (D.A.), Bachalo (W.D.), (et al.), *694*

- trailing vortices, vortex flow, vortex sheets, wakes, Phillips (W.R.C.), *1506*
- compressible flow, numerical methods, transonic flow, Niyogi (P.), Dutta (S.), *1525*
- oscillating bodies, scale effects, transonic flow, Davis (S.S.), *1784*
- interaction, perturbations, shear flow, Hashem (A.A.F.), Peacock (R.E.), *2610*
- computing techniques, holography, interferometry, shock waves, supercritical flow, Spaid (F.W.), Bachalo (W.D.), *2726*
- airfoil characteristics, oscillating bodies, pressure distribution, schlieren methods, shock waves, Benetka (J.), Pernica (Z.), *2733*

- design, sailplane, Boermans (L.M.M.), Selen (H.J.W.), *2746*
- lift, porous walls, two dimensional flow, wind tunnels, Sawada (H.), *2769*
- oscillating bodies, pressure distribution, transonic flow, wind tunnels, Benetka (J.), Pernica (Z.), *2771*
- aerodynamics, compressible flow, numerical methods, transonic flow, Haidar (K.), *3637*
- base pressure, drag, subsonic flow, trailing edge, Gai (S.L.), Sharma (S.D.), *3725*
- finite element techniques, transonic flow, Marsh (J.E.), Eastep (F.E.), *3727*
- flaps, incompressible flow, potential flow, vortex sheets, Zaitsev (A.A.), Komarov (A.M.), *3728*
- boundary layer, supercritical flow, transonic flow, wind tunnels, Spaid (F.W.), Stivers (L.S.) Jr., *3764*
- aerodynamic loads, harmonic waves, incompressible flow, oscillating bodies, Filipkowski (S.), Nowak (M.), *3904*
- aerodynamic performance, divergence, swept wings, Bland (S.R.), *3909*
- fredholm equations, irrotational flow, least squares, singularities, sources, Campbell (G.S.), *4587*
- hydrofoils, lifting surfaces, mathematical models, Stepanov (G.Yu.), *4669*
- compressible flow, finite difference methods, transonic flow, unsteady flow, Kerlick (G.D.), Nixon (D.), *5417*
- aerodynamic coefficients, ground effect, lift, potential flow, two dimensional flow, Plotkin (A.), Kennell (C.G.), *5490*
- oscillating bodies, transonic flow, unsteady flow, Shivamoggi (B.K.), *5491*
- boundary layer, design, gliders, laminar flow, sailplanes, Ostrowski (J.), Skrzynski (S.), (et al.), *5492*
- drag, optimization, subsonic flow, transonic flow, Zhigulev (V.N.), *5493*
- separation, subsonic flow, Jacob (K.), *6095*
- compressible flow, porous walls, transonic flow, wind tunnels, Blynskaya (A.A.), Lifhits (Yu.B.), *6628*
- flutter, one dimensional flow, oscillating bodies, transonic flow, unsteady flow, wakes, Mccroskey (W.J.), *6716*
- oscillating bodies, three dimensional flow, transient effects, transonic flow, two dimensional flow, Dowell (E.H.), *6718*
- compressible flow, flaps, viscous flow, Oskam (B.), *6719*
- compressible flow, porous walls, Ciavaldini (J.-F.), Pogu (M.), (et al.), *6721*
- unsteady flow, wakes, Ho (C.-M.), Chen (S.-H.), *7735*
- base pressure, compressible flow, vortex shedding, Motallebi (F.), Norbury (J.F.), *7736*
- lift, slots, unsteady flow, vortices, wakes, Howe (M.S.), *7783*
- incompressible flow, stalling, turbulent flow, two dimensional flow, viscous flow, Hegna (H.A.), *7788*
- aerodynamic loads, damping, oscillating bodies, subsonic flow, Salmond (D.J.), *7904*
- control, flutter, incompressible flow, trailing edge, Nissim (E.), Lottati (I.), *7906*
- beams (cantilever), flexure, torsion, Wang (K.-F.), *9259*
- aerodynamic performance, incompressible flow, inviscid fluid, Ando (S.), Lee (D.-H.), *9646*
- numerical methods, supersonic flow, two dimensional flow, Lewis (T.S.), Sirovich (L.), *9647*
- boundary layer, potential flow, velocity profiles, Dutt (H.N.V.), Sreekanth (A.K.), *9654*
- pressure distribution, separated flow, shock waves, transonic flow, unsteady flow, Roos (F.W.), *9805*
- compressible flow, conformal mapping, numerical methods, transonic flow, Constantinescu (V.N.), Bucur (S.C.), *10419*
- compressible flow, numerical methods, subsonic flow, Carey (G.F.), Pan (T.T.), *10420*
- cascades, transonic flow, two dimensional flow, Messiter (A.F.), Adamson (T.C.) Jr., *10448*
- finite difference methods, transonic flow, two dimensional flow, Chen (L.-T.), *10497*
- aerodynamic interference, aerodynamics, blades, rotors, wind turbines, Klimas (P.C.), *10520*
- rolling, three dimensional flow, trailing edge, vortex sheets, Schwartz (L.W.), *11360*
- compressible flow, numerical methods, separated flow, transonic flow, viscous flow, wakes, Le Balleur (J.C.), *11395*

Airila (M.), compressors, control, cooling, mathematical models, screw compressors, *3746*

airplane performance, control, flight path, performance, Ivanov (V.V.), Sirazetdinov (T.K.), *691*
- flight tests, spin recovery, wind tunnels, Tischler (M.B.), Barlow (J.B.), *692*
- airplanes, controllability, Nguyen (L.T.), *694*
- control, longitudinal stability, swept wings, Dzygadlo (Z.), Szendzielorz (C.), *1621*
- design criteria, engine failure, runway (critical length), runways, Powers (S.A.), *1625*
- digital control, flight loads, sampled data systems, Keskar (D.A.), Slater (G.L.), *1626*
- spin recovery, stalling, Hreha (M.A.), Lutze (F.H.), *2744*
- stability derivatives, transonic flow, wind tunnels, Langhans (R.A.), Flechner (S.G.), *3736*
- leading edge, stalling, transonic flow, visualization, wind tunnels, wings, Pavelka (J.), Tatum (K.E.), *10499*
- flight, propellers, Laitone (E.V.), *10508*
- ground roll, landing gears, Sivaramakrishnan (M.M.), *10509*
- derivatives, dynamic analysis, dynamic testing, modeling, Stafford (H.L.), *10510*
- design, flight tests, leading edge, spin recovery, wind tunnels, Dicarlo (D.J.), Stough (H.P.) III, (et al.), *10512*
- design, propulsion, stol, turbofan engines, vtol, Glasgow (E.R.), Skarshaug (R.E.), *11742*

airplane structures, crack growth, fatigue, material testing, prediction, survey, Schijve (J.), *1350*
- fatigue, life expectancy, statistical design, Jost (G.S.), Costolloe (S.P.), *1408*
- aluminum alloys, bonding, corrosion fatigue, laminates, Vogelesang (L.B.), Mariseen (R.), (et al.), *2424*
- fracture mechanics, stress analysis, survey, Liebowitz (H.), Subramonian (N.), (et al.), *2437*
- design, forebodies, geometrical properties, pressure distribution, Barger (R.L.), *2738*
- composite materials, patching, residual stresses, thermal effects, Jones (R.), Callinan (R.J.), *2980*
- design (optimum), optimization, Sliwa (S.M.), *3523*
- algorithms, failure, reliability analysis, Yanko (A.K.), *3529*
- aerospace vehicles, panels (stiffened), Anthony (F.M.), Helenbrook (R.G.), *3538*
- adhesives, bonded joints, composite materials, moisture, Delasi (R.J.), Schulte (R.L.), *3587*
- aerodynamic interference, fuselages, geometrical properties, helicopters, rotors, Wilby (P.G.), Young (C.), (et al.), *4673*
- crash dynamics, dynamics, safety, Wittlin (G.), *5369*
- eccentrically braced frames, frames, seismic loading, Jain (A.K.), Goel (S.C.), *5891*
- aerodynamic interference, aerodynamic loads, airplanes, external stores, stress analysis, Ronen (T.), Hanin (M.), *7789*
- acoustic waves, jet engines, numerical methods, scattering, Bayliss (A.), *7942*
- acoustic loading, fatigue, galerkin method, monte carlo analysis, panels, Maekawa (S.), *8434*
- airplanes, noise abatement, Revell (J.D.), Balena (F.J.), (et al.), *9850*
- noise (random), turbojet engines, Magliozzi (B.), *10803*
- acoustic measurements, noise abatement, Barton (C.K.), Mixson (J.S.), *10805*

airplanes, design, feedback, observers, Singh (S.N.), Schy (A.A.), *121*
- design (optimum), subsonic flow, transport, Torenbeek (E.), *688*
- separated flow, separation, spin recovery, wings, Feistel (T.W.), Anderson (S.B.), (et al.), *690*
- airplane performance, controllability, Nguyen (L.T.), *694*
- noise (traffic), noise measurements, Taylor (S.M.), Hall (F.L.), (et al.), *913*
- dynamic analysis, kinematics, Hitch (H.), *1069*
- algorithms, differential games, evasion, pursuit, Rajan (N.), Prasad (U.R.), (et al.), *1157*
- dynamic stability, mathematical models, trajectories, Young (J.W.), Schy (A.A.), (et al.), *1161*
- control, flight control, simulation, vtol, Tinling (B.E.), Cole (G.L.), *1166*
- ground effect, simulation, vortices, wakes, Wickens (R.H.), *1619*
- lift, potential flow, sprays, streamlines, trajectories, vortices, Wickens (R.H.), *1620*
- acoustic measurements, noise (traffic), sampling, Schomer (P.D.), De Vor (R.E.), *1814*
- digital control, flight control, fly-by-wire system, navigation, reliability analysis, Berman (H.), Boudreau (J.), *2159*
- design, flight control, side-force control, Binnie (W.B.), Stengel (R.F.), *2160*
- air traffic control, algorithms, control, dynamic programming, Ben-Avraham (O.), Tabak (D.), *2181*
- control, design, external stores, flutter, Nissim (E.), Lottati (I.), *2183*
- air traffic control, mathematical models, simulation, Atack (M.J.), *2203*
- noise (traffic), noise abatement, simulation, supersonic flow, Grantham (W.D.), Smith (P.M.), (et al.), *2960*
- dynamic analysis, variable mass, Nita (M.M.), *3088*
- guns, identification, least squares, mathematical models, Kou (R.S.), Glass (B.C.), (et al.), *3176*
- drag reduction, wind tunnels, winglets, wings, Gilkey (R.D.), *3729*
- gyrodynamics, spin recovery, Mccormick (B.W.), *3734*
- aerodynamics, engines, propellers, Larrabee (E.E.), *3750*
- aerodynamic performance, pressure measurement, subsonic flow, Larson (T.J.), Siemers (P.M.) III, *3753*
- chemical reactions, ozone, upper atmosphere, Whitten (R.C.), Borucki (W.J.), (et al.), *4065*
- algorithms, error, estimation, identification, Ramamoorthy (R.P.), *4223*
- aerodynamic performance, flight control, flutter, wind tunnels, Winther (B.A.), Shirley (W.A.), (et al.), *4326*
- flight path, optimization, rockets, supersonic flow, wing body combinations, Large (E.), *4671*
- flight control, lateral stability, space shuttle, stochastics, Stengel (R.F.), *4672*
- aerodynamic interference, noise abatement, propellers, Muller (J.), Rouha (L.), *4680*

- design (optimum), gas turbines, Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5659*
- atmosphere, noise, nonlinear waves, sound propagation, Morfey (C.L.), Howell (G.P.), *5766*
- evasion, missiles, pursuit, suboptimal control, Steinberg (A.M.), Forte (I.), *6146*
- fluidics, turbulence, Taylor (D.L.), *6693*
- flight path, fuel economy, optimization, simulation, Wauer (J.C.), Bruckner (J.M.H.), (et al.), *6729*
- frequency response, lateral stability, unsteady flow, Wells (W.R.), Banda (S.S.), (et al.), *6730*
- aerodynamic interference, aerodynamic loads, airplane structures, external stores, stress analysis, Ronen (T.), Hanin (M.), *7789*
- design, feedback, feedforward control, interception, optimal control, pursuit, Lunderstadt (R.), *8169*
- design, optimization, supersonic flow, transonic flow, vortex flow, wings, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- aerodynamic interference, afterbodies, jet engines, wind tunnels, Fanning (A.E.), Lucas (E.J.), *8642*
- flight path, fuel economy, optimization, subsonic flow, Large (E.), *8644*
- containers, ejectable containers, ejectors, falling bodies, separation, trajectories, Maddox (A.R.), *8645*
- control, flight control, lateral stability, longitudinal stability, stability, Etkin (B.), *8646, book*
- aerodynamic performance, dynamic loads, flexible bodies, modeling, structural response, Perry (B.) III, Kroll (R.I.), (et al.), *8647*
- noise (aerodynamic), noise abatement, supersonic flow, O'Keefe (J.V.), Mangiarotty (R.A.), (et al.), *8867*
- design, supercritical wings, swept wings, Garabedian (P.), Mcfadden (G.), *9645*
- aerodynamic performance, design, geometrical properties, wings, Larson (E.S.), *9648*
- aerodynamic interference, dynamic behavior, rolling motion, Sachs (G.), Fohrer (W.), *9659*
- aerodynamic performance, maneuverability, optimization, stalling, Well (K.H.), Faber (B.), (et al.), *9660*
- aerodynamic performance, mathematical models, unsteady flow, Skoda (Z.), *9665*
- airplane structures, noise abatement, Revell (J.D.), Balena (F.J.), (et al.), *9850*
- jet engines, noise abatement, Parthasarathy (S.P.), Cuffel (R.F.), (et al.), *9852*
- aerodynamic interference, aerodynamic performance, boundary layer (control), longitudinal stability, stol, thrust, Paulson (J.W.) Jr., *10511*
- aerodynamic performance, jet flaps, numerical methods, Akentev (V.G.), Gulyaev (V.V.), *10513*
- control surfaces, design, equations of motion, flight control, mathematical models, Paljaruci (G.), *11733*
- design, rolling motion, spin recovery, wind tunnels, Bihrle (W.) Jr., Bowman (J.S.) Jr., *11734*
- algorithms, lift, longitudinal stability, unsteady effects, Wells (W.R.), Keskar (D.A.), *11735*
- computer aided design, damping, gust loads, power spectral density, yawing, Noback (R.), Blaauboer (C.), *11843*

airships, design, flight stability, helicopters, rotors, Nagabhushan (B.L.), Tomlinson (N.P.), *7799*

Aizawa (T.), see Yagawa (G.), *3459*
- see Yagawa (G.), *6457*

Aizenberg (Ya.M.), buildings, earthquake engineering, safety, seismic loading, Neiman (A.I.), (et al.), *5894, book*

Aizicovici (S.), discontinuities, integro differential equations, mathematical methods, nonlinear characteristics, volterra equations, *1096*

Akai (M.), interface waves, two dimensional flow, two phase flow, Inoue (A.), (et al.), *6971*

Akaizawa (M.), see Nishiyama (T.), *6994*

Akasaka (T.), see Kawata (K.) eds., *5122, book*

Akay (H.U.), dynamic analysis, finite element methods, large displacement, plates, vibration (free), *8310*
- cascades, finite element techniques, transonic flow, Ecer (A.), *8589*
- see Ecer (A.), *11393*
- cascades, compressible flow, finite element techniques, transonic flow, Ecer (A.), *11404*

Akbay (U.), hydrodynamic stability, non newtonian flow, pipe flow, shear-rate dependent, viscosity, *1560*

Akeju (T.A.I.), equations of motion, shells (cylindrical), shells (thin), *1233*

Akentev (V.G.), aerodynamic performance, airplanes, jet flaps, numerical methods, Gulyaev (V.V.), *10513*

Akers (A.), discharges, hydraulic instruments, jets, orifices, reynolds number (high), *8510*

Akesson (B.), blades, propellers, spectra, vibration (forced), wind turbines, Sandstrom (S.), *6870*

Akesson (B.A.), beams (cantilever), eigenvalues, vibration (free), Friberg (P.O.), *3354*

Akgerman (N.), see Lahoti (G.D.), *1342*

Akhmedzhanov (Kh.), atmospheric circulation, stratification, *9937*

Akhmerov (A.F.), bending, bimodulus materials, elastoplasticity, metallic composites, *7306*

Aki (F.), see Kadotani (K.), *10132*

Aki (S.), see Miyanaga (Y.), *6606*

Akimov (A.I.), density, schlieren methods, shock tubes, shock waves, thermal effects, thermal gradient, Piskareva (M.V.), (et al.), *10492*

Akimov (G.A.), compressible flow, jets, numerical methods, supersonic flow, Sobkolov (B.N.), *3639*

Akimov (P.P.), correlation, mathematical models, stochastic processes, *141*

Akin (J.E.), see Hughes (T.J.R.), *2065*

Akinmusuru (J.O.), caps, footings, interaction, piles, *10257*

Akiyoshi (T.), dynamic response, friction, piles, soil structure interaction, vibration, *8014*

Akkas (N.), cavities, diffusion, infinite medium, mathematical methods, spherical bodies, Baukl (N.R.) Jr., *2010*

Akolkar (S.P.), see Soundalgekar (V.M.), *10737*

Akopyan (S.Ts.), attenuation, earth, viscoelastic waves, Zharkov (V.N.), (et al.), *5877*

Akselrud (G.A.), mass transfer, particle fluid flow, pulsatile flow, Fiklistov (N.I.), (et al.), *12019*

Aksenov (A.F.), friction (rolling), friction (sliding), lubrication (boundary), steel, wear, Belyanskii (V.P.), (et al.), *3042*

Aksu (G.), dynamic properties, plates (stiffened), vibration (free), *9310*

Akulenko (L.D.), dynamic programming, nonlinear systems, rotating bodies, time optimal systems, *2089*
- see Chernousko (F.L.), *2115, book*
- dynamic programming, optimal control, synthesis, terminal control, *4288*
- asymptotic behavior, asymptotic methods, averaging, boundary value problems, nonlinear mechanics, *4948*
- approximation methods, optimal control, schwartz inequality, suboptimal control, synthesis, *5050*
- artificial satellites, dynamic programming, optimal control, rigid bodies, *9818*

Akyuzlu (K.), convection (forced), finite difference methods, oscillations, pressure drop, two phase flow, Veziroglu (T.N.), (et al.), *947*

Al-Ali (B.M.A.), see Manocha (B.L.), *833*

Al-Daini (A.J.), axial compressors, axisymmetric flow, mathematical models, rotors, stalling, Railly (J.W.), *3747*
- axial compressors, rotors, stalling, three dimensional flow, waves, Railly (J.W.), *5500*

Al-Makky (M.M.), dies, drawing, material testing, rolling, Woo (D.M.), *2397*

Al-Najmi (A.Q.S.), see Taylor (R.), *3531*

AlNassri (S.A.), developing flow, inlet flow, laminar flow, non newtonian flow, pipe flow, Unny (T.), *4626*

Al-Sharif (M.M.), see Thomas (L.C.), *8558*

Aladzhev (B.M.), algorithms, design, programming, Kokotov (V.M.), *2144*

Alam (M.K.), see Barr (D.I.H.), *2592*

Alarcon (E.), see Benitez (F.G.), *7294*
- see Dominguez (J.), *9459*
- see Doblare (M.), *12071*

Alautdinov (M.), convection, stratified flow, *980*

Alben (R.), radiant interchange, solar collectors, solar energy, solar radiation, Hardcastle (K.), *3829*

Alber (S.I.), eigenvalue problems, hamiltonian equations, korteweg de vries equation, mathematical methods, *2005*

Albertini (C.), hopkinson bar, materials properties, radioactivity, reactor structures, strain rate, temperature, tension, welding, Montagnani (M.), (et al.), *2488*

Albion (N.), see Shaw (J.), *2337*

Aldis (G.), biomathematics, cell behavior, dynamic analysis, fluid mechanics, mathematical models, Tognetti (K.), (et al.), *8178*

Aldushin (A.P.), flame propagation, laminar flow, mixtures, numerical analysis, Zeldovich (Ya.B.), (et al.), *3960*
- combustion instability, flames (laminar), mathematical models, thermal effects, Kasparyan (S.G.), *7881*
- combustion, filtration, porous media, Seplyarskii (B.S.), (et al.), *9757*

Aleksandrov (A.Ya.), deformation (finite), elasticity (nonlinear), finite strain, Shushunov (V.V.), *4332*

Aleksandrov (E.V.), see Vladimirov (V.P.), *3920*

Aleksandrov (V.M.), elasticity (linear), shells (spherical), stamping, stress intensity factor, torsion, Karpenko (V.A.), *244*
- contact problems, half space, stamping, Filippova (L.M.), *1183*
- contact problems, continuum mechanics, fredholm equations, hydrodynamics, volterra equations, Kovalenko (E.V.), *4167*
- impact, layered media, punch problems, shear, viscoelasticity (dynamic), winkler foundation, Zelentsov (V.B.), *11159*

Aleksandrov (Yu.S.), central force field, kepler orbits, orbit mechanics, variational methods, *870*

Aleksandrova (A.A.), boundary value problems, green function, integral methods, magneto fluid dynamics, waves, Khizmyak (N.A.), *10749*

Aleksanopolskii (N.B.), critical phenomena, pipe flow, thermal explosions, variable fluid properties, viscous flow, Naidenov (V.I.), *11501*

Aleksapolskii (N.B.), detonative ignition, explosions, ignition, self ignition, thermal explosions, viscous effects, Naidenov (V.I.), *9836*

Alekseenko (S.V.), film flow, film thickness, hydrodynamic stability, surface waves, vertical surfaces, Nakoryakov (V.E.), (et al.), *11612*

Alekseeva (M.K.), see Kayuk (Ya.F.), *4991*

Alekseichik (M.I.), decision theory, existence theorems, optimization, vector methods, Naumov (G.E.), *9113*

Alekseychik (M.I.), algorithms, nonlinear programming, optimization, relaxation methods, Kalyuzhnyy (G.V.), *6142*

Alekseyev (A.S.), field tests, inverse problems, processing, seismic waves, Dobrinskiy (V.I.), (et al.), *5875*

Alekseyev (N.M.), channel flow, crossflow, film cooling, injection, Zelengur (A.A.), *8689*

Alemany (A.), cylindrical bodies, liquid metals, magneto fluid dynamics, turbulence, two dimensional flow, Moreau (R.), (et al.), *2893*

Aleshin (V.I.), axial loading, crack growth, crazing, fractography, Kuvshinskii (E.V.), *457*

- see Lebedeva (M.F.), *9386*

Alexander (A.M.), concrete, frequencies, impact, nondestructive tests, tests, *3496*

Alexander (C.M.), cables, crossflow, fluid-structure interaction, towing cables, vibration (forced), vortex shedding, *8291*

Alexander (J.C.), bifurcation, eigenvalue problems, nonlinear theory, topological techniques, Antman (S.S.), *4946*

Alexander (M.J.L.), biodynamics, experimental methods, human body, kinematics, Colbourne (J.), *3057*

Alexiades (V.), asymptotic behavior, initial value problems, parabolic equations, singular perturbations, *4175*

- almost periodic solutions, integro differential equations, mathematical models, time delay systems, volterra equations, *4960*
- fourier problem, mathematical models, radiant interchange, Chan (C.Y.), *10593*

Alfredson (R.J.), see Mathew (J.), *4798*

Alfredsson (H.), see Shanda (J.), *6648*

alfven number, acoustic waves, magneto fluid dynamics, nonlinear characteristics, shock waves, Lustman (L.), Geffen (N.), *2892*

- dispersion relation, earth, magneto plasma dynamics, solar wind, Guielmi (A.V.), *2899, book*
- plasma, stability theory, tokamak, turbulence (mechanisms), Hatakeyama (R.), Inutake (M.), (et al.), *4749*
- generators, magneto fluid dynamics, pinch effect, pumps, Rutkowski (J.), *9799*
- equilibrium, magneto fluid dynamics, rotating fluids, theory, Zeitunyan (R.Kh.), *10743*

Algazin (V.A.), aerodynamic performance, incompressible flow, vortex sheets, wings, *7784*

algorithms, constraints, optimization, probability, quadratic programming, Lepp (R.), *49*

- design, nonlinear programming, Sandgren (E.), Ragsdell (K.M.), *58*
- least squares, matrix methods, splines, Best (M.R.), *65*
- computer programming, fast fourier transform, fourier transform, Despain (A.M.), *70*
- estimation, identification, Wang (B.-C.), Luus (R.), *132*
- estimation, identification, state space techniques, Ginsberg (K.S.), *140*
- estimation, queue theory, Ivanovskii (V.B.), *143*
- adaptive systems, prediction, stochastic processes, Tanttu (J.T.), *146*
- identification, modeling, process control, Stone (R.), Ivakhnenko (A.G.), (et al.), *149*
- markov processes, queue theory, Kukhta (T.K.), *152*
- linear systems, queue theory, Kochetkov (E.S.), *153*
- pattern recognition, similarity methods, Sahal (D.), *155*
- computing techniques, convex block programming, mathematical programming, Karpinskaya (N.N.), *158*
- automation, design (optimum), mathematical programming, Zhabin (V.I.), Korneichuk (V.I.), (et al.), *159*
- multivariable systems, regulator problem, synthesis, Cheng (L.), Pearson (J.B.) Jr., *160*
- filters, holography, Krasnov (A.E.), *162*
- control, design (optimum), vibration, vibration isolation, De Silva (C.W.), *165*
- mathematical programming, optimization, pareto optimization, Corley (H.W.), *167*
- estimation, pattern recognition, Yurachkovskiy (Yu.P.), Groshkov (A.N.), *169*
- discrete systems, kalman filters, Simkin (M.M.), *181*
- adaptive systems, control, lyapunov's functions, Fradkov (A.L.), *187*
- optimal control, quasilinearization, singular control, Yeo (B.P.), *189*
- identification, kaczmarz algorithm, linear systems, Avedyan (E.D.), Tsypkin (Ya.Z.), *190*
- design, discrete systems, observers, optimal control, Willems (J.L.), *191*
- control, design, manipulators, robotics, Malyshev (V.A.), Timofeyev (A.V.), *201*
- control, robotics, Krutko (P.D.), Popov (Ye.P.), *213*
- control, design, manipulators, robotics, trajectories, Lakota (N.A.), Lisenko (S.A.), (et al.), *214*
- control, design, manipulators, robotics, trajectories, Vereschagin (A.F.), Generozov (V.L.), *216*
- linkages, mechanisms (planes), synthesis, Soni (A.H.), Azeez (S.A.), *540*
- contact problems, finite element methods, machine design, mechanical joints, Sachdeva (T.D.), Ramakrishnan (C.V.), *541*
- empirical methods, graphical methods, probability theory, stochastics, Borodkin (L.I.), *1099*
- computer programming, stochastics, Zak (Yu.A.), Yakhno (V.N.), *1107*
- convex programming, gradient techniques, iterative methods, Ilioi (G.), *1118*
- computing techniques, fluid mechanics, tensor methods, Baker (A.J.), Soliman (M.O.), *1138*
- dynamic programming, maintenance, operations research, process control, Berzilovich (Ye.Yu.), Pavlenko (M.I.), (et al.), *1149*
- multivariable systems, optimization, Meerov (M.V.), Bershchanskiy (Ya.M.), (et al.), *1152*
- airplanes, differential games, evasion, pursuit, Rajan (N.), Prasad (U.R.), (et al.), *1157*
- optimal control, time lag, Teo (K.L.), Craven (B.D.), *1158*
- avoidance, missiles, singular control, trajectories, variable metric algorithm, Blank (D.), Shinar (J.), *1160*
- adhesives, bonded joints, nondestructive tests, ultrasonics, Rose (J.L.), Thomas (G.H.), *1479*
- duality, inequalities, variational methods, Bermudez (A.), Moreno (C.), *2030*
- large scale systems, matrix methods, Sincovec (R.F.), Erisman (A.M.), (et al.), *2039*
- iterative methods, nonlinear analysis, Kolyada (Yu.V.), Sigorskii (V.P.), *2040*
- mathematical methods, matrices, matrix inversion, Pan (V.Ya.), *2042*
- elliptic equations, finite difference methods, Hornby (R.P.), Barrow (H.), *2047*
- computing techniques, continued fraction expansion, inversion, Kumar (A.), *2053*
- computer programming, matrices, Thompson (E.), Shimazaki (Y.), *2056*
- computing techniques, minimization, Imai (M.), Fukumura (T.), (et al.), *2057*
- finite element techniques, matrices (sparse), mesh generation, George (A.), *2063*
- identification, lumped systems, time varying systems, Saha (D.C.), Rao (G.P.), *2068*
- hilbert transfer, realization, Khermanis (E.Kh.), *2095*
- estimation, prediction, Ivakhnenko (A.G.), Stepashko (V.S.), (et al.), *2102*
- controllability, linear systems, observability, time invariant systems, Paige (C.C.), *2104*
- extremal trees, graph theory, Kletin (V.A.), *2108*
- control, filters, guidance theory, terminal control, Zavadskii (V.K.), *2111*
- estimation, identification, Shubladze (A.M.), *2112*
- array ordering, arrays, matrix methods, Vilenkin (S.Ya.), Charnaya (I.S.), *2113*
- optimal control, riccati equation, Allwright (J.C.), *2117*
- aerodynamics, boundary layer, boundary value problems, singular perturbations, Calise (A.J.), *2120*
- numerical methods, optimization, Kibardin (V.M.), *2121*
- discrete systems, optimal control, Bakan (G.M.), Strashko (V.T.), *2124*
- adaptive systems, estimation, Tugnait (J.K.), *2136*
- lyapunov's functions, stochastic control, tracking, trajectories, wiener-hopf technique, Afanasev (V.N.), Daniilina (A.N.), *2137*
- estimation, mathematical programming, optimization, stochastic processes, Katkovnik (V.Ya.), Kheisin (V.E.), *2138*
- approximation methods, estimation, stability, Gilbo (E.P.), Chelpanov (I.B.), (et al.), *2139*
- bayesian decisions, decision theory, optimization, Pashkovskii (G.S.), *2140*
- hill climbing, optimization, Gnoenskii (L.S.), Rafselyan (R.S.), *2143*
- design, programming, Aladzhev (B.M.), Kokotov (V.M.), *2144*
- model reduction, multivariable systems, process control, Mishra (R.N.), Wilson (D.A.), *2145*
- identification, mathematical models, Kharchev (V.N.), *2147*
- estimation, identification, model reduction, Semesenko (M.P.), Ramazanov (S.K.), *2148*
- estimation, identification, Kuzmin (N.N.), Korotnikh (Yu.Ya.), (et al.), *2149*
- gradient techniques, optimal control, tracking, Rybashov (M.V.), *2151*
- mathematical programming, multiprocessor systems, queue theory, Kawaguchi (T.), Nakano (H.), (et al.), *2152*
- optimization, queue theory, Garger (V.I.), Ioffe (L.Sh.), *2153*
- identification, minimax techniques, optimization, process control, Bakan (G.M.), Strashko (V.T.), *2154*
- mathematical programming, optimal control, regulator problem, Dzhafarov (E.M.), Iskenderov (I.A.), *2155*
- control, guidance, orbit determination, orbit mechanics, planetary entry, Bukharkina (A.P.), Golubev (Yu.F.), *2158*
- operations research, optimization, renewal reward processes, Christer (A.H.), *2168*
- mathematical models, model reduction, process control, Minsker (I.N.), *2175*
- randomly moving object, search, statistical theory, tracking, Mangel (M.), *2177*
- air traffic control, airplanes, control, dynamic programming, Ben-Avraham (O.), Tabak (D.), *2181*
- computer aided manufacturing, numerical control, optimal control, sampled data systems, tools, Schlueter (R.A.), Retford (E.T.), (et al.), *2194*
- artificial intelligence, autonomous systems, vehicles, Benes (J.), Kolar (P.), *2196*
- computer aided manufacturing, design, Dunsmuir (A.M.), *2200*
- estimation, forecasting, Mckenzie (E.), *2201*
- elastoplasticity, linear programming, plasticity, wolfe-markowitz algorithm, Smith (D.L.), *2507*

- modeling, networks, water, Rahal (C.M.), Sterling (M.J.H.), (et al.), *2596*
- differentiation, interpolation, Oliver (J.), *3123*
- discrete systems, identification, nonlinear systems, realization, Tam (T.-J.), Nonoyama (S.), *3150*
- continued fraction method, linear systems, model reduction, state space techniques, Khatwani (K.J.), Tiwari (R.K.), (et al.), *3155*
- multivariable systems, nonlinear systems, stability theory, stochastic systems, Shibata (H.), Mayeda (H.), (et al.), *3171*
- digital simulation, mathematical models, multivariable systems, stochastic systems, Razevig (V.D.), *3179*
- parallel computations, programming, Shcherbakov (E.V.), *3180*
- design, functional analyis, linear programming, optimal control, Bershchanskii (Ya.M.), Meerov (M.V.), *3185*
- machinery, nonlinear systems, optimization, sequential machines, Baibatshaev (M.Sh.), Popkov (Yu.S.), *3189*
- binary signals, digital simulation, filters, interpolation, Konkin (A.V.), Kulman (N.K.), *3191*
- optimal control, stochastic systems, suboptimal control, Kolmanovskii (V.B.), *3195*
- erlang distribution, mathematical models, queue theory, two phase systems, Vilenkin (S.Ya.), Fedotov (A.G.), *3197*
- operations research, optimization, pattern recognition, sequential search, Nazarov (N.G.), Tarasenko (V.F.), *3198*
- computer aided design, optimization, Stoyan (Yu.G.), Sokolovskii (V.Z.), *3199*
- control, differential games, Krasovskii (N.N.), *3200*
- decision theory, identification, linear systems, Balk (P.I.), *3207*
- gradient techniques, optimal control, vibration, vibration isolation, Poterasu (V-F.), Popescu (D.), *3209*
- adaptive systems, identification, nonlinear systems, Kopysov (O.Yu.), Prokopov (B.I.), *3210*
- distribution systems, optimization, transport, two-stage optimization, Stewart (T.J.), Ittmann (H.W.), *3212*
- nonlinear programming, nonlinear systems, optimal control, vehicles, Van Zanten (A.T.), Krauter (A.I.), *3221*
- data analysis, measurements, systems, Walter (P.L.), *3489*
- airplane structures, failure, reliability analysis, Yanko (A.K.), *3529*
- design, force, kinematics, mechanisms, transmission, Sutherland (G.H.), *3569*
- computing techniques, fast fourier transform, hankel transform, transforms, Oppenheim (A.V.), Frisk (G.V.), (et al.), *4173*
- computing techniques, differential equations (ordinary), runge kutta method, Krinke (D.C.), Huston (R.L.), *4183*
- computing techniques, iterative methods, newton method, Herzberger (J.), *4186*
- adina, computing techniques, strain, Toridis (T.G.), Judy (J.), (et al.), *4188*
- digital simulation, linear systems, matrix methods, numerical methods, simulation, state space techniques, transition matrices, Litz (L.), *4206*
- distributed parameters, initial value problems, numerical methods, optimal control, parabolic equations, Winther (R.), *4207*
- gauss method, inequalities, least squares, numerical methods, optimization, penalty function, Bellagamba (L.), *4208*
- large scale systems, modal analysis, model reduction, Kabamba (P.T.), *4210*
- linearization, quaternion equations, time varying systems, Yen (K.), Cook (G.), *4212*
- model reduction, observers, Polotskii (V.N.), *4213*
- identification, iterative methods, Dudkin (L.M.), Kasparson (V.A.), *4214*
- controllability, linear systems, model reduction, observability, principal component analysis, Moore (B.C.), *4217*
- discrete systems, identification, kalman filters, linear systems, stochastic systems, Konishi (K.), Inouchi (K.), (et al.), *4219*
- airplanes, error, estimation, identification, Ramamoorthy (R.P.), *4223*
- automatic control, design, frequency domain techniques, matrix methods, multivariable systems, Frisch (H.P.), *4224*
- linear systems, observers, Parusnikov (N.A.), *4237*
- discrete systems, identification, multivariable systems, stochastic approximation, stochastic processes, El-Sherief (H.), Sinha (N.K.), *4238*
- linear systems, stability theory, Kostyleva (N.E.), *4245*
- control stability, design, feedback, linear systems, stability theory, Tannenbaum (A.), *4249*
- dynamic analysis, hybrid simulation, stability theory, Allison (J.S.), Johnson (H.M.), *4252*
- adaptive systems, estimation, identification, model reference systems, Van De Ven (H.H.), Groenendaal (A.W.M.), *4255*
- identification, linear systems, lumped systems, poisson moment functionals, Saha (D.C.), Rao (G.P.), *4256*
- design, digital control, discrete systems, Krutko (P.D.), Popov (Ye.P.), *4257*
- laplace transform, queue theory, Ivnitskiy (V.A.), *4262*
- analytical methods, erlang queuing, queue theory, Rzhikov (Yu.I.), *4263*
- adaptive systems, mathematical models, statistical modelling, stochastic control, stochastic systems, Minyaeva (L.N.), Sabinin (O.Y.), *4267*
- adaptive systems, estimation, stochastic processes, Rudenko (O.G.), Bodyanskii (E.V.), (et al.), *4270*
- lagrange equations, optimal control, Svechinskii (V.B.), *4272*
- differential games, pursuit, Chikrii (A.A.), *4273*
- estimation, filters, Bakan (T.M.), *4274*
- jump conditions, optimal control, Ashchepkov (L.T.), Badam (U.), *4275*
- design, multivariable systems, pole placement, Bogachev (A.V.), Grigorev (V.V.), (et al.), *4276*
- filters, stability theory, Salychev (O.S.), *4278*
- large scale systems, model reduction, Moissenko (G.E.), *4279*
- design, minimax techniques, multivariable systems, Bakan (G.M.), Strashko (V.T.), *4280*
- estimation, optimization, pareto set, Merkurev (V.V.), Moldavskii (M.A.), *4281*
- integer programming, linear programming, linear theory, Radashevich (Yu.B.), Sidorov (I.M.), *4282*
- discrete programming problem, optimization, programming, Redkovskaya (M.N.), Yaremchuk (T.G.), *4283*
- estimation, nonlinear systems, observability, Krasovskii (A.A.), *4300*
- design, nonlinear programming, Boychuk (L.M.), *4303*
- boundary value problems, multiple shooting algorithm, numerical methods, singular control, solar energy, Oberle (H.J.), *4304*
- dynamic programming, equipment replacement, optimal control, Evlanov (L.G.), Trubitsin (O.N.), *4309*
- discrete systems, optimal control, Kondratev (V.V.), Savelev (V.P.), (et al.), *4310*
- optimal control, vibration (forced), vibration isolation, vibrators, vibrotransporter, Zavin (A.A.), *4311*
- adaptive systems, discrete systems, Kakabadze (D.P.), Kubintsev (G.M.), (et al.), *4312*
- bayesian approach, decision theory, markov processes, stochastic processes, Sato (M.), Abe (K.), (et al.), *4317*
- differential games, pursuit, Zak (V.L.), *4318*
- differential games, linear systems, Rappoport (I.S.), *4319*
- adaptive systems, identification, observers, Nuyan (S.), Carroll (R.L.), *4321*
- nonlinear systems, optimization, process control, Kelmans (G.K.), Poznyak (A.S.), (et al.), *4324*
- adaptive systems, gradient techniques, optimization, Polyak (B.T.), Tsypkin (Ya.Z.), *4325*
- linkages, mechanisms, synthesis, Jaini (C.K.C.), Rao (A.C.), *4550*
- computing techniques, nonlinear programming, optimization, Pappas (M.), *4594*
- computing techniques, gradient techniques, minimization, ridge-path method, Elzoughby (A.A.), Metwalli (S.M.), (et al.), *4595*
- convergence, iterative methods, optimal control, optimization, Allwright (J.C.), *4597*
- cholesky algorithm, computer programming, eigenvalues, matrices, optimization, Meirovitch (L.), Baruh (H.), *5001*
- computing techniques, matrices (sparse), Kafarov (V.V.), Meshalkin (V.P.), (et al.), *5005*
- newton method, nonlinear systems, Mah (R.S.H.), Lin (T.D.), *5007*
- computer programming, finite element techniques, linear equations, matrix methods, Stabrowski (M.M.), *5017*
- coding, least squares, Cornwell (L.W.), Kocman (M.G.), (et al.), *5018*
- hybrid techniques, mathematical programming, minimization, Adamenko (G.M.), Gaishun (I.V.), *5047*
- maximum principle, stochastic systems, Bodner (V.A.), Rodnishchev (N.E.), (et al.), *5052*
- constraints, numerical methods, optimal control, regulator problem, Kalaba (R.), Spingarn (K.), *5054*
- linear systems, multivariable systems, optimal control, schur form, Sima (V.), *5055*
- large scale systems, optimal control, stochastic control, Chernitser (A.V.), *5056*
- numerical methods, optimal control, sensitivity, Evers (A.H.), *5058*
- iterative methods, numerical methods, optimization, Adamenko (G.M.), *5059*
- gliding trajectory, numerical methods, optimal control, oscillations, trajectory optimization, Williamson (W.E.) Jr., *5061*
- finite difference methods, free boundary, navier stokes equation, Bulgarelli (U.), Casulli (V.), (et al.), *5408*
- calibration, hot wire, numerical methods, Huffman (G.D.), *5506*
- computer programming, integration, singularities, Roose (D.), De Doncker (E.), *6094*
- adaptive systems, design, discrete systems, lyapunov's functions, observers, Tamaki (S.), Omatu (S.), (et al.), *6132*
- geometric programming, mathematical programming, stochastic processes, stochastic systems, Scott (C.H.), Jefferson (T.R.), *6136*
- mathematical programming, numerical methods, optimal control, Sheela (B.V.), Ramamoorthy (P.), *6140*
- nonlinear programming, optimization, relaxation methods, Alekseychik (M.I.), Kalyuzhnyy (G.V.), *6142*
- dynamic programming, stochastic control, suboptimal control, synthesis, Batkov (A.M.), Grinchenko (S.T.), *6145*
- conduits, resistance, roughness, Kumar (S.), Roberson (J.A.), *6594*
- computing techniques, shock waves, Vorozhtsov (E.V.), Yanenko (N.N.), *6715*
- controllability, helicopters, rotors, Du Val (R.W.), *6731*
- constraints, optimization, penalty function, Brunner (J.K.), *7179*
- convergence, descent, minimization, Cohen (A.I.), *7193*
- iterative methods, market equilibrium, numerical methods, operations research, optimization, Ahn (B.H.), *7227*

- adaptive systems, discrete systems, linear systems, multivariable systems, state space techniques, Goodwin (G.C.), Ramadge (P.J.), (et al.), *7233*
- identification, linear systems, modeling, multivariable systems, pseudoinverse, static model, Mechetnyy (V.S.), *7235*
- control, differential games, distributed parameters, hyperbolic equations, parabolic equations, position control, Korotkii (A.I.), Osipov (Iu.S.), *7240*
- linear systems, numerical methods, optimal control, suboptimal control, Kein (V.M.), Parikov (A.N.), (et al.), *7243*
- identification, linear systems, lumped systems, time delay systems, Saha (D.C.), Rao (G.P.), *7246*
- navigation, optimal control, tracking, Reid (J.G.), Chaffin (D.E.), (et al.), *7249*
- computer programming, mechanical properties, stress strain relationships, testing equipment, Kharchenko (V.K.), Gnuchii (Yu.B.), (et al.), *7562*
- flaw detection, frequency domain techniques, transducers (ultrasonic), ultrasonics, Cleveland (D.), Mucciardi (A.N.), *7578*
- defects, flaw detection, frequency domain techniques, ultrasonics, Cleveland (D.), Barron (A.R.), (et al.), *7584*
- design, manipulators, robotics, Sugimoto (K.), Duffy (J.), *7630*
- computing techniques, equations of motion, orbit mechanics, space vehicle structures, space vehicles, Kane (T.R.), Levinson (D.A.), *7916*
- boundary value problems, eigenvalue problems, newton method, sturm-liouville problem, Bailey (P.B.), *8130*
- mathematical methods, Platonov (A.D.), Trivailo (P.M.), *8134*
- design, manipulators, mechanisms (planes), robotics, Murata (H.), Hayashi (I.), *8430*
- attitude control, gyrodynamics, Mckern (R.), Musoff (H.), *8846*
- boundary value problems, computing techniques, discontinuities, Welsh (W.), Ojika (T.), *9122*
- computer programming, computing techniques, differentiation, Oliver (J.), *9123*
- biomathematics, cybernetics, differential games, pattern recognition, Yablonskij (S.V.), *9152, book*
- manipulators, robotics, Schmieder (L.), *9155*
- attainability sets, control, linear systems, Bushenkov (V.A.), Lotov (A.V.), *9157*
- analytical methods, design, multivariable systems, synthesis, Graser (A.), *9164*
- cybernetics, optimal control, optimization, pursuit, search, trajectories, Vereshchagin (A.F.), Medvedev (V.S.), (et al.), *9184*
- boundary value problems, numerical methods, optimal control, Travassos (R.), Kaufman (H.), *9185*
- dynamic analysis, friction, gears, Majewski (L.), *9475*
- control, design, manipulators, mechanisms (planes), robotics, Hewit (J.R.), Burdess (J.S.), *9482*
- contact problems, friction (solid solid), mechanical joints, tools, Sachdeva (T.D.), Ramakrishnan (C.V.), *9945*
- computing techniques, transforms, Candel (S.), *10042*
- mathematical models, probability theory, simulation, Malyshev (I.A.), Palagin (Yu.I.), *10060*
- computer programming, finite element techniques, optimization, Hua (B.-H.), *10068*
- automatic control (optimal), design, linear systems, pole placement, Lee (G.K.F.), *10084*
- nonlinear programming, optimal control, Grachev (I.I.), Evtushenko (Yu.G.), *10091*
- guidance, linear systems, pole placement, pursuit, time varying systems, Solenski (N.), *10092*
- numerical methods, three dimensional flow, transport, Pepper (D.W.), Baker (A.J.), *10693*
- bearings (hydrodynamic), cavitation, lubrication (hydrodynamic), Elrod (H.G.), *10891*
- eigenvalue problems, linear systems, linear theory, Van Dooren (P.M.), *11038*
- design, matrix methods, multivariable systems, Wolovich (W.A.), *11039*
- lyapunov's functions, matrix methods, numerical methods, riccati equation, Balzer (L.A.), *11042*
- control, discrete systems, singular perturbations, Rajagopalan (P.K.), Naidu (D.S.), *11043*
- approximation methods, hilbert space, linear programming, optimal control, Rubio (J.E.), *11051*
- estimation, identification, time delay systems, Banks (H.T.), Burns (J.A.), (et al.), *11060*
- dynamic programming, filters, image processing, nonlinear systems, signal processing, Scharf (L.L.), Elliott (H.), *11064*
- linear programming, optimization, Gray (D.F.), Sutherland (W.R.S.), *11065*
- approximation methods, asymptotic methods, optimal control, Moiseev (N.N.), Chernousko (F.L.), *11066*
- mathematical programming, numerical methods, optimization, Russak (I.B.), *11074*
- optimal control, singular perturbations, suboptimal control, Rajagopalan (P.K.), Naidu (D.S.), *11076*
- kalman filters, phased array, sensitivity, Cooke (C.C.), *11079*
- estimation, identification, modeling, nonlinear systems, nonlinear theory, stochastic systems, volterra series, Fakhouri (S.Y.), *11080*
- mathematical programming, numerical methods, optimization, quadratic programming, Coope (I.D.), Fletcher (R.), *11081*
- dynamic programming, multiobjective methods, numerical methods, Chankong (V.), Haimes (Y.Y.), (et al.), *11083*
- control, dynamic programming, reservoirs, Sniedovich (M.), *11085*
- linear programming, regulator problem, suboptimal control, time delay systems, Kim (B.K.), Bien (Z.), *11088*
- convergence, identification, iterative methods, linear systems, Tsypkin (Y.Z.), Avedyan (E.D.), (et al.), *11098*
- computer aided design, numerical methods, optimal control, Raggett (G.F.), *11099*
- kinematics, linkages, mechanisms, Garcia De Jalon (J.), Serna (M.A.), (et al.), *11342*
- airplanes, lift, longitudinal stability, unsteady effects, Wells (W.R.), Keskar (D.A.), *11735*

Ali (K.H.M.), air, irrotational flow, siphons, streamlines, Pateman (D.), *6613*

Ali (R.), plates (holed), plates (rectangular), rayleigh method, vibration (free), Atwal (S.J.), *6295*

Ali (S.M.J.), see Serna (S.P.), *3318*

Alifanov (O.M.), conduction (heat), conjugate gradient method, data analysis, inverse problems, minimum discrepancy method, steepest descent method, Rumyantsev (S.V.), *7859*

Alikakos (N.D.), boundary value problems, diffusion, mathematical models, nonlinear analysis, porous media, Rostamian (R.), *6831*

Alimpiyev (A.I.), boundary layer (turbulent), fluid injection, permeability, roughness, Alimpiyev (V.I.), *1552*

Alimpiyev (V.I.), see Alimpiyev (A.I.), *1552*

- duct flow, fluid injection, noncircular pipes, visualization, Kalinina (S.V.), (et al.), *3671*

Alizadeh (A.), diffusion coefficient, dispersion, liquids, Nieto De Castro (C.A.), (et al.), *10667*

Aljabri (A.S.), see Mccormick (B.W.), *2759*

Alkhimenkov (T.B.), see Gurev (A.V.), *4352*

Alkidas (A.C.), exhaust gases, heat transfer, one dimensional flow, spark ignition engines, thermal measurements, *6848*

Allaire (P.E.), bearings (journal), bearings (tilted pad), dynamic stability, perturbation methods, Parsell (J.K.), (et al.), *4901*

- control, dynamic analysis, dynamic properties, feedback, rotating bodies, rotors, vibration, Lewis (D.W.), (et al.), *8177*

Allegre (J.), see Lengrand (J.-C.), *8596*

Allemong (J.J.), eigenvalues, mathematical models, model reduction, spectral analysis, Kokotovic (P.V.), *8157*

Allen (D.H.), constitutive equations, work hardening, yield criteria, *2239*

- thermal loading, thermoplasticity, variational methods, Haisler (W.E.), *2973*

Allen (J.H.), see Dayal (U.), *6364*

Allen (K.W.), see Hull (M.L.), *6001*

Allen (N.F.), compressional waves, fluid mechanics, porous media, sand, saturation, Richart (F.E.) Jr., (et al.), *5836*

Allen (R.R.), design, dynamic loads, landing gears, longitudinal stability, stabilization, O'Massey (R.C.), *8462*

Allertshammer (W.), see Varga (T.), *3432*

Alley (T.L.), damping, oscillations, vibration, vibration isolation, *11082*

Alliney (S.), cylindrical bodies, diffraction, fluid-structure interaction, gravity waves, *10476*

Allison (I.M.), finite element techniques, free boundary, stress analysis, Soh (A.K.), *87*

Allison (J.S.), algorithms, dynamic analysis, hybrid simulation, stability theory, Johnson (H.M.), *4252*

Allison (R.A.), flames (diffusion), hydrogen, kinetics, Clarke (J.F.), *1741*

- flames (diffusion), kinetics, mathematical models, Clarke (J.F.), *9751*

Allison (R.F.), see Villchur (E.), *3974*

Allison (R.W.), see Johnson (R.P.), *2265*

Allman (D.J.), annuli, axial loading, large displacement, membranes, Mansfield (E.H.), *6217*

alloys, constitutive equations, elastoviscoplasticity, strain rate, Suliciu (I.), *1052*

- creep, high temperature, thermoviscoelasticity, Nerodenko (L.M.), Dabizha (E.V.), *1192*
- data analysis, relaxing media, stress relaxation, viscoelastic materials, Povolo (F.), *2230*
- crystals, cyclic loading, fatigue, stress strain relationships, Wilhelm (M.), *2241*
- crack initiation, crack propagation, cyclic testing, fatigue, high temperature, turbines, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- high temperature, materials properties, phase changes, Guttmann (V.) ed., *2962, book*
- life expectancy, material testing, thermal fatigue, Vashunin (A.I.), Kotov (P.I.), *2976*
- brittle materials, ductility, fracture, transition, Schulson (E.M.), *3264*
- crack arrest, crack growth, microcracks, steel, Varga (T.), Allertshammer (W.), (et al.), *3432*
- crack growth, fatigue, low cycle fatigue, rotors, Shih (T.T.), Donald (J.K.), *3439*
- crack growth, fatigue, mixed mode fracture, strain energy, Badaliance (R.), *3469*
- crack growth, fatigue, James (L.A.), *4476*
- deformation, grain boundaries, plasticity, superplastics, Kaibyshev (O.A.), Valiev (R.Z.), *4515*

- polyvalent metals, thermophysical properties, Pashaev (B.P.), Palchaev (D.K.), (et al.), *5517*
- cracking, metals, stress corrosion, Koval (V.P.), Karvatskii (L.M.), (et al.), *6423*
- fatigue, high cycle fatigue, high temperature, Ishchenko (I.I.), Golub (V.P.), (et al.), *6469*
- bending, cyclic loading, iron, shape factors, testing equipment, thermal fatigue, Pryakhin (V.A.), Ivanova (L.P.), *6474*
- mathematical methods, mixtures, moving surfaces, solidification, Tao (L.N.), *6802*
- environmental tests, high cycle fatigue, high temperature, low cycle fatigue, Soo (P.), Chow (J.G.Y.), *7478*
- ausforming, fatigue, forming, rolling, steel, Ohmori (M.), Yokokawa (S.), (et al.), *9378*
- crack propagation, metallurgy, nucleation, stress corrosion, Chu (W.-Y.), Hsiao (C.-M.), (et al.), *9394*
- creep, friction stress, life expectancy, Plumbridge (W.J.), Bartlett (R.A.), *10276*

Allwright (J.C.), algorithms, optimal control, riccati equation, *2117*
- algorithms, convergence, iterative methods, optimal control, optimization, *4997*

Almasi (J.), cooling towers, design, shells (hyperbolic), *8458*

Almeida (C.A.), see Bathe (K.J.), *10063*

Aloyan (A.E.), see Penenko (V.V.), *1916*

Alp (E.), boundary layer (turbulent), fluid injection, mass transfer, Strong (A.B.), *3706*

Alpa (G.), biaxial loading, crack propagation, stability theory, stress intensity factor, Bozzo (E.), (et al.), *6454*
- computer aided design, shape factors, shells (shallow), structural design, thin walled structures, Bozzo (E.), (et al.), *7336*

Alquier (M.), eddies, particles, suspensions, Gruat (J.), (et al.), *5811*

Alran (C.), see Costes (J.), *7750*

Alt (H.W.), free boundary, numerical methods, porous media, *3002*
- free boundary, incompressible flow, jets, two dimensional flow, Caffarelli (L.A.), (et al.), *4977*

Altes (R.A.), acoustics, spectral analysis, *3963*

Altinisik (D.), bodies (liquid filled), dams, finite element techniques, fluid-structure interaction, Karadeniz (H.), (et al.), *11649*

Altman (M.), banach space, cauchy problem, differential equations (partial), evolution equations, quasilinearization, *33*

Altus (E.), composite materials, fracture mechanics, j-integral, laminates, strength, stress intensity factor, three dimensional formulation, Rotem (A.), *5312*

aluminum alloys, crack propagation, fatigue, heat treatment, life expectancy, Chung (D.W.), Chaturvedi (M.C.), *445*
- crack propagation, high cycle fatigue, steel, Hoffelner (W.), *447*
- flaw detection, ingots, material testing, titanium, ultrasonics, Zavyalova (N.S.), Grishina (V.M.), (et al.), *501*
- crack growth, fatigue, overloads, Wei (R.P.), Fenelli (N.E.), (et al.), *1405*
- crack propagation, fatigue, materials processing, Schulte (K.), Nowack (H.), *1407*
- combined loading, creep, Findley (W.N.), Lai (J.S.), *1411*
- fracture toughness, porosity, porous media, welded joints, Mccarthy (W.A.) Jr., Lamba (H.), (et al.), *1476*
- control, structural analysis, structures, welded structures, welding, Papazoglou (V.J.), Masubuchi (K.), *2173*
- combined loading, fatigue, life expectancy, multiaxial fatigue, Sines (G.), Ohgi (G.), *2407*
- crack growth, crack opening displacement, fatigue, Vogelesang (L.B.), *2423*
- airplane structures, bonding, corrosion fatigue, laminates, Vogelesang (L.B.), Mariseen (R.), (et al.), *2424*
- fracture criteria, high cycle fatigue, Botvina (L.R.), Shabalina (V.N.), (et al.), *2425*
- crack growth, cyclic loading, fatigue, Bowen (A.W.), Forsyth (P.J.E.), *2426*
- acoustic emission, deformation, nondestructive tests, Green (G.), Clark (G.), *2482*
- adhesives, bonded joints, failure, Kinloch (A.J.), Smart (N.R.), *2572*
- ductility, erosion, metals, Bellman (R.) Jr., Levy (A.), *3039*
- additives, corrosion, lubrication (boundary), wear, Poole (W.), Sullivan (J.L.), *3041*
- high temperature, laminates, mechanical properties, Mcwithey (R.R.), Royster (D.M.), *3281*
- plastic waves, strips, Senda (T.), *3391*
- crack propagation, griffith cracks, thermodynamics, Izumi (Y.), Fine (M.E.), (et al.), *3441*
- deformation (plastic), stress concentration, welded joints, Demina (N.I.), Zastolskaya (Z.K.), (et al.), *3584*
- anisotropic media, diaphragms, plasticity, pressurized components, Ilahi (M.F.), Parmar (A.), (et al.), *5112*
- copper alloys, dislocations, experimental results, micromechanisms, Cherns (D.), Hirsch (P.), (et al.), *5120*
- damping capacity, machinability, materials properties, metallic composites, Deonath, Narayan (R.), (et al.), *5123*
- high strength, high temperature, material testing, reinforced bodies, Yajima (S.), Okamura (K.), (et al.), *5125*
- crack closure, crack opening displacement, environmental tests, fatigue, Ewalds (H.L.), *5287*
- crack initiation, fatigue, fractographic tests, fretting, wear, Leadbeater (G.), Kovalevskii (V.V.), (et al.), *5290*
- crack retardation, fatigue, hold time, metallurgy, Slagle (W.P.), Mahulikar (D.), (et al.), *5310*
- composite materials, elastic constants, metallic composites, ultrasonics, Blessing (G.V.), Elban (W.L.), *5328*
- copper alloys, damping capacity, deformation (plastic), superplastics, Furushiro (N.), Takimoto (J.), (et al.), *6188*
- buckling (nonlinear), collapse, nonlinear materials, nonlinear theory, plates, Little (G.H.), *6250*
- drawing, wires, work hardening, Varma (S.K.), *6409*
- crack initiation, fatigue, life expectancy, microcracks, nondestructive tests, Buck (O.), Morris (W.L.), (et al.), *6419*
- crack growth, crack resistance, fracture toughness, notch tests, Munz (D.), *6478*
- copper, delamination, finite element methods, friction (sliding), wear, Ohmae (N.), Tsukizoe (T.), *7089*
- erosion, impact, Preece (C.M.), Brunton (J.H.), (et al.), *7091*
- cracks, fatigue, high cycle fatigue, ultrasonics, Tschegg (E.), Stanzl (S.), *7473*
- crack growth, low cycle fatigue, material testing, stress intensity factor, vacuum, Kirby (B.R.), Beevers (C.J.), *7484*
- damage, electric resistance, material testing, steel, Cailletaud (G.), Policella (H.), (et al.), *7504*
- boron, fracture toughness, material testing, Reedy (E.D.) Jr., *7507*
- bonded joints, crack propagation, polymers, Mijovic (J.), *7536*
- acoustic emission, fatigue, low cycle fatigue, nondestructive tests, tension, Baram (J.), Rosen (M.), *7559*
- corrosion fatigue, high strength, powder metallurgy, Pickens (J.R.), *8368*
- crack opening displacement, fatigue, high strength, material testing, Davidson (D.L.), Lankford (J.), *8373*
- crack growth, creep, temperature, Radhakrishnan (V.M.), Mcevily (A.J.), *8384*
- cyclic loading, deformation, macroscopic characterization, metallography, microstructures, Wang (Z.G.), Ke (T.S.), *8429*
- brittle fracture, crack growth, fracture toughness, sheet metal, stress intensity factor, Yablonskii (I.S.), *9432*
- tension, ultrasonic welding, welded joints, Renshaw (T.), Sarrantonio (A.), *9486*
- crack growth, fatigue, quenching, Petrak (G.J.), Ruschau (J.J.), *10272*
- fracture toughness, material testing, Latiere (H.J.), *10278*
- residual stresses, thermal effects, ultrasonics, Salama (K.), Ling (C.K.), (et al.), *10321*
- correlation, endurance limit, fatigue, flexure, steel, ultimate strength, Stepnov (M.N.), Evstratova (S.P.), (et al.), *10330*
- plasticity, servomechanisms, steel, strain measurement, stress relaxation, Meguid (S.A.), *10334*
- copper, crystals, deformation (plastic), dislocations, plasticity, Kolkman (H.J.), *10336*

Alvarez (M.C.), see Coull (A.), *2292*

Alwar (R.S.), see Reddy (B.S.), *5180*
- see Nagaraja (Y.R.), *6668*

Aly (A.A.), see Grierson (D.E.), *11319*

Aly (A.M.M.), channel flow, internal flow, tube bundles, *10824*

Aly (S.), condensers, mass transfer, porous surfaces, tube bundles, Cunningham (J.), *2857*

Amari (M.), beam columns, buckling (plastic), structural optimization, Okumura (A.), *3325*
- buckling, columns, design (optimum), elastoplasticity, optimization, Okumura (A.), *3521*

Amaryan (L.S.), experimental results, peat soil, soil consolidation, *1319*

Ambartsumian (S.A.), magnetoelasticity, plates, shells (thin), surveys, *79999*

Ambrose (C.W.), see Bandopadhayay (P.C.), *614*
- see Van Leersum (J.G.), *3838*

Amdahl (J.), see Furnes (O.), *993*

Amelyanovich (K.K.), brittle materials, composite materials, cyclic loading, experimental mechanics, shells (spherical), Podgornyi (L.N.), *4547*

Amenzade (R.Yu.), compressional waves, duct flow, flexible walls, propagation velocity, *11631*

Amenzade (Yu.A.), elasticity (linear), half space, layered media, *5078*

Amick (C.J.), existence theorems, finite amplitude, gravity waves (solitary), wave height (greatest), Toland (J.F.), *2702*

Amiet (R.K.), edge effects, noise, plates, sound generation, *10804*

Amin (K.E.), copper alloys, residual stresses, stress relaxation, x ray techniques, Ganesh (S.), *4510*

Amin (W.M.), biomaterials, bonded joints, dentistry, polymers, Fletcher (A.M.), (et al.), *3070*

Aminov (R.Z.), design (optimum), energy conservation, generators, heat exchangers, power plants, Radchenko (E.V.), *3837*

Amiro (I.Ya.), buckling, structural stability, time dependence, *5185*
- dynamic response, shells (cylindrical), shells (stiffened), vibration (free), Pelemarchuk (V.G.), *5223*

Amit (R.), cavities, discretizations, finite difference methods, navier stokes equation, networks, Hall (C.A.), (et al.), *3636*

- compressible flow, numerical methods, one dimensional flow, thermal expansion, two phase flow, Porsching (T.A.), *11421*

Amkreutz (J.H.A.E.), computer aided design, computer programming, heat transfer, mathematical models, Vanier (D.J.), *778*

Ammicht (E.), see Stickler (D.C.), *6909*

Amosov (A.P.), friction (sliding), heat transfer (direct contact), thermal contact resistance, wear, *8051*

- abrasion, explosives, friction (solid solid), ignition, *9772*

Amphlett (M.B.), see Anwar (H.O.), *5389*

Amram (M.), acoustic properties, networks, noise abatement, refraction, strips, Stern (R.), *11969*

An (J.-G.), aerodynamic performance, aerodynamics, numerical methods, subsonic flow, wings, *2747*

An (K.N.), biological joints, biomechanics, muscles, Hui (F.C.), (et al.), *6003*

Anagnostopoulos (S.A.), earthquake engineering, modeling, *4037*

analog computation, conduction (unsteady), differential equations (partial), Zboril (F.), *2046*

- differential equations (partial), elliptic equations, optical techniques, parabolic equations, Cederquist (J.), Lee (S.H.), *2079*
- analog simulation, design (optimum), digital analog computation, hydraulic machinery, Sankar (S.), Svoboda (J.V.), *6123*

analog simulation, cardiovascular system, respiratory system, simulation, Balasubramanian (R.), *230*

- heat addition, thermoelasticity (steady), Matsumoto (E.), Sekiya (T.), *3986*
- analog computation, design (optimum), digital analog computation, hydraulic machinery, Sankar (S.), Svoboda (J.V.), *6123*
- manipulators, robotics, simulation, Backhouse (C.), Jones (J.R.), *7253*
- chaos, differential equations (ordinary), feedback, Sparrow (C.T.), *8104*
- plates (holed), tension, vibration (nonlinear), Datta (P.K.), *10206*

analogies, kinematics, pedal curve, Drabek (K.), *34*

- pipe flow, turbulent flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *617*
- layered media, viscoelastic waves, Ting (T.C.T.), Mukunoki (I.), *2364*
- differential equations (partial), elasticity (linear), Everstine (G.C.), *3075*
- bonded joints, inclusions, Rose (L.R.F.), *3474*
- deformable bodies, finite element techniques, rigid bodies, structural analysis, Grabski (J.), *7215*
- complex variables, conduction (heat), waves, Dunne (E.G.), Mugler (D.H.), *8089*
- noise (aerodynamic), sound propagation, Lighthill (J.), *8863*
- eigenvalue problems, fredholm equations, Fernando (K.V.M.), Nicholson (H.), *9118*
- asymptotic behavior, drag, moving surfaces, plates, Burkina (R.S.), Vilyunov (V.I.), *10425*

Anand (A.), see Kinra (V.K.), *10235*

Anand (L.), plane strain, plastic flow, plasticity, shear, shear bands, steel, Spitzig (W.A.), *1196*

Anand (S.C.), elastoplasticity, finite element techniques, mesh generation, substructuring, Shaw (R.H.), *80*

Anantha Ramu (S.), explosive loading, plasticity, shells (spherical), Iyengar (K.J.), *408*

Anapolskii (L.Iu.), see Abdullin (R.Z.), *126*

anchors, elastic behavior, influence charts, soil structure interaction, Rowe (R.K.), Booker (J.R.), *2384*

- bolts, concrete, pull-out tests, strength, Bungey (J.H.), *4506*
- kalman filters, optimal control, ship maneuvers, ships, Balchen (J.G.), Jenssen (N.A.), (et al.), *6147*
- buried structures, soil mechanics, structures, underground, Smorodinov (M.), Smolin (B.S.), *10251*

Andam (K.A.), design (optimum), portal frames, precast concrete, Knapton (J.), *10353*

Andersen (K.H.), centrifugation, centrifuge tests, clay, foundations, gravity platform, scale models, Selnes (P.B.), (et al.), *1313*

Anderson (P.S.), adiabatic processes, annular flow, liquid gas mixture, two phase flow, Wurtz (J.), *1858*

Anderson (W.H.), detonative ignition, explosions, ignition, thermal explosions, *3925*

Anderson (A.L.), acoustic measurements, bubble dynamics, ocean bed, saturation, sedimentation, Hampton (L.D.), *6899*

Anderson (B.D.O.), see Lewis (R.M.), *3154*

- see Potter (J.M.), *6128*
- see Bitmead (R.R.), *9119*
- control, design, feedback, large scale systems, stability theory, Moore (J.B.), *11089*

Anderson (C.A.), creep, finite element methods, rocks, thermal loading, Bridwell (R.J.), *965*

- boundary value problems, cavities, creep, half space, inclusions, *7276*

Anderson (C.L.), see Bleisdell (F.W.), *7659*

Anderson (D.), buildings (tall), combined loading, multistory frames, *4539*

Anderson (D.A.), see Rai (M.M.), *9127*

- see Rai (M.M.), *10414*

Anderson (D.H.), fire spread, forest fires, mathematical models, Catchpole (E.A.), (et al.), *9777*

Anderson (I.M.), dynamics, gravity, relativity, *6046*

Anderson (J.C.), impulsive loading, nonlinear structures, vibration (nonlinear), Masri (S.F.), *1260*

Anderson (J.D.), see Broucke (R.), *874*

Anderson (J.D.) Jr., aerodynamic loads, leading edge, lift, stalling, vortex lines, wings, Corda (S.), (et al.), *3737*

- compressible flow, finite difference methods, shock waves, *5411, book*

Anderson (J.S.), noncircular pipes, sudden expansion, transonic flow, unsteady flow, Meier (G.E.A.), *11493*

Anderson (M.S.), buckling, framed structures, lattices, structural stability, *1250*

- lattices, prestressed structures, structural response, vibration (free), *9326*

Anderson (N.), boundary value problems, nonlinear analysis, power law fluids, variational methods, Arthurs (A.M.), *1533*

Anderson (N.E.), gears (spur), machine design, transmissions, Loewenthal (S.H.), *2560*

Anderson (R.), buoyant flow, convection (free), laminar flow, plates (vertical), Bejan (A.), *6778*

Anderson (R.H.), attitude control, control, guidance systems, space vehicle structures, vibration, Haung (C.-C.), (et al.), *10774*

Anderson (R.M.), immiscible fluids, porous media, two phase flow, Ford (W.T.), *4023*

Anderson (S.B.), see Feistel (T.W.), *690*

Anderson (S.J.), catalyzed ignition, emissions, gas turbines, scale models, Friedman (M.A.), (et al.), *7885*

Anderson (W.J.), see Licht (L.), *4905*

Anderson (W.W.), control, design, guidance systems, space shuttle, Groom (N.J.), (et al.), *2927*

Ando (S.), carbon dioxide, reflection, shock waves, shock waves (oblique), *1615*

- aerodynamic performance, airfoils, incompressible flow, inviscid fluid, Lee (D.-H.), *9646*

Andoh (E.), combustion, fire spread, flame propagation, ignition, solid propellants, Mizomoto (M.), (et al.), *6945*

Andrawes (K.Z.), embankments, inclusions, soils, Mcgown (A.), (et al.), *3397*

Andre (J.-C.), boundary layer (atmospheric), convection (forced), heat transfer (atmospheric), Artaz (M.-A.), *9936*

Andre (P.), acoustic emission, duct flow, heat transfer, pipe flow, resonance, turbulent flow, unsteady flow, Creff (R.), *6764*

- see Creff (R.), *8615*

Andreev (A.F.), hydrodynamics, liquids, thermal waves, thermodynamic functions, variable fluid properties, variable thermal properties, *5516*

Andreev (L.V.), bifurcation, critical load, shells (cylindrical), shells (nonlinear), shells (shallow), Zavarykin (L.G.), (et al.), *8267*

Andreev (N.I.), probability theory, stochastic control, synthesis, *5051*

Andreev (Yu.N.), optimal control, structural design, Fedorenko (R.P.), (et al.), *2142*

Andreeva (I.A.), cutting, life expectancy, suspensions, tools, Bryukhanova (L.S.), (et al.), *6410*

Andrei (V.I.), see Vasilescu (A.), *612*

- see Vasilescu (A.A.), *5438*

Andreichenko (K.P.), buoyancy, couette flow, pressure gradient, unsteady flow, velocity profiles, Smarun (A.B.), *3668*

Andreikiv (A.E.), elastic behavior, inclusions, infinite medium, nonhomogeneous media, stress concentration, Stadnik (M.M.), (et al.), *6164*

Andrejkiv (A.E.), see Panasyuk (V.V.), *1362*

- see Panasyuk (V.V.), *8396*

Andreopoulos (J.), boundary layer (thermal), plane flow, thermal measurements, turbulent flow, Bradshaw (P.), *1678*

Andreussi (P.), annular flow, drops, entrainment, *6981*

Andrew (M.J.), aerodynamic performance, downwash, helicopters, hovering, rotors, wakes, *7796*

Andrews (D.J.), creep, deformation, earthquakes, faults, stochastic processes, *9917*

Andrews (H.C.), see Chen (C.-C.), *195*

Andrews (R.S.), scattering, thermal effects, underwater acoustics, *3928*

Andreyev (P.A.), boiling, critical flow, critical heat flux, dispersed flow, film flow, two phase flow, Borishanskiy (V.M.), (et al.), *8695*

Andrianopoulos (N.P.), see Theocaris (P.S.), *10300*

Andrieta (A.G.), see Deich (M.E.), *12032*

Andrizhievskii (A.A.), boiling, chemical reactions, dissociation, unsteady flow, Mikhalevich (A.A.), (et al.), *6975*

Andrizhiyevskiy (A.A.), boiling, heat transfer, tubes, Dolzhenkova (G.G.), (et al.), *805*

Andrushchenko (L.I.), see Efremov (A.A.), *6033*

Andrzejewski (M.), noise abatement, sound generation, sound propagation, vibration, Campel (C.), *1805*

anechoic chambers, absorption, acoustics, noise abatement, vegetation, Martens (M.J.M.), *917*

anelasticity, elasticity (nonhomogeneous), magnetoelasticity, micropolar media, vibration, Hsieh (R.K.T.), Voros (G.), *1058*

- concrete, constitutive relations, strain, Bazant (Z.P.), Tsubaki (T.), *1334*
- damping, finite element methods, material testing, viscoelasticity (dynamic), Vasilenko (N.V.), *5105*
- continuum mechanics, creep, metals, viscoplasticity, Rusinko (K.N.), Ivasyuk (V.V.), *5114*
- high temperature, nuclear reactors, structural design, Corum (J.M.), *8196*

anemometers, heat transfer (atmospheric), scale effects, turbulence (transport), Test (F.L.), Lessmann (R.C.), (et al.), *1662*

- flow measurement, laminar flow, vortex flow, Winoto (S.H.), Crane (R.I.), *3658*
- aorta, blood flow, hot film, Yearwood (T.L.), Chandran (K.B.), *6023*
- laser doppler velocimeters, two phase flow, Lesinski (J.), Mizera-Lesinska (B.), (et al.), *6958*
- boundary layer (atmospheric), turbulence (geophysical), velocimeters, velocity measurement, Wyngaard (J.C.), *7070*
- hot wire, oceanography, velocity measurement, Gust (G.), *8984*
- hot wire, thin films, turbulence (geophysical), Otten (L.J.), Pavel (A.L.), (et al.), *9003*
- thermal measurements, wires, wollaston wire, Petit (C.), Paranthoen (P.), (et al.), *10590*
- bubbly flow, laser doppler velocimeters, two phase flow, Martin (W.W.), Adbelmessih (A.H.), (et al.), *12040*

Angehm (R.), buckets, experimental mechanics, shells, Schweizer (F.), (et al.), *4383*

Angel (E.S.), decision theory, differential equations (partial), dynamic programming, smoothing of data, transforms, *10023*

Angel (Y.C.), couplings, half space, rayleigh waves, scattering, viscoelastic fluids, Bogy (D.B.), *9338*

Angell (T.S.), boundary integral methods, boundary value problems, existence theorems, helmholtz equation, scattering, Kleinman (R.E.), *10019*

Angrilli (F.), buckling, large displacement, lateral stability, pipelines, Bergamaschi (S.), *1255*

- flexible bodies, oscillating bodies, piles, vortex shedding, waves, Cossalter (V.), *9512*

Anguillet (J.-P.), see Gaviglio (J.), *4652*

Anikeev (G.I.), films, fluid-structure interaction, rotating disks, vibration (forced), viscous effects, Blokhin (I.L.), (et al.), *6306*

Anisimkin (V.I.), acoustic waves, diffraction, surface waves, Morozov (A.I.), (et al.), *5236*

Anisimowicz (M.), creep, experimental results, tensor methods, tubes, Sawczuk (A.), *7275*

anisotropic media, axisymmetric loading, boundary value problems, half space, punch problems, Dhawan (G.K.), *247*

- adhesion, contact stresses, half space, indentation, Dhawan (G.K.), *250*
- plane stress, work hardening, yield criteria, Hodge (P.G.) Jr., *268*
- necking, rate sensitivity, sheet metal, strain rate, Neale (K.W.), Chater (E.), *274*
- bending, dynamic relaxation, plates (circular), Sherbourne (A.N.), Murphy (D.N.S.), *305*
- stability theory, strain energy, Parry (G.P.), *331*
- acoustic waves, finite amplitude, rayleigh waves, Planat (M.), *398*
- compression, failure, rocks, Nova (R.), *425*
- penny shaped crack, shear stress, stress intensity factor, Dahan (M.), *469*
- elasticity (linear), existence theorems, uniqueness, Umanskii (S.E.), *1184*
- creep, cylindrical bodies, torsion, Gupta (S.K.), Rana (V.D.), *1194*
- convection, cylindrical bodies, radiant interchange, solar radiation, Edwards (D.K.), *1695*
- composite materials, laminates, slabs, thermoelasticity (steady), Tauchert (T.R.), *1838*
- microstresses, polycrystalline materials, pressure, stresses, Livshits (L.D.), Prishchepov (V.F.), *1877*
- airy function, disks, elasticity (three dimensional), plates (anisotropic), Zastrow (U.), *2226*
- porous media, rocks, Smith (M.B.), Cheatham (J.B.) Jr., *2390*
- design (optimum), plates (circular), vibration (free), Olhoff (N.), Lurie (K.A.), (et al.), *2508*
- conduction (heat), transient effects, Tanaka (K.), Tanaka (M.), *2811*
- absorption, radiant interchange, scattering, Modest (M.F.), Azad (F.H.), *2824*
- cylindrical bodies, thermal stresses, thermoelasticity (steady), Misra (J.C.), Achari (R.M.), *2964*
- strips, thermal stresses, thermoelasticity (steady), Misra (J.C.), *2968*
- cooling, polymers, shells (cylindrical), shells (thick), thermal stresses, Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- green function, materials possessing memory, Osokin (A.E.), Suvorova (Iu.V.), *3077*
- boundary value problems, cracks, plates (weakened), Lyubchak (V.A.), Filshtinskii (L.A.), *3249*
- indentation, penetration, plasticity, Litewka (A.), Sawczuk (A.), *3257*
- clay, shear strength, Nova (R.), *3396*
- soils, stress strain relationships, Yoshida (S.), *3400*
- nonhomogeneous media, piezoelectrics, Muller (L.), *4337*
- boundary integral methods, elasticity (linear), green function, half space, Kobayashi (S.), Nishimura (N.), *4344*
- contact problems, indentation, viscoelastic materials, Predeleanu (M.), Dahan (M.), *4348*
- harmonic waves, waveguides, Fraser (W.B.), *4450*
- experimental methods, plasticity, soils, Murff (J.D.), *4461*
- nonhomogeneous media, plates (annular), rotating disks, thermal stresses, Misra (J.C.), Achari (R.M.), *4815*
- cylindrical bodies, rayleigh ritz method, thermoelasticity (steady), Kalam (M.A.), *4819*
- cosserat solids, membrane theory, moving surfaces, shells (thin), Murdoch (A.I.), Cohen (H.), *4926*
- coordinate systems, stress analysis, tensor methods, Ting (T.C.T.), *5094*
- elasticity (nonhomogeneous), nonhomogeneous media, Jin (F.-S.), *5095*
- granular media, plastic flow, slip line methods, Lippmann (H.), *5107, book*
- aluminum alloys, diaphragms, plasticity, pressurized components, Ilahi (M.F.), Parmar (A.), (et al.), *5112*
- elliptical bodies, laminates, plates, Bert (C.W.), *5126*
- dilatancy, rocks, strain, Lerau (J.), Saint-Leu (C.), (et al.), *5263*
- cold working, deformation (plastic), rolling, sheet metal, Honda (K.), Hosokawa (N.), (et al.), *5271*
- magneto fluid dynamics, models, perturbation theory, turbulence, Montgomery (D.), Turner (L.), *5679*
- shells (cylindrical), thermoelasticity (steady), Biswas (P.), *5799*
- incompressible flow, porous media, Kosterin (A.V.), *5828*
- displacement, free boundary, half space, seismic waves, Kosaryev (G.L.), Makeyeva (L.K.), (et al.), *5969*
- brittle materials, plasticity, slip line methods, Levitas (V.I.), *6177*
- fibers, probability, void fraction, Komori (T.), Makishima (K.), *6201*
- collapse, failure, finite element methods, soils, Toh (C.T.), Sloan (S.W.), *6382*
- composite materials, cylindrical bodies, thermal stresses, thermoelasticity (steady), Iesan (D.), *6952*
- composite materials, edge effects, stress concentration, wedges, Ting (T.C.T.), Chou (S.C.), *7269*
- elastic bodies, love waves, nonhomogeneous media, Chander (S.), Gogna (M.L.), *7423*
- composite materials, mathematical programming, optimization, polymers, shells (of revolution), Tomashevskii (V.T.), Nikolaev (B.A.), (et al.), *7594*
- biological membranes, inclusions, membranes (permeable), Pasechnik (V.I.), *8072*
- nonhomogeneous media, phase changes, strain energy, Tsakalakos (T.), *8091*
- rotating disks, stress analysis, Genta (G.), Gola (M.), (et al.), *8255*
- composite materials, laminates, plates (sandwich), thermal effects, Reddy (J.N.), Hsu (Y.S.), *8888*
- composite materials, strength, Margolin (G.G.), *9253*
- half space, punch problems, Dhawan (G.K.), *10142*
- conductivity, polymers, thermophysical properties, thin films, Voronkov (V.A.), Sukhareva (L.A.), (et al.), *10569*
- porous media, unsteady flow, Falade (G.K.), *10836*
- acoustic waves, calibration, transducers (ultrasonic), Brissaud (M.), Kleimann (H.), *11163*
- elastic waves, half space, propagation, Musgrave (M.J.P.), Payton (R.G.), *11164*
- elastic waves, singularities, Peslyak (M.Yu.), *11165*
- elastic waves, half space, propagation, vibration, Osipov (I.O.), *11166*
- damping capacity, elastic waves, propagation, Tarabrin (G.T.), *11167*

anisotropic structures, plates (sandwich), rayleigh ritz method, shells, vibration (free), Kuznetsov (N.D.), Kartashov (G.G.), (et al.), *8305*

- axial loading, pressure, reinforced bodies, tubes, Highton (J.), Soden (P.D.W.), *10325*

anisotropy, elastic constants, rolling, steel, Kitagawa (H.), *256*

- biomechanics, bones, elastic constants, ultrasonics, Van Buskirk (W.C.), Cowin (S.C.), (et al.), *1031*
- composite materials, effective elastic moduli, thermoplasticity, Stephenson (R.C.), Turner (S.), (et al.), *1834*
- layered media, soils, strength, Krishna Murthy (M.), Nagaraj (T.S.), (et al.), *2379*
- biomaterials, bones, composite materials, Kreger (A.F.), Zilauts (A.F.), *3248*
- composite materials, structural optimization, Banichuk (N.V.), *4342*
- elastic constants, elasticity (nonlinear), Hiki (Y.), *5083*
- bauschinger effect, experimental results, yield criteria, Shevchenko (Yu.N.), Kulakov (S.V.), (et al.), *5115*
- composite materials, photoelasticity, stress analysis, Jacob (K.A.), *5141*
- hardening, porous media, rocks, Celle (C.C.), Cheatham (J.B.), *5265*
- fatigue, heat treatment, life expectancy, rolling, strength, Nisitani (H.), Kage (M.), *6422*
- plasticity, strain analysis, work hardening, Besdo (D.), *7282*
- bauschinger effect, plasticity, stress strain relationships, work hardening, Rees (D.W.A.), *7285*
- composite materials, dynamic behavior, fibers, harmonic waves, orthotropic materials, Nemat-Nasser (S.), Yamada (M.), *7408*
- deep drawing, deformation (plastic), drawing, mechanical properties, Schmidt (W.), *7459*
- concentration, dispersion, mixed flow, porous media, Routaboul (F.), Quintard (M.), *7973*
- acoustic waves, high pressure, rocks, Levitova (F.M.), *8010*
- plates (perforated), yield criteria, Markov (K.Z.), *8202*
- birefringence, colloids, optical techniques, suspensions, Meeten (G.H.), *8502*
- convection (free), diffusion, galerkin method, Kelly (D.W.), Nakazawa (S.), (et al.), *8786*

Annapurna (N.), diffusion, dispersion, magneto fluid dynamics, plates (parallel), solutions (material), Gupta (A.S.), *2882*

annular flow, friction (internal), heat transfer, laminar flow, pressure drop, rotating disks, Mochizuki (S.), Yang (W.-J.), *761*

- conductivity, heat transfer, insulating materials (thermal), isothermal processes, Shimomura (H.), Okamoto (Y.), (et al.), *765*
- boiling, critical heat flux, two phase flow, Boltenko (E.A.), Peskov (O.L.), (et al.), *1674*

- convection, entrance region, heat transfer, hydrogen bubble technique, visualization, Ogunba (V.), Barrow (H.), *1690*
- heat transfer, nusselt number, thermosyphons, Seki (N.), Fukusako (S.), (et al.), *1718*
- adiabatic processes, liquid gas mixture, two phase flow, Andersen (P.S.), Wurtz (J.), *1858*
- convection (free), laminar flow, nusselt number, El-Shaarawi (M.A.I.), Sarhan (A.), *2790*
- jets, vortices, wakes, Ko (N.W.M.), *3695*
- hot wire, velocity profiles, Simmers (D.A.), Coney (J.E.R.), *3752*
- axial flow, cylindrical bodies, heat transfer, Rath (R.S.), Bastia (S.N.), *3787*
- convection (free), grashof number, spherical bodies, stratified flow, Singh (S.N.), Elliott (J.M.), *3801*
- geometrical properties, steam turbines, Zaryankin (A.E.), *3880*
- cooling, lasers, transient loading, Dulnev (G.N.), Gurev (Yu.L.), (et al.), *5540*
- rotating fluids, thermal instability, variable fluid properties, Jonas (P.R.), *5557*
- dispersion coefficient, dispersion relation, thermal diffusion, Achwal (S.K.) Shenoy (A.V.), *5620*
- friction factor, moving surfaces, pipe flow, transition, Shands (J.), Alfredsson (H.), (et al.), *6648*
- convection, dielectrics, electro fluid dynamics, heat transfer, laminar flow, Mizushina (T.), Ogino (F.), (et al.), *6768*
- convection, heat transfer (combined modes), laminar flow, Hattori (N.), *6776*
- drops, entrainment, Andreussi (P.), *6981*
- boundary layer, cascades, swirl flow, vortex flow, wakes, Tan (C.S.), *7807*
- channel flow, heat transfer, turbulent flow, variable fluid properties, Nemira (M.), Vilemas (J.), (et al.), *7827*
- convection (forced), cooling, critical heat flux, tube bundles, Katto (Y.), *7833*
- cables, cooling, electrical components, joints, thermal effects, Abdel Aziz (M.M.), Riege (H.), *7845*
- augmentation, convection, cylindrical bodies, heat exchangers, heat transfer, Dyban (E.P.), Lesnikovskii (A.A.), (et al.), *9682*
- condensation (filmwise), tubes, tubes (horizontal), Nishiyama (E.), *8699*
- convection (free), cylindrical bodies, three dimensional flow, Ozoe (H.), Shibata (T.), (et al.), *8703*
- boundary layer (thermal), convection, ekman layer, rotating fluids, thermal instability, Hignett (P.), Ibbetson (A.), (et al.), *8717*
- convection (forced), rotating bodies, secondary flow, shells (spherical), Dalman (R.J.), Douglass (R.W.), *8720*
- cyclones, cylindrical bodies, internal flow, inviscid fluid, velocity profiles, vortex flow, Martynov (Yu.V.), *9523*
- asymptotic methods, cylindrical bodies, rotating cylinders, singularities, Conlisk (A.T.), Walker (J.D.A.), *9535*
- diffusers, inlet flow, swirl flow, Elgammal (A.H.), Elkersh (A.M.), *9669*
- critical heat flux, drying, film boiling, Sedler (B.), *9688*
- critical heat flux, critical region, pipe flow, slug flow, Bonn (W.), Krebs (R.), (et al.), *9689*
- cylindrical bodies, nonlinear theory, rossby waves, rotating cylinders, Davey (M.K.), *10410*
- developing flow, hydrodynamic stability, perturbations, Gupta (S.C.), Garg (V.K.), *10464*
- axial compressors, blades, boundary layer, mixing, wakes, Davino (R.M.), Lakshminarayana (B.), *10522*
- axial turbines, boundary layer, velocity measurement, visualization, Hunter (I.H.), *10527*
- magneto fluid dynamics, numerical methods, pipe flow, porous walls, Verma (P.D.S.), Singh (M.), *10732*
- couette flow, magneto fluid dynamics, rotating cylinders, stability theory, Antimirov (M.Ya.), Kolyshkin (A.A.), *10746*
- numerical methods, reynolds number (high), rotating bodies, spherical bodies, Nakabayashi (K.), Nishida (H.), (et al.), *11375*
- exit, gravity, jets, nozzles, Tuck (E.O.), *11484*
- hydrodynamic stability, perturbations, stability curve, Garg (V.K.), *11526*
- dynamic stability, hydroelasticity, pipelines, Kozarov (M.), Mladenov (K.), *11697*
- centrifugal pumps, design, radial loading, Borovskii (B.I.), *11751*
- convection, plasma, theory, waves, Shivamoggi (B.K.), *11837*

annuli, diffusers, pressure recovery, swirl, Kumar (D.S.), Kumar (K.L.), *1570*
- drops, shear flow, Chan (P.C.-H.), Leal (L.G.), *2986*
- couette flow, cylindrical bodies, vortex flow, Stuart (J.T.), Diprima (R.C.), *3660*
- approximations (higher order), conical bodies, divergence, laminar flow, Renaud (M.F.), *3662*
- diffusers, experimental results, vortex flow, Adkins (R.C.), Matharu (D.S.), (et al.), *4628*
- aerodynamic performance, conical flow, diffusers, turbines, Kruse (H.), Quest (J.), *4629*
- convection (free), heat transfer, pipe flow, prandtl number, Kuehn (T.H.), Goldstein (R.J.), *5551*
- axial loading, large displacement, membranes, Allman (D.J.), Mansfield (E.H.), *6217*
- frequency domain techniques, laminar flow, unsteady flow, Franke (M.E.), Carney (G.R.), (et al.), *8573*
- flooding, liquid vapor mixture, nuclear reactors, two phase flow, Richter (H.J.), *8576*
- fluid-structure interaction, shells (fluid-filled), vibration, Pavlovskii (V.S.), Ometsinskaya (E.B.), *8633*
- laminar flow, moving surfaces, porous walls, Kalita (W.), Szaniawski (A.), *9584*
- compressible flow, irrotational flow, pipe flow, rotating cylinders, swirl flow, Neuberger (A.W.), *9586*
- cascades, numerical analysis, secondary flow, Glynn (D.R.), Marsh (H.), *9587*
- coaxial flow, convection, cylindrical bodies, helicoidal flow, laminar flow, Mojtabi (A.), Caltagirone (J.-P.), *9696*
- incompressible flow, jet flaps, singular integral equations, vortices, wings, Belotserkovskii (S.M.), Lifanov (I.K.), *10496*
- hydrodynamic stability, laminar flow, rotating cylinders, Hall (P.), *11496*
- bodies (liquid filled), columns, fluid-structure interaction, seismic loading, Fujita (K.), *11637*

Annushkin (Yu.M.), combustion, flames (diffusion), hydrogen, methane, turbulent flow, Maslov (G.F.), *6835*

Anson (L.W.), acoustics, force, radiation, Chivers (R.C.), *11985*

Antanovich (A.A.), equations of state, gases, high pressure, nitrogen, *7820*

antennas, space vehicle structures, trusses, Bush (H.G.), Heard (W.L.) Jr., *1461*
- artificial satellites, control, surface profiles, Buyakas (V.I.), Chekuleev (Yu.V.), *2193*
- acoustics, arrays, diffraction, sound fields, Adekola (S.A.), *3967*
- acoustics, arrays, Adekola (S.A.), *11991*

Anthony (F.M.), aerospace vehicles, airplane structures, panels (stiffened), Helenbrook (R.G.), *3538*

Antimirov (M.Ya.), annular flow, couette flow, magneto fluid dynamics, rotating cylinders, stability theory, Kolyshkin (A.A.), *10746*

Antipov (S.V.), rossby waves, solitary waves, Nezlin (M.V.), (et al.), *7051*

Antman (S.S.), see Alexander (J.C.), *4946*

Antoine (B.), see Villermaux (J.), *3872*

Antonelli (R.G.), dynamic stability, nonlinear structures, structural stability, vibration (torsional), Meyer (K.J.), (et al.), *3377*

Antonenko (A.N.), earth, earthquakes, seismic waves, structure, Dubrovin (G.K.), *7029*

Antonenko (E.V.), beams (thin section), bending (elastic), shells (cylindrical), thin walled structures, *7325*

Antonenko (V.A.), see Tolubinskii (V.I.), *804*
- see Tolubinskii (V.I.), *10645*

Antonenko (V.M.), eigenvalues, plates (rectangular), plates (sandwich), vibration (free), Piskunov (V.G.), (et al.), *6307*

Antonets (A.V.), blunt bodies, compressible flow, numerical methods, real gas effects, supersonic flow, Marinin (V.P.), *7687*

Antonia (R.A.), see Rajagopalan (S.), *650*
- reynolds number, turbulence (geophysical), turbulence (structure), Chambers (A.J.), *1583*
- measurements, sampling, turbulence, *2701*
- see Sokolov (M.), *3648*
- jets, pressure gradient, wakes, Phan-Thien (N.), *4635*
- jets, reynolds number, velocity profiles, Chambers (A.J.), (et al.), *5450*
- see Phan-Thien (N.), *8533*
- see Subramanian (C.S.), *9608*
- hydrodynamic stability, temperature, turbulence, turbulence (structure), velocity measurement, Chambers (A.J.), (et al.), *9617*
- boundary layer (atmospheric), spectra, turbulence (geophysical), wind-wave interaction, Chambers (A.J.), *9939*
- see Subramanian (C.S.), *10485*
- reynolds number, shear flow, turbulence (structure), turbulent flow, velocity profiles, Satyaprakash (B.R.), (et al.), *11546*

Antonini (G.), finite difference methods, heat transfer, mass transfer, slug flow, Guiffant (G.), *2855*

Antonov (A.N.), boundary layer (turbulent), noise (aerodynamic), oscillatory flow, turbulent flow, *6640*

Antonov (Yu.), earth, gravity, magnetic field, processing, *5871*

Antsulevich (V.I.), see Adzerikho (K.S.), *777*

Antyufeev (V.S.), mathematical models, monte carlo analysis, radiant interchange, scattering, *9723*

Anvarov (R.), flutter, supersonic flow, vibration (flow induced), viscoelastic materials, Gegel (E.I.), *2907*

Anwar (H.O.), oscillatory flow, spectra, tides, turbulence, Atkins (R.), *2695*
- air, entrainment, suction, vortices, wells, Amphlett (M.B.), *5389*

Anwar (M.), differential equations (ordinary), equations of motion, iterative methods, micropolar media, numerical methods, Guram (G.S.), *61*

Anzhina (G.I.), atmospheric circulation, forecasting, weather forecasting, Mashkovich (S.A.), *1914*
- see Mashkovich (S.A.), *5942*

Aoki (H.), see Harada (M.), *3043*

Aoki (S.), bifurcation, cracks, griffith cracks, pressure, Sakata (M.), *464*
- see Kishimoto (K.), *471*
- crack opening displacement, elastoplasticity, j-integral, thermal loading, Kishimoto (K.), (et al.), *1374*
- see Kishimoto (K.), *1388*
- computing techniques, dynamic fracture, finite element techniques, stress intensity factor, viscoelastic materials, Kishimoto (K.), (et al.), *3476*
- brittle materials, failure, material testing, stochastic processes, Sakata (M.), *8422*

aorta, blood flow, flexible walls, pulsatile flow, shock waves, Forbes (L.K.), *1041*

- blood vessels, stress strain relationships, Manak (J.J.), *3059*
- blood flow, finite element methods, navier stokes equation, shear stress, Gokhale (V.V.), Tanner (R.I.), (et al.), *3067*
- bifurcation, blood flow, pulsatile flow, Walburn (F.J.), Stein (P.D.), *4915*
- elastic constants, flexible walls, heart, pressure measurement, pulsatile flow, Gross (D.R.), Hunter (J.F.), (et al.), *4916*
- blood flow, muscles, Nerem (R.M.), Levesque (M.J.), (et al.), *6017*
- anemometers, blood flow, hot film, Yearwood (T.L.), Chandran (K.B.), *6023*

aortic valve, heart, materials properties, viscoelastic materials, Dorogin (A.D.), Maltsev (L.E.), (et al.), *1040*

- blood, damage, prosthetic devices, shear stress, Figliola (R.S.), Mueller (T.J.), *1960*

Aoyama (K.), see Mori (A.), *8066*

Apaydin (T.A.), beams, dynamic response, elastic foundations, moving loads, vibration (free), *9328*

Apelblat (A.), integration, transforms, *9107*

Apfel (R.E.), acoustics, bubble dynamics, cavitation, *11908*

Apicella (A.), material testing, polymers, recoil, thermoplasticity, viscoelastic fluids, Nicodemo (L.), (et al.), *2576*

Apostolescu (N.), see Turcoiu (T.), *5503*

Appalaswamy (A.V.), axisymmetric flow, plumes, similarity methods, Jaluria (Y.), *3685*

approximation methods, banach space, existence theorems, Balazs (M.), Goldner (G.), *63*

- dynamic response, large scale systems, mathematical models, Lamba (S.S.), Rao (S.V.), *183*
- mathematical models, vibration, Kuttler (J.R.), Sigillito (V.G.), *363*
- convection (forced), heat exchangers (crossflow), Roetzel (W.), Furst (J.), *784*
- sh waves, soil structure interaction, Chu (L.L.), Askar (A.), (et al.), *967*
- diffusion, singular perturbations, transient effects, Mann-Nachbar (P.), *1105*
- beam columns, eigenvalue problems, Ruge (P.), *1245*
- algorithms, estimation, stability, Gilbo (E.P.), Chelpanov (I.B.), (et al.), *2139*
- edge effects, plates (rectangular), plates (stiffened), vibration, Laura (P.A.A.), Gutierrez (R.H.), *2330*
- conduction (heat), heat transfer, nusselt number, Churchill (S.W.), Cheng (S.M.), *2819*
- layered media, nonlinear waves, Engin (H.), Askar (A.), (et al.), *3393*
- beams, vibration (free), Mohsin (M.E.), Sadek (E.A.), *4427*
- fredholm equations, vortex sheets, vortices, Gorelov (D.N.), *4580*
- optimal control, schwartz inequality, suboptimal control, synthesis, Akulenko (L.D.), *5050*
- differential equations (ordinary), vibration (parametric), Zajaczkowski (J.), *6283*
- plates (simply supported), plates (skew), vibration (free), Sakata (T.), *6294*
- ceramics, empirical methods, quartz, thermal expansion, Rusovic (N.), Godecke (T.), *6757*
- aerosols, asymptotic behavior, coagulation, particles, Tokar (Ya.I.), *6970*
- multiple degree of freedom, seismic loading, structural response, Tansirikongkol (V.), Pecknold (D.A.), *7041*
- beams (elastic), boundary value problems, elasticity (linear), plates, Karpov (N.I.), *7329*
- elastic bodies, mathematical methods, singularities, vibration (forced), George (O.D.), *7398*
- earth, gravimetrics, Strakhov (V.N.), *8009*
- dynamic response, vibration (random), Dobrynin (S.A.), Feldman (M.S.), *8285*
- design criteria, extended surfaces, fins, heat exchangers, Kern (J.), *8757*
- conductivity, experimental methods, mathematical models, radiant interchange, Saito (A.), *9722*
- error, estimation, ill posed problems, Vainikko (G.M.), *10048*
- algorithms, hilbert space, linear programming, optimal control, Rubio (J.E.), *11051*
- control, relay systems, stochastic systems, Fuller (A.T.), *11063*
- algorithms, asymptotic methods, optimal control, Moiseev (N.N.), Chernousko (F.L.), *11066*
- air, radiation, wakes, Pilyugin (N.N.), Tikhomirov (S.G.), (et al.), *11516*

approximation theory, numerical methods, vibration, Malsch (H.), *2324*

- boundary value problems, infinite medium, De Hoog (E.R.), Weiss (R.), *3099*
- finite element methods, multivariable systems, splines, Blaga (P.), Coman (G.), *3126*
- compressible flow, difference equations, iterative methods, stability theory, Samarskii (A.A.), *4169*
- duality, mathematical methods, Precupanu (T.), *4176*
- nonhomogeneous media, statistical continuum mechanics, Babkin (G.I.), Klyatskin (V.I.), (et al.), *6345*
- error, finite difference methods, finite element techniques, heat transfer, Stubley (G.D.), Raithby (G.D.), (et al.), *7196*
- continuum mechanics, finite difference methods, lattices, Jaberolanssar (H.), Peddieson (J.) Jr., *9252*
- large scale systems, model reduction, Litz (L.), *11077*

approximations, finite difference methods, inequalities, Singare (S.M.), Pachpatte (B.G.), *1117*

- computing techniques, convergence, newton method, Potra (F.A.), *1123*
- dynamic properties, foundations, stiffness, Kitamura (Y.), Sakurai (S.), *1284*
- boltzmann equation, green function, scattering, Coppa (G.), Ravetto (P.), *1529*
- arcs (magnetically constrained), forced systems, heat transfer, models, Bublievskii (A.F.), *1776*
- convergence, fredholm equations, Vorobev (S.N.), *2014*
- first-passage approximations, oscillators, probabilistic design, probability theory, Lutes (L.D.), Chen (Y.-T.T.), (et al.), *2019*
- conduction (unsteady), least squares, variational methods, Djukic (D.S.), Atanackovic (T.M.), *2038*
- convergence, integro differential equations, iterative methods, volterra equations, Vata (P.), *2051*
- cylindrical bodies, dynamic response, El-Raheb (M.), Babcock (C.D.) Jr., *2338*
- green function, stress concentration, stress intensity factor, strips, Rooke (D.P.), Baratta (F.I.), (et al.), *2431*
- boiling, convection (forced), heat transfer, nucleate boiling, Guglielmini (G.), Nannei (E.), (et al.), *2793*
- magneto fluid dynamics, rotating bodies, spherical bodies, torque, Natyaganov (V.L.), *2888*
- differential equations (ordinary), integration, numerical analysis, Mikeladze (Sh.E.), *3116, book*
- computing techniques, finite element techniques, interpolation, isoparametric elements, Webster (W.D.) Jr., *3133*
- boundary integral methods, holes, laplace equation, Barone (M.R.), Caulk (D.A.), *4161*
- computer programming, finite element techniques, higher order theories, shape functions, Wachspress (E.L.), *4192*
- beams, rotating bodies, vibration, Hodges (D.H.), *4414*
- mindlin plates, plates (circular), vibration (free), Irretier (H.), *4428*
- boundary layer, perturbation methods, Jovanovic (J.), Askovic (R.), *4597*
- duct flow, elliptic equations, magneto fluid dynamics, singularities, Nye (V.A.), *4747*
- coalescence, electro fluid dynamics, particles, turbulence (mechanisms), Lapiga (E.Ya.), Loginov (V.I.), *6862*
- asymptotic methods, complex variables, differential equations (ordinary), eigenvalue problems, sturm-liouville problems, Boyd (J.P.), *7158*
- convolution processes, mathematical methods, stochastic processes, Splettstosser (W.), *7174*
- computing techniques, linear equations, singular integral equations, Fabrikant (V.), Hoa (S.V.), (et al.), *7184*
- computing techniques, differential equations (ordinary), iterative methods, Korner (E.), *7187*
- expansion, magneto plasma dynamics, radiation, waves, Shyam (R.), Sharma (J.), (et al.), *8823*
- error, integration, linearization, particle dynamics, Laitone (J.A.), Laitone (E.V.), *8913*
- cost control, heat equation, optimal control, quadratic programming, Fletcher (R.), Harley (P.J.), *9100*
- asymptotic behavior, stability theory, Mirkina (A.S.), Khodzhaev (K.Sh.), *9112*
- discontinuities, liquid metals, magneto fluid dynamics, propagation, Patsegon (N.F.), *9797*
- artificial satellites, computer programming, upper atmosphere, Hoots (F.R.), *9816*
- conduction (unsteady), conformal mapping, Laura (P.A.A.), *10037*
- derivatives, finite difference methods, Lau (P.C.M.), *10045*
- mathematical methods, optimization, Fletcher (R.), Sinclair (J.W.), *10053*
- restricted three body problem, stability theory, Markellos (V.V.), Szebehely (V.), *10773*
- asymptotic methods, boundary value problems, Cimatti (G.), *10933*
- boundary value problems, compressible flow, difference operator, differential operator, least squares, subsonic flow, Danilov (Yu.M.), *11433*

approximations (higher order), ducts (curved), elliptical cross-section, noncircular pipes, pipe flow, Srivastava (R.S.), *611*

- ducts (curved), helical flow, laminar flow, Murata (S.), Miyake (Y.), (et al.), *1555*
- entrance region, mass transfer, pipe flow, turbulent flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *2645*
- ducts (variable area), pipe flow, viscoelastic fluids, Williams (E.W.), Javadpour (S.H.), *2646*
- pipe flow, unsteady flow, viscoelastic fluids, Manero (O.), Walters (K.), *2647*
- annuli, conical bodies, divergence, laminar flow, Renaud (M.F.), *3662*
- nozzles, throats, transonic flow, Dutton (J.C.), Addy (A.L.), *4624*
- gravity waves (solitary), stratified flow, Grimshaw (R.), *4654*
- irrotational flow, nozzles, supersonic flow, Ishii (R.), *6661*
- finite amplitude, gravity waves (surface), highest wave, velocity profiles, Srokosz (M.A.), *9618*
- gravity waves (surface), lakes, ocean, rotational flow, Bennett (J.R.), Schwab (D.J.), *11573*
- containers (partially filled), nonlinear analysis, sloshing, Lukovskii (I.A.), *11679*

approximations (polynomial), finite element techniques, interpolation, mathematical methods, Hoppe (V.), *6110*

- computing techniques, differential equations (ordinary), initial value problems, splines, Multhei (H.N.), *10049*
- computing techniques, finite element methods (hybrid), integration, isoparametric elements, Spilker (R.L.), Singh (S.P.), *10062*

- finite element techniques, interpolation, mesh generation, Okabe (M.), *10065*

Apshtein (E.Z.), ablation, ellipsoids, heat transfer, three dimensional flow, Pilyugin (N.N.), *796*
- bodies of revolution, deformation, ellipsoids, integral methods, virtual mass, Kolotilova (N.G.), *8534*

Apykhtin (N.G.), dynamics, equations of motion, optimization, variable mass, Iakovlev (V.F.), *4757*

aquifers, finite difference methods, finite element methods (hybrid), unsteady flow, Guvanasen (V.), Volker (R.E.), *1874*
- mixing layers, storage, Singh (S.P.), *2996*
- mixing, particles, stochastics, stratification, Gelhar (L.W.), Gutjahr (A.L.), (et al.), *4025*
- groundwater, porous media, Gupta (S.K.), Lal (D.), (et al.), *5902*
- porous media, Brutsaert (W.), Corapcioglu (M.Y.), *5907*
- porous media, Motz (L.H.), *5909*
- subsidence, Safai (N.M.), Pinder (G.F.), *6377*
- diffusion, infiltration, Dassonville (G.), Emsellem (Y.), *7050*
- computing techniques, identification, perturbation theory, quasilinearization, Galligani (I.), *8127*
- drainage, numerical methods, Rolfes (L.), *8949*
- coasts, finite element techniques, infiltration, porous media, Das Gupta (A.), Arbhabhirama (A.), *8971*
- conduction (heat), convection (free), geothermal reservoirs, heat transfer (combined modes), thermosyphons, Torrance (K.E.), Chan (V.W.C.), *9724*
- mathematical models, storage, underground storage, Dussaud (M.), Carriere (J.-F.), *9902*
- energy conservation, energy storage, Yokoyama (T.), Umemiya (H.), (et al.), *10603*
- groundwater, transport phenomena, Sauty (J.-P.), *10675*

Arai (N.), film boiling, heat transfer (combined modes), mass transfer, radiation, Takahashi (S.), (et al.), *799*
- convection (free), mass transfer, plane surfaces, Takahashi (S.), (et al.), *818*

Arai (S.), boundary layer, ducts (curved), liquid metals, magneto fluid dynamics, theory, Tomita (Y.), (et al.), *853*

Arai (T.), see Sakurai (A.), *8544*

Arakawa (K.), see Minagawa (S.), *3079*

Arakeri (V.H.), bubble dynamics, cavitation flow, laminar flow, ogives, separation, water tunnels, Carroll (J.A.), (et al.), *563*

Araki (H.), inclusions, plates (nonhomogeneous), thermal stresses, thermoelasticity (steady), Shioya (S.), (et al.), *2966*

Araki (M.), see Saeki (M.), *3168*

Araki (T.), fuel elements, heat transfer, hydraulics, nuclear fuels, numerical methods, Takeda (T.), (et al.), *11802*

Aran (A.), bauschinger effect, heat treatment, plastic behavior, thermal effects, Demirkol (M.), *2237*

Aranda (G.R.), chimneys, seismic loading, soil structure interaction, *4846*

Aranovitch (E.), conductivity, convection (free), energy conversion, radiant interchange, solar collectors, *3842*

Aravindan (P.K.), see Sambanthan (T.G.), *3309*

Arays (Ye.A.), multivariable systems, numerical methods, simulation, Dmitriyev (V.M.), *7255*

Arbel (A.), design, observers, pole placement, Tse (E.), *100*
- design, large scale systems, linear systems, observers, Tse (E.), *2084*
- actuators, controllability, design, optimization, oscillations, space vehicle structures, *11047*

Arbhabhirama (A.), see Das Gupta (A.), *8971*

Arbib (H.A.), chemical reactions, combustion, hydrocarbons, mathematical models, Goldman (Y.), (et al.), *5645*

arch dams, damping, hydraulic jump, jets, radiating flow, Petrillo (A.), Ranieri (M.), (et al.), *561*

Archegov (V.G.), see Drozdov (Yu.N.), *7081*
- see Drozdov (Yu.N.), *10688*

arches, dynamic analysis, frames, Henrych (J.), *300, book*
- design (optimum), mathematical programming, Lipson (S.L.), Haque (M.I.), *1424*
- buckling, hinged bodies, pressure, Schmidt (R.), *2297*
- hinged bodies, postbuckling behavior, Schmidt (R.), *2298*
- design, structural support, tunnels, Matsumoto (Y.), Sakamoto (S.), (et al.), *4538*
- axial loading, bending, buckling, energy methods, Sladkov (S.I.), *5149*
- buckling, imperfections, Oran (C.), *5178*
- finite element methods, large displacement, postbuckling behavior, Lazarov (L.), *5179*
- elastic foundations, vibration (free), Plaut (R.H.), Johnson (E.R.), *7406*
- domes, imperfections, nonlinear analysis, Wolde-Tinsae (A.M.), Huddleston (J.V.), *9267*
- postbuckling theory, structural stability, Schmidt (R.), *10172*
- beams (curved), buckling (nonlinear), rings, Batoz (J.-L.), *11120*
- dynamic stability, frames, shells (cylindrical), Simitses (G.J.), Sheinman (I.), *11124*

arcjet engines, magneto fluid dynamics, space shuttle, thrusters, Kuriki (K.), *5668*

arcjets, ablators, insulating materials (thermal), joints, reentry, space shuttle, Brewer (W.D.), Pittman (C.M.), (et al.), *1723*
- gaseous fuels, generators, plasma jets, Chan (A.K.F.), Hilliard (J.C.), (et al.), *2905*
- discharges, dynamic behavior, generators, plasma jets, Sergienko (A.S.), *5695*

arcs, cutting, heat transfer, plasma, Hinds (B.K.), De Almeida (S.M.), *436*
- energy transport, numerical methods, plasma, turbulence (transport), Galeev (Z.M.), Ziganshin (R.R.), (et al.), *6866*
- experimental methods, performance, plasma jets, porous walls, Gonopolskii (A.M.), Slobodkina (F.A.), *10761*

arcs (magnetically constrained), approximations, forced systems, heat transfer, models, Bublievskii (A.F.), *1776*

Ardasheva (M.M.), conical bodies, heat transfer, shock tubes, Bezmenov (V.Ya.), (et al.), *5537*

Arditi (M.), see Foster (F.S.), *3982*

Aref (H.), see Siggia (E.D.), *2698*
- initial value problems, stability, turbulent flow, two dimensional flow, vortex shedding, vortex street, Siggia (E.D.), *5399*

Arefyev (K.M.), cooling, evaporation, heat transfer, mass transfer, water, Averkiyev (A.G.), *802*

Arenz (R.J.), dynamic stresses, impact, photoviscoelasticity, propagation, time dependence, Soltesz (U.), *1391*

Argel (A.), see Friedman (M.), *3987*

argon, electric propulsion, ionic propulsion, Ramsey (W.D.), *848*
- ionic propulsion, thrusters, xenon, Wilbur (P.J.), Kaufman (H.R.), *5666*

Argon (A.S.), creep, internal stresses, metals, micromechanisms, power law geometrics, Takeuchi (S.), *5101*

Argoun (M.B.), decoupling, design, feedback, frequency domain techniques, Van De Vegte (J.), *3158*

Argyris (J.H.), elastic bodies, finite element techniques, nonconservative systems, nonlinear analysis, Symeonidis (S.), *4197*
- cables, dynamic response, experimental mechanics, networks, Aicher (W.), (et al.), *7380*

Ari-Gur (J.), buckling, dynamic stability, impact, plates (rectangular), Singer (J.), (et al.), *11125*

Aribert (J.M.), bolted joints, creep, flammability, metallic constructions, Riaux (H.), *1437*

Arie (M.), atmosphere, boundary layer (atmospheric), boundary layer (turbulent), generation, Kiya (M.), (et al.), *4600*
- see Kiya (M.), *4609*
- see Kiya (M.), *4651*
- see Kiya (M.), *8499*

Ariel (N.Z.), boundary layer (atmospheric), drag coefficient, ocean air interaction, ocean waves, wind-wave interaction, Byutner (E.K.), (et al.), *983*

Ariel (P.D.), duct flow, fins, fredholm equations, magneto fluid dynamics, velocity profiles, Aggarwala (B.D.), *5672*

Arima (J.), see Iwai (Y.), *7292*

Aristov (V.V.), blast effects, explosions, impulsive transfers, rarefied gases, Shakhov (E.M.), *9835*
- compressible flow, navier stokes equation, one dimensional flow, rarefied flow, Makhmudov (A.A.), (et al.), *11434*

Arkhangelskaya (M.Yu.), dynamic analysis, lyapunov's functions, rotating bodies, *3089*

Arkhinov (V.I.), see Maslov (L.A.), *6495*

Arkhipenko (V.I.), cylindrical bodies, hydromagnetic stability, liquids, perturbations, waves, Barkov (Yu.D.), (et al.), *851*
- decomposition, experimental methods, interfaces, jets, magneto fluid dynamics, Barkov (Yu.D.), *10745*
- drops, gravity, magneto fluid dynamics, stability theory, theory, Barkov (Yu.D.), (et al.), *11821*

Arkhipov (A.N.), elastoplasticity, finite element techniques, residual stresses, Temis (Yu.M.), *6116*

Arkhipov (V.I.), edge cracks, elastoplasticity, holography, *3454*

Arknipov (V.N.), see Artamonov (A.K.), *11409*

Armbruster (J.T.), see Chen (C.-L), *11613*

Armstrong (D.), biocontrol, muscles, nervous system, Moon (M.), *5067*

Armstrong (G.), see Thorp (I.), *1759*

Armstrong (R.R.) Jr., coherent structure, compressible flow, experimental results, jets, noise (aerodynamic), turbulence, *1580*

Armstrong (W.P.), conductivity, laminates, pressure vessels, thermal properties, Jawad (M.H.), *5805*

Arnal (D.), corners, subsonic flow, turbulence, Cousteix (J.), *3647*

Arndt (R.E.A.), cavitation, cavitation inception, hydraulic machinery, hydraulic structures, scale effects, surface effect, *10631*

Arnesen (A.), geometric nonlinearities, material nonlinearities, plane stress, reinforced concrete, shells (thin), Sorensen (S.I.), (et al.), *7603*

Arnold (D.J.), gas turbines, high temperature, radial turbines, stresses, Balje (O.E.), *5658*

Arnold (D.N.), convergence, finite element techniques, korteweg de vries equation, Winther (R.), *10064*

Arnold (J.M.), eigenvalues, sound propagation, underwater acoustics, waveguides, *11895*

Arnold (T.W.), dynamic analysis, nonlinear analysis, vibration (nonlinear), Case (W.), *7366*

Arnquist (J.), see Hepler (A.K.), *3540*

Arone (R.), crack initiation, cyclic loading, fatigue, fracture, stochastics, *6416*

Aronov (B.M.), axial turbines, blades, cascades, geometrical properties, swirl flow, Kerzhenkov (A.G.), *11747*

Aronov (B.S.), ceramics, electromechanical components, piezoelectric devices, transducers, *6465*

- ceramics, electromechanical components, piezoelectric devices, vibration (free), *11131*

Aronson (A.Ya.), imperfections, numerical analysis, shells, Gaidaichuk (V.V.), (et al.), *9270*

Arora (A.), acoustic emission, crack growth, detection, Tangri (K.), *1307*

Arora (J.S.), constraints, structural optimization, Haug (E.J.), (et al.), *4521*

- see Govil (A.K.), *5347*
- see Belegundu (A.D.), *7591*

Arora (K.L.), dynamic effects, forging, forming, high speed, inertia, materials properties, plane strain, Sachdev (A.S.), (et al.), *1338*

Arques (P.), energy conversion, heat engines, organic fluid, steam engines, Gublin (F.), (et al.), *3887*

- frequency domain techniques, internal combustion engines, pressure measurement, vibration, *5649*
- flame propagation, hot wire, modeling, spark ignition engines, *6849*

arrays, detection, estimation, filters, radar, Chen (C.-C.), Andrews (H.C.), *195*

- eddies, sound propagation, Baer (R.N.), *888*
- acoustics, sound generation, Sullivan (E.J.) Jr., *906*
- acoustics, ocean, shallow water, sound propagation, Buckingham (M.J.), *1802*
- acoustic measurements, acoustics, holography, Sato (T.), Sasaki (K.), (et al.), *1829*
- algorithms, array ordering, matrix methods, Vilenkin (S.Ya.), Charnaya (I.S.), *2113*
- measurements, nozzles, Marsters (G.F.), *2666*
- acoustic waves, focusing, nonlinear waves, Tjotta (J.N.), Tjotta (S.), *2950*
- diagnostics, piezoelectrics, transducers (ultrasonic), ultrasonics, Sato (J.), Kawabuchi (M.), (et al.), *2955*
- adaptive systems, error, frequency domain techniques, Keating (P.N.), *3955*
- reflection, sonar, underwater acoustics, Lynch (J.F.), Pitt (S.P.), (et al.), *3956*
- acoustics, noise, Earwicker (M.J.), *3958*
- acoustics, sound speed, Hinich (M.J.), *3959*
- acoustics, sound fields, Cantoni (A.), Godara (L.C.), *3964*
- noise, underwater acoustics, Wagstaff (R.A.), *3966*
- acoustics, antennas, diffraction, sound fields, Adekola (S.A.), *3967*
- imaging systems, ultrasonics, Sato (T.), Sasaki (K.), (et al.), *3976*
- sound fields, Greene (C.R.), Wood (R.C.), *4793*
- imaging systems, turbulence, ultrasonics, Sato (T.), Linzer (M.), (et al.), *4810*
- spectral analysis, underwater acoustics, Tuteur (F.B.), Presley (J.A.) Jr., *4811*
- diffusers, diffusion, jets, mixing, Lee (J.H.W.), *5454*
- holography, imaging systems, underwater acoustics, Sutton (J.L.), *5718*
- acoustic measurements, ocean, underwater acoustics, Harper (E.Y.), *5754*
- acoustic measurements, acoustic waves, radiation, reflection, Nefedov (N.N.), *5796*
- sound fields, underwater acoustics, Neubert (J.A.), *7945*
- submerged bodies, three dimensional flow, wave absorbers, Thomas (G.P.), Evans (D.V.), *10489*
- transducers (ultrasonic), transfer functions, Bardsley (B.G.), Christensen (D.A.), *10797*
- layered media, underwater acoustics, Eliseevnin (V.A.), *11909*
- acoustic waves, nonhomogeneous media, propagation, Komissarova (N.N.), *11924*
- acoustic waves, interference, microphones, transducers, Carnes (T.N.), Reynolds (D.D.), (et al.), *11927*
- focusing, underwater acoustics, Claus (A.J.), Labianca (F.M.), *11976*
- acoustics, antennas, Adekola (S.A.), *11991*
- underwater acoustics, Mole (L.A.), *11999*
- focusing, underwater acoustics, Lynch (J.F.), Stokes (R.H.), *12000*

Arscott (F.M.), coordinate systems, elliptical bodies, helmholtz equation, mathematical methods, Darai (A.), *37*

Arst (Kh.Yu.), atmosphere, radiant interchange, radiation properties, scattering, spectral analysis, transmission, Kostyanoy (G.N.), *2823*

Artamonov (A.K.), compressible flow, hypersonic flow, rarefied flow, spherical bodies, Arknipov (V.N.), *11409*

Artamonov (A.T.), measurements (dynamic), shafts, torque gages, Volkov (N.P.), (et al.), *225*

Artamonov (K.I.), acoustic waves, gases, impedance, nonlinear characteristics, thermal effects, Vorobev (A.P.), *6921*

Artaz (M.-A.), see Andre (J.-C.), *9935*

Artemov (V.I.), energy conversion, magneto plasma dynamics, nonequilibrium effects, perturbations, three dimensional flow, Sinkevich (O.A.), *7900*

arteries, biomaterials, elasticity (nonlinear), tissues, Fung (Y.C.), *1039*

- blood flow, difference differential equations, Lefevre (J.), Magnus (A.), *1044*
- pulsatile flow, stenoses, Padmanabhan (N.), *1955*
- cell behavior, dynamic response, muscles, shear stress, Dewey (C.F.) Jr., Bussolari (S.R.), (et al.), *3065*
- diagnostics, stenoses, Fox (B.), Seed (W.A.), *4118*
- blood flow, pressure measurement, pulsatile flow, Mauck (G.W.), Smith (C.R.), (et al.), *4120*
- aneurysms, blood flow, pulsatile flow, viscous flow, Wille (S.O.), *4912*
- blood flow, navier stokes equation, stenoses, Wille (S.O.), *4918*
- blood flow, compressional waves, pulsatile flow, Smit (C.H.), *6018*
- attenuation, blood flow, compressional waves, energy dissipation, Bertram (C.D.), *6021*
- stress strain relationships, tissues, Vito (R.P.), Hickey (J.), *7113*
- blood flow, compressional waves, pressure measurement, pulsatile flow, Li (J.F-J.), Melbin (J.), (et al.), *7118*
- acoustics (physiological), blood flow, muscles, sound generation, Grigoryan (S.S.), Saakyan (Yu.Z.), (et al.), *8077*

Arthurs (A.M.), see Anderson (N.), *1533*

artificial intelligence, computer aided design, robotics, Rybak (V.I.), *2182*

- algorithms, autonomous systems, vehicles, Benes (J.), Kolar (P.), *2196*

artificial satellites, spinning bodies, stability theory, Saakyan (L.S.), *879*

- lyapunov's functions, magnetic stabilization, Takezawa (S.), Ninomiya (K.), *1791*
- control, satellites, space vehicle structures, structural response, Lightner (E.B.), *2178*
- antennas, control, surface profiles, Buyakas (V.I.), Chekulaev (Yu.V.), *2193*
- averaging, hamiltonian equations, oblateness, Claes (H.), *2920*
- attitude control, optimization, Acaccia (G.M.), Cepolina Molfino (R.), *2921*
- averaging, libration theory, resonance, restricted three body problem, Barkin (Iu.V.), Markov (Iu.G.), *3915*
- libration theory, periodic orbits, resonance, restricted three body problem, Barkin (Yu.V.), Markov (Yu.G.), *3916*
- n body problems, stability theory, three body problem, Walker (I.W.), Emslie (A.G.), (et al.), *4756*
- cables, flexible bodies, space vehicle structures, tethered systems, Weber (R.), Wehrli (R.), *4758*
- drag coefficient, upper atmosphere, Goldfinger (A.D.), *5712*
- orbit mechanics, photography, Bykov (O.P.), *6878*
- oblateness, orbit decay, reentry, upper atmosphere, De Lafontaine (J.), *6883*
- damping, flexible bodies, gravitational stabilization, lyapunov's functions, Hablani (H.B.), Shrivastava (S.K.), *6886*
- orbit mechanics, perturbation methods, potential theory, Roth (E.A.), *7915*
- communication satellites, trajectory optimization, weather satellites, Contant (J.-M.), Winkels (H.-M.), (et al.), *7925*
- control, guidance systems, maneuverability, tethered satellites, Bschorr (O.), *7930*
- averaging, equations of motion, oblateness, transformation, Hoots (F.R.), *8942*
- attitude control, flexible bodies, modal control, space vehicle structures, Sellappan (R.), Bainum (P.M.), *8947*
- convection (free), plates (vertical), transition flow, turbulence (transport), turbulent flow, Doan-Kim-Son, Coutanceau (J.), *9695*
- approximations, computer programming, upper atmosphere, Hoots (F.R.), *9816*
- geosynchronous orbits, stability theory, Breakwell (J.V.), *9817*
- dynamic programming, optimal control, rigid bodies, Akulenko (L.D.), *9818*
- circumnavigation, computer algebra, computer programming, oblateness, Deprit (A.), *10776*
- low thrust engines, optimal control, two body problem, Vasilev (V.V.), *10779*
- manned satellites, reentry, weather satellites, Rex (D.), *10780*
- dynamic analysis, oscillations, solar arrays, space vehicle structures, Khoroshilov (V.S.), *11335*

Artikov (T.U.), earthquakes, finite element techniques, oscillations, Khuzhaev (A.), *86*

Artiz-Cohen (J.A.), binary flow, convection (benard), galerkin method, poiseuille flow, thermodynamics (nonequilibrium), Velarde (M.G.), *2801*

Arts (T.), biomechanics, blood flow, heart, muscles, Reneman (R.S.), (et al.), *7109*

Artyshev (S.G.), explosions, explosive loading, explosive solid interactions, impulsive loading, soil mechanics, Dunin (S.Z.), (et al.), *9642*

Artyukh (L.Yu.), bodies of revolution, combustion, compressible flow, mathematical models, supersonic flow, Kashkarov (V.P.), (et al.), *5415*

Artyukhin (E.A.), conduction (heat), gradient techniques, inverse problems, Rumyantsev (S.V.), *1701*

- boundary value problems, conduction (heat), gradient techniques, inverse problems, numerical methods, Rumyantsev (S.V.), *5581*

Artyukhin (Yu.P.), contact problems, structural analysis, thin walled structures, Gerkina (V.S.), *6223*

Arunachalam (V.M.), blood, circulatory systems, oxygen, prosthetic devices, Shettigar (U.R.), *7126*

Arunagiri (R.), see Subramanian (G.), *3486*

Arutyunov (A.V.), linear systems, mathematical theory, optimal control, time optimal systems, *8158*

Arutyunyan (A.B.), films, ignition, kinetics, metals, particles, Kharatyan (S.L.), (et al.), *9747*

Arutyunyan (N.Kh.), creep, deformation (finite), viscoelasticity, *4345*

Arvidsson (K.), buildings (tall), frames, shear walls, variational methods, *3549*

Arvikar (R.), biomechanics, gait, human body, pressure measurement, Seireg (A.), *4908*

Arvin (J.R.), see Novick (A.S.), *11513*

Arya (V.K.) eds., deconvolution, processing, seismic waves, Aggarwal (J.K.), *9907, book*

Asada (Y.), drawing, thermal effects, thermoelasticity, tubes, wires, Mori (K.-I.), (et al.), *4004*
Asano (K.), see Ito (A.), *10666*
Asano (N.), contact problems, dynamics, finite element techniques, mesh generation, *4202*
- see Doi (O.), *6389*

Asano (Y.), see Ota (T.), *3654*
Asanov (G.S.), dynamic analysis, kinematics, relativity, *1990*
Asaoka (A.), prediction, settlements, soil mechanics, Matsuo (M.), *6384*
Asaro (R.J.), see Chang (Y.W.), *6433*
Ascough (J.), photoelasticity, photoelasticity (three dimensional), scattered light, stress analysis, *11313*
Asfar (K.R.), dynamic response, vibration (forced), vibration (self excited), Nayfeh (A.H.), (et al.), *10190*
Ashbee (K.H.G.), see Sargent (J.P.), *11343*
Ashchepkov (L.T.), algorithms, jump conditions, optimal control, Badam (U.), *4275*
Ashchi (H.), see Gerstle (K.H.), *2486*
Ashelby (D.W.), see Hills (D.A.), *2419*
- see Hills (D.A.), *3263*

Asher (R.B.), doppler effect, electric propulsion, estimation, random error, space vehicles, Eller (T.J.), (et al.), *5714*
Ashour (H.A.), beams (thin section), biaxial loading, buckling, shells (stiffened), Sobel (L.H.), *10180*
Asif (S.A.), carbon dioxide, heat transfer (combined modes), high temperature, injection, regenerators, Khandwawala (A.I.), *7868*
Asimakopoulos (D.N.), balloons, boundary layer (atmospheric), turbulence (geophysical), Lalas (D.P.), (et al.), *7062*
Askadskii (A.A.), accelerated testing, polymers, relaxing media, viscoelastic materials, Todadze (T.V.), *3256*
Askar (A.), see Chu (L.L.), *967*
- see Chu (L.), *3006*
- see Engin (H.), *3393*
- crystals, korteweg de vries equation, lattices, one dimensional waves, particle dynamics, *7140*

Askovic (R.), see Jovanovic (J.), *4597*
Aslam (M.), containers (partially filled), finite element techniques, seismic loading, sloshing, *11662*
Asner (B.A.) Jr., control, flexible bodies, space vehicle structures, Seltzer (S.M.), *2924*
Aso (K.), bending, drilling, drilling rods, ocean bed, rods, vibration, Kan (K.), *11659*
Asoskov (V.A.), combustion, combustion chambers, liquid fuels, Shestakov (N.S.), *1755*
Assael (M.J.), binary flow, conduction (heat), conductivity, gases, kinetic theory, mixtures, multicomponent flow, Wakeham (W.A.), (et al.), *8675*
Astafev (V.I.), crack growth, crack opening displacement, creep, *1382*
Astanin (V.V.), compression, dynamic properties, elastoplasticity, experimental results, metals, shock waves (normal), *399*
- elastoplasticity, experimental methods, shock waves (normal), *7427*

asteroids, libration theory, perturbation methods, regularization, resonance, Garfinkel (B.), *871*
astrodynamical constants, circumnavigation, gravity, solar system, Moyer (T.D.), *869*
astronautics, celestial mechanics, design, mission analysis, optimization, orbits, space vehicles, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*
astrophysics, convection, magneto plasma dynamics, models, stability theory, Sankhla (V.D.), Bhatia (P.K.), *6867*
- planetary atmospheres, propagation, shock waves, similarity methods, Pai (S.I.), Menon (S.), (et al.), *9637*

Asundi (A.), see Chiang (F.P.), *7555*
Aswatha Narayana (P.A.), see Lakshmana Gowda (B.H.), *2637*
- boundary layer (turbulent), flow measurement, pressure gradient, roughness, *4601*

asymptotic behavior, residual stresses, series, sheet metal, Yagoda (H.P.), *54*
- codes, stability theory, Beaudoin (Y.), Nerenberg (M.A.H.), *66*
- layered media, shells, tubes, Widera (G.E.O.), Johnson (M.W.), (et al.), *289*
- crack propagation, finite element techniques, stress intensity factor, Bazant (Z.P.), Cedolin (L.), *479*
- boundary layer (turbulent), flow obstructions, incompressible flow, reynolds number (high), Sykes (R.I.), *595*
- differential equations (ordinary), dynamic behavior, transient effects, Friedman (C.N.), *1076*
- damping, dynamics, oscillations, Philos (C.G.), Staikos (V.A.), *1080*
- conduction (unsteady), one dimensional flow, parabolic equations, short-time solutions, Gavalas (G.R.), Yortsos (Y.C.), *1087*
- computing techniques, fluid mechanics, nonlinear mechanics, perturbation methods, Glowinski (R.) eds., Lions (J.E.), *1111, book*
- periodic orbits, perturbation methods, random excitation, stability theory, Chow (P.L.), Chiou (K.L.), *1994*
- boundary layer, laminar flow, time dependence, Hultgren (L.S.), Gustavsson (L.H.), *2631*
- boundary layer, boundary value problems, Jones (E.), *2640*
- flexible bodies, large displacement, rods, Oshevsky (K.U.), *3288*
- boundary layer, computing techniques, laminar flow, pressure gradient, separation, Curle (N.), *3653*
- initial value problems, parabolic equations, singular perturbations, Alexiades (V.), *4175*
- drag, orbit decay, planetary atmospheres, Chakravarty (A.J.M.), *4760*
- asymptotic methods, averaging, boundary value problems, nonlinear mechanics, Akulenko (L.D.), *4948*
- airy function, nonlinear mechanics, special functions, Miles (J.W.), *4951*
- fourier series, parabolic equations, Belousov (L.A.), *4963*
- dimensional analysis, similarity methods, Barenblatt (G.I.), *4998*
- curved surfaces, cylindrical waves, Hollinger (F.), *5246*
- boundary layer, cylindrical bodies, existence theorems, gortler series, uniqueness, yawing, Schwierz (K.-P.), *5426*
- bubble dynamics, chemically reactive flow, liquid gas mixture, modulated systems, waves, Bagdoev (A.G.), Oganyan (G.G.), *5488*
- differential equations (ordinary), oscillations, vibration, Taylor (W.E.) Jr., *6062*
- conservation laws, mathematical methods, Wang (C.-H.), *6071*
- hyperbolic equations, magneto fluid dynamics, wave equations, Gustafsson (B.), *6080*
- aerosols, approximation methods, coagulation, particles, Tokar (Ya.I.), *6970*
- bubble dynamics, fluidized beds, prediction, Bar-Cohen (A.), Hughes (R.W.), *6989*
- porous media, transition flow, Nilson (R.H.), *7004*
- diffusion, nonlinear analysis, phase plane, travelling waves, Fife (P.C.), Mcleod (J.B.), *7167*
- composite materials, fibers, rings, Bogan (Yu.A.), *7326*
- differential equations (ordinary), large scale systems, singular perturbations, stability theory, Grujic (L.T.), *8105*
- dynamics, matched asymptotic expansions, nonconservative systems, oscillations, relaxation, van der pol equation, Grasman (J.), *8106*
- dirichlet problem, fourier series, tricomi problem, Chebanova (N.A.), *8116*
- bending (elastic), boundary layer, perturbation methods, plates (rectangular), Nazarov (S.A.), *8243*
- elasticity (nonlinear), plates (nonhomogeneous), Kolos (A.V.), *8252*
- shells (shallow), shells (spherical), stability theory, Larchenko (V.V.), *8268*
- crack opening displacement, elasticity (nonlocal), Atkinson (C.), *8394*
- blunt bodies, hypersonic flow, separation, shock layer, two dimensional flow, Barantsev (R.G.), Engelgart (V.N.), *8636*
- boundary conditions, hyperbolic equations, lyapunov's functions, nonlinear analysis, Radzikowski (J.), Sadkowski (W.), *9104*
- approximations, stability theory, Mirkina (A.S.), Khodzhaev (K.Sh.), *9112*
- elliptic equations, error, mesh generation, Rai (M.M.), Anderson (D.A.), *9127*
- boundary layer (three dimensional), pressure gradient, unsteady state, Ryzhov (O.S.), *9566*
- convection (free), corners, porous media, Liu (C.Y.), Ismail (K.A.R.), *9901*
- biomathematics, differential equations (ordinary), feedback, Selgrade (J.F.), *10015*
- boundary value problems, differential equations (ordinary), Chin (R.C.Y.), *10039*
- boundary layer, fluid mechanics, heat transfer, navier stokes equation, Kuiken (H.K.), *10424*
- analogies, drag, moving surfaces, plates, Burkina (R.S.), Vilyunov (V.I.), *10425*
- mathematical programming, optimal control, trajectory optimization, Feinstein (C.D.), Luenberger (D.G.), *11069*

asymptotic methods, shells (of revolution), Steele (C.R.), *309*
- boundary layer, laminar flow, moving surfaces, Chernyy (G.G.), *593*
- conduction (heat), mathematical models, perturbation methods, variable thermal properties, Aziz (A.), Jaleel (A.), (et al.), *772*
- boundary layer, incompressible flow, interaction, separation, singular perturbations, Veldman (A.E.P.), *1549*
- boundary layer, incompressible flow, reynolds number (high), separation, surveys, Ruban (A.I.), Sychev (V.V.), *1550*
- flow irregularities, kelvin waves, ocean waves, reflection, wave generation, Haines (C.R.), *1603*
- shells (cylindrical), waves, Protsenko (A.M.), *2360*
- bodies of revolution, compressible flow, transonic flow, Brezhnev (A.L.), Chernov (I.A.), *2620*
- hydrodynamic stability, orr sommerfeld equation, shear layer, stability theory, Monkewitz (P.A.), Monkewitz (M.A.), *2686*
- duct flow, elliptical bodies, Richardson (S.M.), *2791*
- conduction (heat), mathematical models, transient effects, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *2810*
- ignition, thermal excitation, Berman (V.S.), Riazantsev (Iu.S.), (et al.), *2858*
- combustion, flame holders, one dimensional flow, Bobrova (N.R.), Burkina (R.S.), (et al.), *2861*
- differential equations (partial), nonlinear mechanics, orbit mechanics, perturbation methods, Kevorkian (J.), Cole (J.D.), *3111, book*
- immiscible fluids, jets, Eliseev (V.I.), Sukhikh (L.I.), (et al.), *3687*
- boundary layer, catalytic surface, chemical reactions, Benilov (M.S.), Tirskii (G.A.), *3864*

- control, feedback, space vehicle structures, stability theory, Balas (M.J.), *3922*
- differential equations (ordinary), limit cycles, nonlinear mechanics, oscillators, van der pol equation, Grasman (J.), *4152*
- nonlinear mechanics, stochastic systems, surveys, Vladimirov (V.S.), Mitropolsky (Yu.A.), (et al.), *4158*
- piezoelectric devices, torsional waves, Paul (H.S.), Raju (D.P.), *4443*
- asymptotic behavior, averaging, boundary value problems, nonlinear mechanics, Akulenko (L.D.), *4948*
- averaging, nonlinear mechanics, oscillations, Khodzhaev (K.Sh.), Shatalov (S.D.), *4990*
- approximations, complex variables, differential equations (ordinary), eigenvalue problems, sturm-liouville problems, Boyd (J.P.), *7158*
- curve fitting, equilibrium, scour, sediment transport, Blaisdell (F.W.), Anderson (C.L.), (et al.), *7659*
- free boundary, ship motion, slender bodies, Troesch (A.W.), *9006*
- diffraction, ocean waves, ships, slender bodies, wave interactions, Beck (R.F.), Troesch (A.W.), *9012*
- boundary layer (three dimensional), parabolic equations, ships, wakes, Mori (K.), *9016*
- differential equations (ordinary), eigenvalue problems, iterative methods, Gogokhiya (V.Sh.), *9095*
- biharmonic equation, finite element methods, plates, Destuynder (P.), *9137*
- reynolds number (small), spherical bodies, unsteady flow, Sano (T.), *9530*
- annular flow, cylindrical bodies, rotating cylinders, singularities, Conlisk (A.T.), Walker (J.D.A.), *9535*
- cylindrical bodies, film flow, liquid vapor interface, plates, Salem (A.), Trad (A.), *9542*
- boundary layer, laminar flow, Osiptsov (A.N.), *9560*
- acoustic waves, burgers equation, shock waves, Parker (D.F.), *9644*
- bessel functions, transforms, Wong (R.), *10041*
- conical bodies, moment coefficient, reservoirs, stresses (normal), Layrangues (P.), *10395*
- boundary layer, finite difference methods, grids, supersonic flow, Rai (M.M.), Anderson (D.A.), *10414*
- boundary layer, buoyant flow, convection (free), stokes flow, wells, De Socio (L.M.), Gaffuri (G.), (et al.), *10568*
- irrotational flow, ship resistance, slender bodies, wavemaking resistance, Adachi (H.), *10879*
- approximations, boundary value problems, Cimatti (G.), *10933*
- algorithms, approximation methods, optimal control, Moiseev (N.N.), Chernousko (F.L.), *11066*
- buckling, elasticity (nonlinear), plates, Rudev (A.N.), *11121*
- cylindrical bodies, drag, porous media, viscous flow, Verma (P.D.), Vyas (H.K.), *11390*

Atack (M.J.), air traffic control, airplanes, mathematical models, simulation, *2203*

Atanackovic (T.), elastodynamics, simple materials, variational methods, viscoelasticity (dynamic), *2217*

Atanackovic (T.M.), see Djukic (D.S.), *2038*

- conservation laws, continuum mechanics, variational methods, virtual work methods, *6039*
- elastic bodies, elastodynamics, kinematics, optimization, *6166*

Atanasov (D.), see Panchev (S.), *982*

Atanov (G.A.), channel flow, pumps, unsteady flow, variational methods, Voronin (S.T.), *3685*

Athanasiou-Grivas (D.), contact points, granular media, particle dynamics, soils, structure, Harr (M.E.), *9359*

Athanassiadis (A.), boundary integral methods, elliptical cracks, fracture mechanics, stress intensity factor, surface flaws, Boissenot (J.M.), (et al.), *10287*

Atimtay (A.), concentration, convection (forced), mass transfer, plates, Gill (W.N.), *2849*

Atkatsh (R.S.), bending, finite difference methods, numerical methods, plates, Baron (M.L.), (et al.), *5226*

Atkins (A.G.), see Tomkins (B.), *3431*

Atkins (R.), see Anwar (H.O.), *2695*

Atkinson (C.), see Popelar (C.H.), *3468*

- boundary integral methods, crack opening displacement, edge cracks, elastic behavior, stress intensity factor, variable properties (material), Xanthis (L.S.), (et al.), *6441*
- cracks, elasticity (nonlocal), singularities, *7523*
- asymptotic behavior, crack opening displacement, elasticity (nonlocal), *8394*
- fracture mechanics, nonhomogeneous media, thermoelasticity (transient), thermoviscoelasticity, Smelser (R.E.), *8881*

Atkinson (J.D.), see Phan-Thien (N.), *9084*

Atluri (R.), design, model reduction, process control, sampled data systems, Kao (Y.K.), *5044*

Atluri (S.N.), see Rhee (H.C.), *88*

- see Vijayakumar (K.), *1351*
- finite element methods (hybrid), fracture mechanics, nonlinear materials, three dimensional formulation, Nakagaki (M.), (et al.), *8420*
- cracks, flaws, fracture mechanics, nozzles, pressure vessels, reactor structures, Kathiresan (K.), *9463*

atmosphere, laser doppler velocimeters, lasers, lidar, meteorology, Gaumet (J.-L.), Renaut (D.), (et al.), *1917*

- density, measurements, meteorology, temperature, Dyubua (P.P.), Melnikov (A.N.), (et al.), *1920*
- radiant interchange, radiation properties, scattering, spectral analysis, transmission, Arst (Kh.Yu.), Kostyanoy (G.N.), *2823*
- mass transfer, meteorology (physical), moisture, ocean, Timofeev (N.A.), *3025*
- mathematical models, radiant interchange, scattered light, Ganapol (B.D.), *3828*
- acoustics, sound propagation, stratification, Mitsumura (Y.), Makino (M.), *3929*
- forecasting, meteorology, temperature, Bochkova (T.N.), *4089*
- boundary layer (atmospheric), boundary layer (turbulent), generation, Arie (M.), Kiya (M.), (et al.), *4600*
- airplanes, noise, nonlinear waves, sound propagation, Morfey (C.L.), Howell (G.P.), *5766*
- lasers, lidar, meteorology (physical), moisture, raman scattering, scattering, Zakharov (V.M.), Kalachinskii (S.F.), (et al.), *5959*
- aerosols, drops, particle size, refraction, Mathai (C.V.), Harrison (A.W.), *5960*
- invariant imbedding, optical thickness, quasilinearization, radiant interchange, solar radiation, Ueno (S.), *6075*
- absorption, spectral analysis, spectroscopy, Emerry (R.J.), Moffat (P.H.), (et al.), *6755*
- atmospheric circulation, convection, currents, gravity, Hagiwara (Y.), *7064*
- numerical methods, planetary atmospheres, radiation, Karp (A.H.), *7065*
- functional analyis, geometrical properties, relativity, Defrise (P.), *7136*
- solar energy, solar radiation, Bird (R.E.), Hulstrom (R.L.), *8035*
- shear flow, spectra, stratified flow, turbulence (geophysical), Weinstock (J.), *9607*
- mass transfer, turbulent flow, Saab (A.E.), *10460*
- blunt bodies, froude number, stagnation point, stratified flow, Kitabayashi (K.), *11386*
- clouds, dispersion, models, Eidsvik (K.J.), *11522*

atmospheric circulation, boundary layer (atmospheric), Pushistov (P.Yu.), Shlychkov (V.A.), *984*

- climatology, ocean air interaction, Gates (W.L.), *987*
- eddies, meteorology (physical), Kabanov (A.S.), Shmerlin (B.Ya.), *1901*
- clouds, forecasting, weather forecasting, Falkovich (A.I.), *1903*
- geostrophic flow, meteorology (physical), Kivganov (A.F.), Mokhanti (U.Ch.), *1904*
- ice, ocean air interaction, oceanography, Belevich (M.Yu.), *1911*
- forecasting, weather forecasting, Anzhina (G.I.), Mashkovich (S.A.), *1914*
- boundary layer (atmospheric), forecasting, Berkovich (L.V.), Shnaidman (V.A.), *1915*
- boundary layer (atmospheric), meteorology (physical), Penenko (V.V.), Aloyan (A.E.), (et al.), *1916*
- acoustic measurements, flow measurement, wind, Makarova (T.I.), *1919*
- baroclinic instability, finite difference methods, hydrodynamic stability, Dymnikov (V.P.), *3018*
- baroclinic instability, hydrodynamic stability, Shakina (N.P.), *3019*
- hydrodynamic stability, oscillations, stratification, Kadyshnikov (V.M.), *3029*
- Holopainen (E.), Nurmi (P.), *3030*
- numerical methods, Ludwig (F.L.), Byrd (G.), *3031*
- rossby waves, Thomas (J.H.), Lux (R.A.), *4053*
- boundary layer (atmospheric), ekman layer, Dobryshman (E.M.), *4054*
- finite difference methods, weather forecasting, Penenko (V.V.), Obraztsov (N.N.), *4055*
- climatology, heat transfer (atmospheric), Golitsyn (G.S.), Mokhov (I.I.), *4056*
- climatology, weather forecasting, Kontarev (G.P.), *4059*
- meteorology (physical), vortices, Bekoryukov (V.I.), Makarov-Mironov (A.M.), *4060*
- cyclones, weather forecasting, Shakins (N.P.), *4062*
- clouds, convection (forced), convection (free), heat transfer (atmospheric), hydrodynamic stability, Falkovich (A.I.), *4063*
- meteorology (physical), Radinovic (D.), *4066*
- climatology, meteorology (physical), ocean air interaction, weather forecasting, Marchuk (G.I.), *4069*
- heat transfer (atmospheric), meteorology (physical), weather forecasting, Dymnikov (V.P.), Ishimova (A.V.), *4070*
- meteorology (physical), Kurbatkin (G.P.), Karimov (A.U.), (et al.), *4072*
- forecasting, meteorology (physical), Fuks-Rabinovich (M.S.), *4074*
- heat transfer (atmospheric), meteorology (physical), Dobryshman (E.M.), *4082*
- coasts, jet streams, Philander (S.G.H.), *4859*
- gravity waves, waveguides, Dvoryakovskiy (V.P.), Petrukhin (N.S.), (et al.), *4865*
- cloud physics, clouds, storms, Klemp (J.B.), Wilhelmson (R.B.), *4885*
- hydrodynamic stability, internal waves, Kurganskiy (M.V.), *5927*
- rossby waves, Shapiro (L.J.), *5929*
- climatology, heat transfer (atmospheric), Roads (J.O.), *5930*
- vortex shedding, vortices, Trischka (J.W.), *5931*
- vortex flow, vorticity, Schubert (W.H.), Hack (J.J.), (et al.), *5932*
- jet streams, kelvin-helmholtz instability, turbulence (geophysical), Klostermeyer (J.), Ruster (R.), *5933*
- eddies, gravity waves (internal), kelvin-helmholtz instability, Klostermeyer (J.), *5934*

- gravity waves (internal), Eltayeb (I.A.), Kandaswamy (P.), *5935*
- internal waves, Guiraud (J.P.), Zeytounian (R.K.), *5938*
- boundary layer (atmospheric), currents, Shnaidman (V.A.), *5939*
- internal waves, planetary waves, Mashkovich (S.A.), Anzhina (G.I.), *5942*
- ocean air interaction, Stefanick (M.), *5943*
- atmosphere, convection, currents, gravity, Hagiwara (Y.), *7064*
- boundary conditions, meteorology (physical), Gordon (P.), *8986*
- meteorology (physical), rotating fluids, stratification, Held (I.M.), Hou (A.Y.), *8988*
- heat transfer (atmospheric), simulation, waves, Lordi (N.J.), Kasahara (A.), (et al.), *9929*
- heat transfer (atmospheric), simulation, waves, Hsu (C.-P.F.), *9930*
- coriolis forces, Ramenskiy (A.M.), *9933*
- meteorology (physical), vortices, Mcwilliams (J.C.), *9934*
- coriolis forces, rotating fluids, Zeng (Q.-C.), Ye (D.-Z.), *9936*
- stratification, Akhmedzhanov (Kh.), *9937*
- meteorology (physical), turbulence (geophysical), Dutton (J.A.), *12075*
- cyclones, meteorology (physical), Pinus (N.Z.), Kapitanova (T.P.), *12076*

atomization, capillary waves, cavitation, ultrasonics, Mir (J.M.), *4015*
- centrifugation, liquids, Klyachko (L.A.), *4017*
- centrifugation, films, Nafikov (I.M.), Zinnatullin (N.Kh.), *4826*
- drops, scale effects, El-Shanawany (M.S.), Lefebvre (A.H.), *5822*
- drops, measurements, sprays, Picot (J.J.C.), Tomey (T.D.), (et al.), *6985*
- nozzles, swirl, Som (S.K.), Mukherjee (S.G.), *6986*
- combustion, drops, Lefebvre (A.H.), *8904*

atomized liquids, jets, turbulent flow, two phase flow, unsteady flow, Lebedev (O.N.), Solonenko (O.P.), *7734*

Atopov (V.I.), see Kosova (N.V.), *2223*

Atrek (E.), computing techniques, elastoplasticity, iterative methods, newton method, *9117*

Attenborough (K.), acoustics, attenuation, noise abatement, sound propagation, *1811*
- half space, layered media, porous media, sound propagation, Hayek (S.I.), (et al.), *6919*

attenuation, breakwater, floating bodies, mooring, wave loads, Yamamoto (T.), *526*
- adaptive systems, dipoles, noise abatement, Eghtesadi (K.), Leventhall (H.G.), *912*
- absorption, barriers, noise abatement, Czarnecki (S.), *916*
- acoustics, noise abatement, sound propagation, Attenborough (K.), *1811*
- acoustics, automobiles, ducts, exhaust gases, silencers, Prasad (M.G.), Crocker (M.J.), *1813*
- ducts, lagging, noise abatement, Smith (T.), Rae (J.M.), (et al.), *1820*
- bends, ducts (curved), green function, sound propagation, El-Raheb (M.), Wagner (P.), *2936*
- diffraction, transducers (ultrasonic), ultrasonics, Chivers (R.C.), Rosselaar (L.), (et al.), *2952*
- ear muffs, noise, noise abatement, nonlinear waves, shock waves, Osmundsen (E.), Gjaevenes (K.), *2958*
- reflection, sonar, underwater acoustics, Stewart (J.L.), Westerfield (E.C.), (et al.), *3954*
- interface waves, reflection, solid-fluid interaction, stonely waves, Hawker (K.E.), *4788*
- thin walled structures, ultrasonics, Lee (S.S.), Williams (J.H.) Jr., *5247*
- porous media, sand, saturation, sound propagation, viscosity, Hovem (J.M.), Ingram (G.D.), *5733*
- ocean bed, sound propagation, underwater acoustics, Tindle (C.T.), *5735*
- ocean bed, shallow water, underwater acoustics, Tindle (C.T.), Weston (D.E.), (et al.), *5747*
- ocean bed, porous media, sedimentation, underwater acoustics, Hovem (J.M.), *5753*
- ocean bed, sedimentation, underwater acoustics, Mitchell (S.K.), Focke (K.C.), *5756*
- earth, viscoelastic waves, Akopyan (S.Ts.), Zharkov (V.N.), (et al.), *5877*
- arteries, blood flow, compressional waves, energy dissipation, Bertram (C.D.), *6321*
- bones, human body, shock waves, Wosk (J.), Voloshin (A.), *6025*
- damping, piezoelectric devices, vibration, Bondarenko (A.A.), Kutsenko (G.V.), (et al.), *6324*
- noise, noise measurements, springs, Meltzer (G.), Melzig-Thiel (R.), *6895*
- barriers, diffraction, heat exchangers (crossflow), noise (aerodynamic), vortex shedding, Howe (M.S.), *6931*
- near ground effects, sound propagation, Soom (A.), Gu (R.-R.), *6934*
- free boundary, nonhomogeneous media, surface waves, Lapin (A.D.), *7422*
- sand, shear waves, Brunson (B.A.), Johnson (R.K.), *7430*
- reverberation, sound generation, Thunder (T.D.), *7944*
- acoustics, ducts, resonance, Cote-Dunajewski (T.), *9646*
- metals, modeling, shock waves (normal), Duan (Z.-P.), *10231*
- dispersion, elastic waves, measurements (dynamic), Bondarenko (A.N.), Kondratev (A.I.), *10240*
- pipelines, pressure gradient, water hammer, Thielen (H.), Burmann (W.), *10487*
- ducts (curved), sound propagation, Rostafinski (W.), *10785*
- friction (sliding), pore pressure, seismic waves, Winkler (K.W.), Nur (A.), *10844*
- absorption, ducts, sound propagation, Krizan (P.), Kuscer (I.), *11917*
- ducts, exhaust gases, noise abatement, Panicker (V.B.), Munjal (M.L.), *11939*
- ducts, exhaust gases, flow reversal, noise abatement, Panicker (V.B.), Munjal (M.L.), *11940*
- absorption, diffusers, sound propagation, Holger (D.K.), *11961*
- acoustics, ducts, energy methods, noise abatement, Gaudefroy (A.), *11996*

Atthey (D.R.), heat transfer, liquid metals, magneto fluid dynamics, models, welding, *8818*

Attia (F.A.-S.), ergodic process, probability, stochastic processes, *4172*

Attia (M.H.), connected bodies, contact stresses, joints, machine elements, thermoelasticity, Kops (L.), *3989*
- mechanical joints, thermoelasticity (nonlinear), tools, Kops (L.), *5800*

attitude control, orbit correction, space vehicles, x ray techniques, Rose (R.E.), Berkery (E.A.), *1794*
- artificial satellites, optimization, Acaccia (G.M.), Cepolina Molfino (R.), *2921*
- control, gravimetrics, Debra (D.B.), *2925*
- flexible bodies, riccati equation, space vehicle structures, Fenton (J.), Gill (K.F.), *3921*
- communication satellites, geosynchronous orbits, gyrodynamics, Hsing (J.C.), Ramos (A.), (et al.), *5703*
- gyrodynamics, interferometry, Ellis (J.F.), Creswell (G.A.), *5704*
- flexible appendages, space vehicle structures, spinning bodies, stability theory, Lips (K.W.), Modi (V.J.), *6884*
- aerodynamic performance, fans, propulsion, Betzina (M.D.), Kita (R.), *7790*
- data acquisition, guidance theory, spinning bodies, tumbling bodies, Hubert (C.), *7920*
- guidance systems, rockets, vibration, Cochran (J.E.) Jr., Christensen (D.E.), *7921*
- hamiltonian equations, resonance, space vehicles, spinning bodies, Cochran (J.E.), Holloway (H.E.), *7923*
- maneuverability, optimal control, Junkins (J.L.), Turner (J.D.), *7924*
- algorithms, gyrodynamics, Mckern (R.), Musoff (H.), *8946*
- artificial satellites, flexible bodies, modal control, space vehicle structures, Sellappan (R.), Bainum (P.M.), *8947*
- control, guidance systems, space vehicle structures, vibration, Anderson (R.H.), Haung (C.-C.), (et al.), *10774*

Atwal (S.J.), see Ali (R.), *6295*

Au (H.), see Ko (N.W.M.), *5455*

Au (W.-C.), dynamic properties, shear strength, soils, swell, Chae (Y.S.), *5252*

Aubourg (M.), measurements (dynamic), noise (random), structural response, transfer functions, Guesdon (M.), *6321*

Auconi (F.), dynamic plasticity, plasticity, shakedown structures, *8087*

Audunson (T.), see Gebhart (B.), *5953*

augmentation, fins, heat exchangers, Webb (R.L.), *785*
- vortices, wind turbines, Hubbartt (J.E.), *1630*
- condensation, convection (forced), fins, heat exchangers, Webb (R.L.), *2827*
- energy transport, entropy, heat exchangers, heat transfer, pressure drop, viscous effects, Bejan (A.), Pfister (P.A.) Jr., *2828*
- convection, fins, heat transfer, laminar flow, tubes, Soliman (H.M.), Chau (T.S.), (et al.), *3786*
- electro fluid dynamics, heat transfer, liquids, Jones (T.B.), *5542*
- annular flow, convection, cylindrical bodies, heat exchangers, heat transfer, Dyban (E.P.), Lesnikovskii (A.A.), (et al.), *8682*
- extended surfaces, fins, tube bundles, turbulent flow, Carnavos (T.C.), *8758*
- computer programming, condensers, fouling, heat transfer, marine engineering, Marto (P.J.) eds., Nunn (R.H.), *8761, book*
- channel flow, convection (free), extended surfaces, heat transfer, plates (parallel), rayleigh number, Sparrow (E.M.), Prakash (C.), *9699*
- energy conservation, radiant interchange, regenerators, waste heat, Chawla (O.P.), Khandwawala (A.I.), *9733*
- heat exchangers, heat transfer, tube bundles, viscous effects, Dzyubenko (B.V.), levlev (V.M.), *11768*
- cylindrical pin fins, extended surfaces, fins, heat transfer, optimization, Sonn (A.), Bar-Cohen (A.), *11771*

Augusti (G.), cable stayed bridges, dynamic response, experimental mechanics, structural response, Chiarugi (A.), (et al.), *6524*

Augusztinovicz (F.), noise (traffic), noise abatement, noise measurements, Buna (B.), *3953*

Aulenbacher (U.), far field radiation, transducers (ultrasonic), transient, ultrasonics, Langenberg (K.J.), *7585*

Auracher (H.), see Stephen (K.), *4700*

Aurlault (J.L.), charged particles, electro-osmosis, fluid mechanics, porous media, Strzelecki (T.), *949*

Aurich (D.), deformation (plastic), fracture, material testing, metallurgy, work hardening, Wobst (K.), *10280*
- see Zieba (J.), *11317*

Auslander (D.M.), see Abedi-Hayati (S.), *220*
- control, heating, solar energy, solar heating, Tomizuka (M.), (et al.), *2187*
- see Tomizuka (M.), *7251*

automatic control, duality, geometric control, linear theory, time invariant systems, Fuhrmann (P.A.), *99*
- digital control, sampled data systems, Jury (E.I.), *135*
- stability theory, state space techniques, Shubladze (A.M.), *168*

- control, linear systems, nonlinear mechanics, Chernousko (F.L.), Akulenko (L.D.), (et al.), *2115, book*
- queue theory, Brodetskaya (T.S.), *3173*
- plasma (toroidal), stability, thermonuclear energy, tokamak, Gubarev (V.F.), Krivonos (Yu.G.), (et al.), *3218*
- algorithms, design, frequency domain techniques, matrix methods, multivariable systems, Frisch (H.P.), *4224*
- control, guideways, mass transportation, vehicles, Shladover (S.E.), *5062*
- cryogenics, simulation, wind tunnels, Thibodeaux (J.J.), Balakrishna (S.), *5063*
- electrical instruments, hydraulics, pumps, servomechanisms, valves, Green (W.L.), Sanger (D.J.), (et al.), *6734*
- balancing, pneumatic components, three dimensional flow, velocimeters, Wachter (J.), Heneka (A.), (et al.), *6739*
- electrical components, fiber optics, helicopters, hydraulics, rotors, Kretz (M.), Larche (M.), *8649*
- flexible walls, transonic flow, two dimensional flow, wind tunnels, Goodyer (M.J.), Wolf (S.W.D.), *8670*
- design, magnetic levitation, magnetic stabilization, transportation devices, vehicles, Breinl (W.), *10082*
- design, state space techniques, Hippe (P.), Wurmthaler (C.), *10089*
- drying, mathematical models, Rock (H.), *10639*
- feedback, pole placement, stability, Willems (J.C.), Commault (C.), *11037*
- discrete systems, feedback, multipass processes, stability theory, Boland (F.M.), Owens (D.H.), *11045*

automatic control (optimal), dynamic analysis, optimal control, Burghes (D.N.), Graham (A.), *6124, book*

- design, digital control, Leonhard (W.), *9195*
- algorithms, design, linear systems, pole placement, Lee (G.K.F.), *10084*

automation, algorithms, design (optimum), mathematical programming, Zhabin (V.I.), Korneichuk (V.I.), (et al.), *159*

- control, discrete systems, Koren (Y.), Masory (O.), *204*
- deformation, moire methods, strain analysis, Sokolov (B.B.), *2473*
- computer aided manufacturing, machinery, manipulators, robotics, Whitney (D.E.), *10093*

automobiles, brakes, experimental results, vehicles, El-Gindy (M.), Ilosvai (L.), *14*

- dynamic behavior, maneuverability, steering, vehicles, Panik (F.), Drosdol (J.), (et al.), *1459*
- brakes, friction (solid solid), high temperature, Ricco (M.), *1469*
- acoustics, attenuation, ducts, exhaust gases, silencers, Prasad (M.G.), Crocker (M.J.), *1813*
- dissipation, dynamic response, highways, roughness, Velinsky (S.A.), White (R.A.), *3384*
- casting, computer aided design, tools, Welbourn (D.B.), Cox (G.M.A.), *3426*
- brakes, dynamic stability, El-Gindy (M.), Ilosvai (L.), *4148*
- design, exhaust gases, internal combustion engines, optimization, Kanarachos (A.), Seifert (H.), *4564*
- digital simulation, human engineering, man machine systems, maneuverability, Garrott (W.R.), Wilson (D.L.), (et al.), *5020*
- aerodynamic interference, blockage, flexible walls, models, wind tunnels, Stafford (L.G.), *5513*
- dynamic analysis, highways, random excitation, Lindgren (G.), *6277*
- dynamic response, stability theory, trailers, Mikulcik (E.C.), *6312*
- aerodynamic performance, controllability, crossflow, drag reduction, lift, Gotz (H.), *6725*
- drag coefficient, friction (rolling), resistance, Roussillon (G.), *6726*
- computer programming, finite element techniques, stiffness matrix, structural analysis, Tang (S.C.), Yeung (K.S.), (et al.), *7208*
- dynamic response, dynamic stability, maneuverability, steering, El-Gindy (M.), Ilosvai (L.), *7616*
- brakes, design, Newcomb (T.P.), *9469*
- brakes, digital simulation, maneuverability, Mitchell (B.), Abrams (R.), (et al.), *10057*
- design (optimum), drag, fuel economy, geometrical properties, Stapleford (W.R.), *10506*

autonomous systems, differential equations (ordinary), perturbation methods, stability theory, Huseyin (K.), *1995*

- algorithms, artificial intelligence, vehicles, Benes (J.), Kolar (P.), *2196*
- large scale systems, linear systems, stability theory, time lag, Lewis (R.M.), Anderson (B.D.O.), *3154*

Avalos (D.R.), see Laura (P.A.A.), *9308*

Avedisian (C.T.), bubble dynamics, liquid liquid systems, nucleation, Glassman (I.), *1862*

- boiling, high pressure, hydrocarbons, nucleation, water, Glassman (I.), *6771*

Avedyan (E.D.), algorithms, identification, kaczmarz algorithm, linear systems, Tsypkin (Ya.Z.), *190*

- see Tsypkin (Y.Z.), *11098*

averaging, differential equations (ordinary), mathematical methods, Bainov (D.), Milusheva (S.), *22*

- inverse method, korteweg de vries equation, mathematical methods, Flaschka (H.), Forest (M.G.), (et al.), *1086*
- mixture theories, multiphase media, nonhomogeneous media, Nikolaevskii (V.N.), *1972*
- integro differential equations, nonlinear theory, viscoelasticity, Turbe (N.), *2015*
- resonance, solar system, spinning bodies, Robinson (C.), Murdock (J.), *2915*
- artificial satellites, hamiltonian equations, oblateness, Claes (H.), *2920*
- reynolds stresses, suspensions, two phase flow, Iwanaga (M.), Ishihara (T.-O.), *2985*
- bifurcation, dynamic analysis, vibration (nonlinear), Holmes (C.), Holmes (P.), *3343*
- dynamic analysis, vibration (nonlinear), Nocilla (S.), *3344*
- channel flow, magnetic fluids, magneto fluid dynamics, reynolds number, Lavrentev (I.V.), *3895*
- artificial satellites, libration theory, resonance, restricted three body problem, Barkin (Iu.V.), Markov (Iu.G.), *3915*
- asymptotic behavior, asymptotic methods, boundary value problems, nonlinear mechanics, Akulenko (L.D.), *4948*
- asymptotic methods, nonlinear mechanics, oscillations, Khodzhaev (K.Sh.), Shatalov (S.D.), *4990*
- composite materials, mixture theories, multiphase media, Topovinina (I.V.) ed., *7130, book*
- bifurcation, differential equations (ordinary), hopf bifurcation, Smith (H.L.), *7155*
- time lag, vibration (nonlinear), Kolesov (Yu.S.), *8281*
- artificial satellites, equations of motion, oblateness, transformation, Hoots (F.R.), *8842*
- dynamic analysis, random excitation, vibration (nonlinear), Spanos (P.-T.D.), *10195*
- eigenvalues, shells (conical), shells (stiffened), vibration (free), Lesnichaya (V.A.), Pisanko (A.N.), *10214*
- bubble dynamics, irrotational flow, two phase flow, Berdichevskii (A.L.), *12025*

Averbukh (A.Z.), composite materials, crack propagation, inclusions, stress intensity factor, *476*

- boundary conditions, composite structures, connected bodies, shells, vibration, Veitsman (R.I.), (et al.), *8222*

Averkiyev (A.G.), see Arefyev (K.M.), *802*

Avksentyuk (B.P.), boiling, critical heat flux, nucleate boiling, roughness, surface effect, *8690*

Avraam (T.P.), see Kounadis (A.N.), *9804*

Avrorin (E.N.), hybrid construction, laser plasma interaction, radiation properties, reactor structures, thermal effects, Zuev (A.I.), (et al.), *5685*

Awaji (H.), brittle fracture, fracture criteria, fracture mechanics, multiaxial fatigue, *1368*

Awazu (K.), see Okada (T.), *9023*

Awbi (H.B.), blunt bodies, cylindrical bodies, strouhal number, vortex shedding, *8535*

- aerodynamic interference, drag, spherical bodies, walls, wind tunnels, Tan (S.H.), *8672*

axial compressors, cascades, secondary flow, Thiruvengadam (J.), *705*

- measurements (dynamic), rotating stall, rotors, Sharma (P.B.), Railly (J.W.), *1635*
- blades, cascades, transonic flow, viscous flow, Sator (F.G.), *2756*
- blades, boundary layer, geometrical properties, subsonic flow, viscid inviscid flow, Calvert (W.J.), Herbert (M.V.), *3745*
- axisymmetric flow, mathematical models, rotors, stalling, Al-Daini (A.J.), Railly (J.W.), *3747*
- rotors, stalling, three dimensional flow, waves, Al-Daini (A.J.), Railly (J.W.), *5500*
- transfer functions, transient effects, Fabri (J.), Paulon (J.), *6737*
- rotors, shock waves, transonic flow, visualization, Strazisar (A.J.), Powell (J.A.), *6742*
- blades, pressure change, stalling, Koch (C.C.), *7806*
- aerodynamic loads, inviscid fluid, stress analysis, unsteady flow, wind tunnels, Lambertz (J.), Wallmann (T.), (et al.), *7808*
- aerodynamics, blades, pressure distribution, rotors, three dimensional flow, Dring (R.P.), Joslyn (H.D.), (et al.), *8656*
- blades, pressure distribution, strain gages, surge, velocity measurement, Shatalov (I.K.), *8657*
- aerodynamic loads, axial turbines, incompressible flow, inviscid fluid, two dimensional flow, unsteady flow, Ispas (I.), Lucking (P.), *9671*
- annular flow, blades, boundary layer, mixing, wakes, Davino (R.M.), Lakshminarayana (B.), *10522*
- mixing, secondary flow, three dimensional flow, Adkins (G.G.) Jr., Smith (L.H.) Jr., *10523*
- aerodynamic interference, axial turbines, cascades, wakes, Mitchell (N.A.), *10524*
- inlet flow, rotating stall, velocity profiles, Grahl (K.), Neuhoff (H.G.), *10529*
- laser doppler velocimeters, transonic flow, turbomachinery, velocity profiles, Powell (J.A.), Strazisar (A.J.), (et al.), *10537*
- blades, cascades, flutter, testing equipment, Jutras (R.R.), Stallone (M.J.), (et al.), *10764*
- blades, hot wire, three dimensional flow, wakes, Reynolds (B.), Lakshminarayana (B.), *11738*
- aerodynamic coefficients, cascades, three dimensional flow, velocity profiles, Starke (J.), *11739*
- aerodynamic performance, cascades, geometrical properties, three dimensional flow, Stark (U.), Hoheisel (H.), *11741*

axial fans, noise, sound generation, Fukano (T.), Kodama (Y.), (et al.), *4765*
- aerodynamic interference, noise (aerodynamic), turbofan engines, wakes, Shaw (L.M.), Glaser (F.W.), *7894*

axial flow, heat transfer, tube bundles, Seale (W.J.), *736*
- heat transfer, laminar flow, velocity profiles, vortex flow, Simmers (D.A.), Coney (J.E.R.), *1566*
- drops, evolution equations, Hinch (E.J.), *1863*
- acceleration waves, capillary waves, jets, Ingebo (R.D.), *3694*
- convection, cylindrical bodies, heat transfer, Oosthuizen (P.H.), Rangarajan (N.), *3779*
- annular flow, cylindrical bodies, heat transfer, Rath (R.S.), Bastia (S.N.), *3787*
- closed conduit flow, conduction (heat), laminar flow, peclet number, Vick (B.), Ozisik (M.N.), *3812*
- density, fluid-structure interaction, tube bundles, vibration (flow induced), Paidoussis (M.P.), Besancon (P.), *9624*
- boundary layer (turbulent), spinning bodies, Nakamura (I.), Yamashita (S.), (et al.), *9564*
- conduction (heat), graetz problem, mathematical models, Bayazitoglu (Y.), Ozisik (M.N.), *9725*
- hydrodynamics, two phase flow, Beattie (D.R.H.), Lawther (K.R.), *9686*
- gas turbines, hydrogen, Bykov (N.N.), Chekalov (M.A.), *10525*
- cascades, choked flow, subsonic flow, three dimensional flow, turbomachinery, Horlock (J.H.), *10526*
- cylindrical bodies, flexible bodies, oscillations, resonance, slender bodies, Paidoussis (M.P.), Issid (N.T.), (et al.), *10765*
- chemically reactive flow, dispersed flow, Gupalo (Yu.P.), Novikov (V.A.), (et al.), *11500*
- compressible flow, fluidstructure interaction, shells (cylindrical), Paidoussis (M.P.), Ostoja-Starzewski (M.), *11636*
- design, leaks, seals, steam turbines, stresses, Abramov (Yu.I.), Smirnov (S.A.), *11746*

axial loading, creep, polymers, torsion, Vilks (U.K.), Tabuns (V.A.), (et al.), *272*
- bearing capacity, buckling (nonlinear), shells (cylindrical), shells (orthotropic), Steinhardt (O.), Pfeiffer (M.), *318*
- crack growth, crazing, fractography, Aleshin (V.I.), Kuvshinskii (E.V.), *457*
- bearing capacity, reinforced concrete, ultimate strength, Salat (G.), *3535*
- dynamic response, frames, Ovunc (B.A.), *3547*
- damage, imperfections, offshore structures, tubes, Taby (J.), Moan (T.), (et al.), *3557*
- elastoplasticity, shells (cylindrical), shells (plastic), torque, Ermakov (S.V.), *4375*
- arches, bending, buckling, energy methods, Sladkov (S.I.), *5149*
- bending, friction, ice, mechanical properties, tests, Schwarz (J.), Frederking (R.), (et al.), *5324*
- annuli, large displacement, membranes, Allman (D.J.), Mansfield (E.H.), *6217*
- cylindrical bodies, forging, friction (solid solid), Hartley (P.), Sturgess (C.E.N.), (et al.), *6254*
- failure, joints, shells (cylindrical), Bushnell (D.), Holmes (A.M.C.), (et al.), *6259*
- collapse, shells (cylindrical), shells (stiffened), Walker (A.C.), Sridharan (S.), *6264*
- beams, design (optimum), reinforced concrete, Melchers (R.E.), *7596*
- design (ultimate strength), flexure, hydraulic structures, reinforced concrete, Liu (T.C.), Gleason (S.), *7609*
- pressure, shells (cylindrical), shells (stiffened), Harding (J.E.), *9294*
- beams, bending, columns, strain gages, strain measurement, Tuttle (M.E.), *9425*
- anisotropic structures, pressure, reinforced bodies, tubes, Highton (J.), Soden (P.D.W.), *10325*
- creep, metals, Simonian (A.M.), *10335*
- buckling, holes, shells (cylindrical), Toda (S.), *11123*
- caissons, foundations, piers, strength, Gruodis (R.I.), *11329*

axial pumps, thermal measurements, three dimensional flow, Rvachev (V.L.), Slesarenko (A.P.), (et al.), *3811*
- cavitation, noise, reynolds number (high), vibration (flow induced), Vladaianu (D.), Marinescu (V.), *5501*

axial turbines, aerodynamics, cooling, heat transfer, one dimensional flow, Sirotkin (Ya.A.), *701*
- aerodynamic performance, blades, separated flow, Suachev (I.P.), Neuimin (V.M.), (et al.), *1632*
- cascades, crossflow, three dimensional flow, Langston (L.S.), *2751*
- blades, cascades, transonic flow, visualization, Holliger (K.), *3740*
- aerodynamic performance, cooling, design, gas turbines, Yamamoto (A.), Takahara (K.), (et al.), *3741*
- blades, boundary layer, cascades, Fielding (L.), *4675*
- convection (forced), cooling, gas turbines, surface jets, Repukhov (V.M.), Shvets (I.T.), *4676*
- blades, cascades, heat transfer, turbulence (freestream), Bayley (F.J.), Priddy (W.J.), *5504*
- cascades, holography, interferometry, nozzles, Bryanston-Cross (P.J.), Lang (T.), (et al.), *5505*
- cascades, mathematical models, rotors, separated flow, Ablamskii (V.A.), *6733*
- aerodynamic performance, aerodynamics, geometrical properties, optimization, Macchi (E.), Perdichizzi (A.), *6736*
- blades, design, velocity profiles, Hirsch (C.), Denton (J.D.), *7802*
- blades, leaks, rotors, Booth (T.C.), Dodge (P.R.), (et al.), *7890*
- blades, leaks, numerical analysis, rotors, Wadia (A.R.), Booth (T.C.), *7891*
- blades, cascades, combustion products, erosion, particles, synthetic fuels, Wenglarz (R.A.), Menguturk (M.), *8807*
- blades, heat transfer, rotors, thermal measurements, Pochuev (V.P.), Shcherbakov (V.F.), *8808*
- aerodynamic loads, axial compressors, incompressible flow, inviscid fluid, two dimensional flow, unsteady flow, Ispas (I.), Lucking (P.), *9671*
- blades, geometrical properties, optimization, Sagadeev (R.G.), Strunkin (V.A.), *10355*
- aerodynamic interference, axial compressors, cascades, wakes, Mitchell (N.A.), *10524*
- annular flow, boundary layer, velocity measurement, visualization, Hunter (I.H.), *10527*
- blades, dynamic response, rotating disks, vibration, Michimura (S.), Nagamatsu (A.), (et al.), *11130*
- blades, cascades, geometrical properties, swirl flow, Aronov (B.M.), Kerzhenkov (A.G.), *11747*
- cascades, cooling, gas turbines, heat transfer, Gorelov (G.M.), Fishbein (V.D.), (et al.), *11748*
- geometrical properties, internal flow, wind turbines, Igra (O.), *11754*
- blades, heat transfer, pressure measurement, walls, Dunn (M.G.), Hause (A.), *11758*

axial waves, cylindrical bodies, fluid-structure interaction, prestressed structures, Bagno (A.M.), *6709*
- compressional waves, flexible walls, pulsatile flow, Bauer (H.F.), Metten (S.), (et al.), *11607*

axisymmetric flow, boundary layer (turbulent), hot wire, turbulence, Adomaitis (E.I.), *649*
- heat transfer, mass transfer, Nesterenko (V.B.), Tverkovkin (B.Ye.), (et al.), *806*
- navier stokes equation, swirl, vortex breakdown, vortex flow, Nakamura (Y.), Uchida (S.), *1504*
- drops, spherical bodies, stokes flow, viscous flow, Zinchenko (A.Z.), *1509*
- jets, turbulent mixing, Navoznov (O.I.), Pavelev (A.A.), *1572*
- nozzles, numerical analysis, supersonic flow, Ishii (R.), *2652*
- elliptic equations, jets, Megahed (I.E.A.), Elghobashi (S.E.), *2675*
- inviscid fluid, mixed flow turbines, vortex flow, Zabolotnyi (F.T.), *2758*
- contraction, nozzles, wind tunnels, Tulapurkara (E.G.), *2768*
- computing techniques, finite difference methods, magneto fluid dynamics, turbulent flow, Mikelson (Yu.Ya.), Pavlov (S.I.), (et al.), *2876*
- finite element techniques, navier stokes equation, two dimensional flow, Wille (S.O.), *3145*
- equilibrium, gravity, rotating fluids, Friedman (A.), Turkington (B.), *3627*
- bodies of revolution, cavities, irrotational flow, unsteady flow, Nesteruk (I.G.), *3630*
- contraction, ducts, two dimensional flow, Jordinson (R.), Rodger (J.G.), *3674*
- plumes, similarity methods, Appalaswamy (A.V.), Jaluria (Y.), *3685*
- galerkin method, jets, swell, Omodei (B.J.), *3692*
- axial compressors, mathematical models, rotors, stalling, Al-Daini (A.J.), Railly (J.W.), *3747*
- diagnostics, jets, optical techniques, Santoro (R.J.), Semerjian (H.G.), (et al.), *3762*
- heat transfer, reattachment, separated flow, thermal measurements, turbulent flow, Smyth (R.), *3780*
- jets, transition, Cantwell (B.J.), *4631*
- jets, swirl flow, Epikhin (V.E.), *4632*
- compressible flow, jets, mathematical models, supersonic flow, Grabitz (G.), *5414*
- coherent structure, jets, spark discharge, Sokolov (M.), Kleis (S.J.), (et al.), *5451*
- convection (free), pressure vessels, thermal loading, Wung (P.M.), Tauchert (T.R.), *5676*
- magneto fluid dynamics, nonuniform flow, turbulent flow, velocity profiles, Gelfgat (Yu.M.), Gorbunov (L.A.), *5673*
- air, cavitation, separation, water tunnels, Holl (J.W.), Carroll (J.A.), *6604*
- bubble dynamics, shear flow, Miksis (M.J.), *6967*
- connected bodies, drag, spherical bodies, stokes flow, Wakiya (S.), *7689*
- bodies of revolution, fredholm equations, least squares, singularities, source distribution, Jones (D.J.), *7681*
- bodies of revolution, boundary layer (thermal), convection (free), heat transfer, laminar flow, Lin (F.N.), Chen (S.Y.), *7837*
- electrical properties, magneto fluid dynamics, mass transfer, solids with liquids, Polyanin (A.D.), Pryadkin (P.A.), *7897*
- boundary layer, impact jets, impingement, jets, plates, Pamadi (B.N.), Belov (I.A.), *8540*
- compressible flow, flow obstructions, impingement, jets, shock waves, supersonic flow, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- constrictions, ducts (variable area), pulsatile flow, unsteady flow, Latinopoulos (P.), Ganoulis (J.), *8582*
- compressible flow, finite difference methods, internal combustion engines, reciprocating engines, turbulent flow, Ramos (J.I.), Humphrey (J.A.C.), (et al.), *8591*

- turbulence (structure), turbulent flow, Durbin (P.A.), *8612*
- bubble dynamics, drops, Miksis (M.), Vanden-Broeck (J.-M.), (et al.), *8905*
- plates (holed), stokes flow, Hasimoto (H.), *9529*
- numerical analysis, parabolic equations, swirl flow, Nakamura (Y.), Uchida (S.), *9585*
- diffusers, entrance region, separated flow, supersonic flow, Vishnevetskii (S.L.), Pakhomova (Z.S.), *9589*
- jets, self excitation, Hasan (M.A.Z.), Hussain (A.K.M.F.), *9595*
- jets, turbulence, turbulent mixing, Long (M.B.), Chu (B.T.), *9605*
- doppler effect, ultrasonics, velocity measurement, Lefebvre (J.-P.), *9672*
- bodies of revolution, boundary layer, drag reduction, inverse method, Dalton (C.), Zedan (M.F.), *9941*
- differential equations (partial), existence theorems, stratified flow, Yih (C.-S.), *10407*
- channel flow, channels (divided), divided flow, irrotational flow, Konovalov (A.E.), *10437*
- bodies of revolution, cavitation flow, sound generation, turbulence, ultrasonics, Murai (H.), Ihara (A.), *10532*
- finite element techniques, hydraulic machinery, incompressible flow, swirl flow, viscous flow, Bar-Yoseph (P.), Blech (J.J.), (et al.), *10533*
- hydrodynamic stability, inviscid fluid, rotating fluids, Vladimirov (V.A.), Tarasov (V.F.), *11373*
- compressible flow, drag, hypersonic flow, supersonic flow, Khlopkov (Yu.I.), *11402*
- impingement, jets, particle dynamics, turbulent flow, Korobko (V.I.), Malyi (I.N.), (et al.), *11512*
- entrainment, jets, mixing, two dimensional flow, Vatsa (V.N.), Werle (M.J.), (et al.), *11517*
- acoustic waves, fluid-structure interaction, plates, vibration, Woolley (B.L.), *11650*

axisymmetric loading, anisotropic media, boundary value problems, half space, punch problems, Dhawan (G.K.), *247*
- coatings, contact problems, indentation, Matthewson (M.J.), *248*
- elasticity, finite element techniques, shells (axisymmetric), Surana (K.S.), *1135*
- bending, shells (perforated), shells (spherical), Nagorski (R.), *2273*
- concrete, cracks, geomechanics, monotonic loading, Chen (E.Y.-T.), Schnobrich (W.C.), *2450*
- boussinesq equation, finite element techniques, infinite medium, Medina (F.), *4189*
- cylindrical bodies, elasticity (three dimensional), Yoshino (T.), Utsugi (S.), *4333*
- membranes, nonlinear theory, Weinitschke (H.J.), *4371*
- cylindrical bodies, elasticity (linear), Zlatin (A.N.), *8247*
- buckling, imperfections, shells (cylindrical), Croll (J.G.A.), Batista (R.C.), *10177*
- compression, plastic flow, stress strain relationships, upset forging, Gelin (J.C.), Oudin (J.), (et al.), *10326*

Ayad (S.S.), aerodynamic performance, chimneys, tornados, wind turbines, *5502*

Ayer (R.M.), see Lee (J.-J.), *5472*

Ayyash (S.), see Mccomb (W.D.), *889*
- see Mccomb (W.D.), *9884*

Azad (A.K.), beams (continuous), design (minimum weight), girders, *1426*

Azad (F.H.), see Modest (M.F.), *2824*

Azad (R.S.), see Derksen (R.W.), *647*
- pressure gradient, turbulence, turbulence (structure), turbulent flow, Hummel (R.H.), *6883*

Azamatov (A.Sh.), heat transfer, liquid vapor interface, mass transfer, sound propagation, Shagapov (V.Sh.), *11923*

Azarov (A.D.), compression, mechanical properties, strength, *7567*

Azarov (V.L.), control, distributed parameters, linear systems, spectral analysis, Lupichev (L.N.), (et al.), *7236*

Azeez (S.A.), see Soni (A.H.), *540*

Aziz (A.), asymptotic methods, conduction (heat), mathematical models, perturbation methods, variable thermal properties, Jaleel (A.), (et al.), *772*
- convection, fins, heat transfer, transforms, unsteady flow, Na (T.Y.), *1703*
- computing techniques, convergence, heat transfer, pade approximation, perturbation methods, *3112*
- fins, perturbation methods, transient effects, Na (T.Y.), *3817*
- extended surfaces, fins, heat transfer, perturbation methods, variable thermal properties, Na (T.Y.), *3822*
- numerical methods, plates (parallel), squeeze films, viscous flow, Na (T.Y.), *4581*
- falkner-skan equation, perturbation theory, uniqueness, Na (T.Y.), *8556*

Azuma (A.), aerodynamic performance, flight, helicopters, rotors, Saito (S.), (et al.), *6732*

B

Baba (S.), probability theory, reliability analysis, safety, structural design, Nakagawa (K.), (et al.), *6516*

Babaev (A.E.), acoustics, gas solid interface, nonlinear waves, shock waves, *11919*

Babaitsev (I.V.), see Brinza (V.N.), *10714*

Babak (A.V.), fracture toughness, high temperature, inert gases, tension, testing equipment, vacuum, Uskov (E.I.), *6477*

Babak (S.F.), matrix methods, stability theory, state space techniques, structural analysis, Ilyasov (B.G.), (et al.), *4244*

- see Petrov (B.N.), *8160*

Babaliev (A.M.), geopential fields, geophysics, meteorology, Kostyukov (V.V.), (et al.), *4088*

Babchin (A.J.), see Gur (Y.), *6585*

Babcock (C.D.), see Kyriakides (S.), *1249*

- see Chai (H.), *2312*
- see Kyriakides (S.), *8465*

Babcock (C.D.) Jr., see El Raheb (M.), *376*

- see El-Raheb (M.), *2338*

Babenko (V.I.), buckling, postbuckling behavior, shells (cylindrical), *4392*

Babenko (Yu.I.), ignition, solid fuels, thermal excitation, *3858*

Baber (T.T.), hysteresis, random excitation, seismic waves, structures, vibration (random), Wen (Y.-K.), *9106*

Babic (I.U.), see Guz (A.N.), *354*

Babich (D.V.), see Khoroshun (L.P.), *6953*

Babich (V.M.), elastic waves, theory, *5874*

Babin (O.A.), compressible flow, elastic bodies, oscillations, panels, supersonic flow, Vorobev (V.I.), (et al.), *6869*

Babitskii (V.I.), engines, hull propeller interaction, marine engineering, oscillations, Nerubenko (G.P.), *4103*

Babkin (G.I.), approximation theory, nonhomogeneous media, statistical continuum mechanics, Klyatskin (V.I.), (et al.), *6345*

- elastic waves, nonhomogeneous media, statistical continuum mechanics, Klyatskin (V.I.), (et al.), *6346*

Babkin (V.S.), combustion, flame propagation, kinetics, thermodynamics, vessels, Babushok (V.I.), (et al.), *1742*

Babloyan (A.A.), contact problems, rings, rotating disks, Engibarian (A.A.), *327*

Babu (R.), see Gangwar (S.S.), *1775*

Babushok (V.I.), see Babkin (V.S.), *1742*

Babuska (I.), differential equations (ordinary), finite element techniques, numerical analysis, sturm-liouville problem, Rheinboldt (W.C.), *7205*

- convergence, finite element techniques, interpolation, mesh generation, Szabo (B.), *9128*

Bacci (P.), see Sandroni (S.), *2679*

Bach (F.), see Nielsen (M.P.), *1228*

Bachalo (W.D.), see Johnson (D.A.), *684*

- see Spaid (F.W.), *2726*

Bachmann (P.), dynamic analysis, hydraulic machinery, hydrodynamics, rotors, scale models, *2760*

Backhouse (C.), analog simulation, manipulators, robotics, simulation, Jones (J.R.), *7253*

Backlund (J.), composite materials, finite element techniques, fracture criteria, notch sensitivity, *2454*

Backlunk (J.), see Gradin (P.A.), *1478*

Backx (E.), see Rammant (J.P.), *1453*

Baclic (B.S.), conduction (heat), conduction (unsteady), transient effects, Gvozdenac (D.D.), *5572*

Badala (A.), collapse, imperfections, rods, trusses, Marinetti (A.), (et al.), *7353*

Badalliance (R.), alloys, crack growth, fatigue, mixed mode fracture, strain energy, *3469*

Badam (U.), see Ashchepkov (L.T.), *4275*

Badatov (E.V.), granular media, mass transfer, spherical bodies, Matros (Yu.Sh.), (et al.), *1732*

Baddour (R.E.), see Hunt (J.N.), *1590*

Bader (M.G.), see Manders (P.W.), *3277*

Baehr (H.D.), see Ahrendts (J.), *6744*

Baer (R.N.), arrays, eddies, sound propagation, *888*

- eddies, sound propagation, underwater acoustics, *5731*

Baev (V.K.), fluid injection, high enthalpy, supersonic flow, Boshenyatov (B.V.), (et al.), *10463*

Baeyens (J.), see Geldart (D.), *7986*

baffles, drag, stilling basins, Ranga Raju (K.G.), Kitaal (M.K.), (et al.), *558*

- acoustic waves, flexural waves, vibration, Ko (S.-H.), Sherman (C.H.), *915*
- barriers, flexural waves, viscoelastic materials, wave absorbers, Ko (S.-H.), *4764*
- bends, scour, spillways, Higgins (D.T.), *9506*

Bagaria (W.J.), dynamic testing, strain gages, strain measurement, thermal effects, Sharpe (W.N.) Jr., *2479*

Bagci (C.), contact problems, irregular elements, machine design, rotating bodies, stress analysis, Wong (J.C.), (et al.), *6117*

- beams (continuous), buckling, elastic foundations, finite element techniques, framed structures, shafts, *8261*
- balancing, four bar linkage, linkages, mechanisms, vibration, *10378*

Bagdoev (A.G.), asymptotic behavior, bubble dynamics, chemically reactive flow, liquid gas mixture, modulated systems, waves, Oganyan (G.G.), *5488*

- plates, shells (cylindrical), shells (fluid-filled), wave generation, Movsisyan (L.A.), *9334*
- diffraction, nonlinear characteristics, nonlinear waves, *9348*

Bagnaru (D.), see Buculei (M.), *6052*

Bagno (A.M.), axial waves, cylindrical bodies, fluid-structure interaction, prestressed structures, *6709*

Bagnold (R.A.), bed load, channels, rivers, sediment transport, *3605*

Bagrov (A.N.), geopotential height, meteorology, ocean, *4096*

Bahadur (S.), see Kar (M.K.), *5973*

Bahar (L.Y.), layered media, state space techniques, thermoelasticity, Hetnarski (R.B.), *2979*

- computing techniques, dynamic response, stiffness matrix, Law (G.E.), *10223*

Bahgat (B.M.), see Osman (M.O.M.), *9085*

Bahia (C.S.), bolted joints, bolts, experimental results, shear, torsion, Martin (L.H.), *6566*

Bai (K.J.), canals, finite element methods, linear theory, ship motion, three dimensional flow, *12087*

Bai (Y.), see Jenner (A.), *4496*

Bai (Y.L.), ballistics, cylindrical bodies, ricochet, rotating cylinders, water, water surface, Johnson (W.), *11652*

Baibatshaev (M.Sh.), algorithms, machinery, nonlinear systems, optimization, sequential machines, Popkov (Yu.S.), *3189*

Baibikov (B.S.), acceleration, friction factor, pipe flow, roughness, Oreshkin (O.F.), (et al.), *9574*

Baikov (V.I.), see Shulman (Z.P.), *6572*

Bailangadi (M.), displacement, integral methods, numerical analysis, stress analysis, Chiang (F.P.), *7548*

Bailey (C.D.), dynamic stability, follower forces, nonconservative systems, Haines (J.L.), *355*

- dynamic analysis, hamilton principle, stability theory, *2329*

Bailey (D.A.), see Blair (M.F.), *4688*

Bailey (F.R.), see Ballhaus (W.F.), *2748*

Bailey (P.B.), algorithms, boundary value problems, eigenvalue problems, newton method, sturm-liouville problem, *8130*

Baillieul (J.), controllability, dynamic analysis, nonlinear analysis, observability, *1993*

Bailon (J.-P.), crack propagation, crack tip geometry, fatigue, strain energy, Dickson (J.I.), (et al.), *448*

Bailon (J.P.), see Hamel (F.), *10318*

Bain (K.R.), see Doner (M.), *10328*

Bainov (D.), averaging, differential equations (ordinary), mathematical methods, Milusheva (S.), *22*

Bainum (P.M.), optimal control, penalty function, space shuttle, stability theory, tethered systems, Kumar (V.K.), *5701*

- see Sellappan (R.), *8847*

Bair (S.), dielectrics, lubricants (liquid), viscoelasticity, viscosity, Winer (W.O.), *1940*

Bajaj (A.K.), bifurcation, bodies (liquid filled), ducts, vibration (flow induced), Sethna (P.R.), (et al.), *11671*

Bajons (P.), deformation, elastoplasticity, fatigue, piezoelectric devices, ultrasonics, *6464*

- see Lindner (A.), *7508*

Bajura (R.A.) ed., multiphase flow, slurries, suspensions, transport, *10820*

Bak (G.), dynamic properties, reinforced concrete, shells (thick), spherical bodies, transient loading, *9320*

Bakal (A.S.), transition, turbulence model, turbulent mixing, *11491*

Bakan (G.M.), controllability, discrete systems, synthesis, *180*

- algorithms, discrete systems, optimal control, Strashko (V.T.), *2124*
- algorithms, identification, minimax techniques, optimization, process control, Strashko (V.T.), *2154*
- algorithms, design, minimax techniques, multivariable systems, Strashko (V.T.), *4280*

Bakan (T.M.), algorithms, estimation, filters, *4274*

Baker (A.J.), algorithms, computing techniques, fluid mechanics, tensor methods, Soliman (M.O.), *1138*

- see Soliman (M.O.), *6639*
- see Soliman (M.O.), *9573*
- see Pepper (D.W.), *10693*

Baker (G.), buckling, plates (rectangular), plates (simply supported), variational methods, Pavlovic (M.N.), *8265*

Baker (J.A.), see Rogers (C.), *1262*

Baker (J.E.), design, linkages, mobility, rigid bodies, structures, *7631*

- see Yu Hon-Cheung, *10390*
- four bar linkage, kinematics, linkages, mechanisms, *11341*

Baker (R.), numerical methods, slopes, soils, stability, *9362*

Baker (S.), see Moss (W.D.), *5434*

Baker (T.J.), airfoil theory, nonconservative systems, potential flow, transonic flow, *9545*

- see Mayes (I.C.), *10273*

Bakhilina (I.M.), linear systems, lyapunov's functions, stability theory, Lerner (D.M.), *4216*

Bakhin (I.I.), bearings (hydrostatic), friction, leaks, piston driven flow, positive displacement pumps, (et al.), *11752*
Bakhitov (G.G.), additives, permeability, polymers, porous media, water, Ogandzhanyants (V.G.), (et al.), *4022*
Bakht (B.), bridges, slabs, structural analysis, Jaeger (L.G.), (et al.), *10364*
Bakhtar (F.), condensation, nucleation, steam, two dimensional flow, Mohammadi Tochai (M.T.), *9781*
Bakhtieva (L.U.), see Sachenkov (A.V.), *8270*
Bakhvalov (N.S.), acoustics, gaussian beams, nonlinear waves, sound propagation, Zhileikin (Ya.M.), (et al.), *5734*
- nonlinear characteristics, numerical methods, sound propagation, Zhileikin (Ya.M.), (et al.), *11990*
- nonlinear waves, sound, wave interactions, Zhileikin (Ya.M.), (et al.), *12007*

Bakioglu (M.), bonded joints, composite materials, edge cracks, fracture, singular integral equations, stress intensity factor, *5127*
Bakker (P.G.), compressible flow, conical flow, stagnation point, supersonic flow, Bannink (W.J.), (et al.), *584*
Bakrunov (A.O.), holography, two phase flow, velocity profiles, Ertanova (O.N.), (et al.), *6964*
Bakshi (O.A.), crack tip geometry, experimental results, photoelasticity, stress intensity factor, Zaitsev (N.L.), (et al.), *482*
Bakshian (B.T.), dust, orbit stability, perturbation theory, solar pressure, stochastics, Nazirov (R.R.), (et al.), *8843*
Balaam (N.P.), piles, rafts, stability, Booker (J.R.), *11178*
Balageas (D.L.), aerodynamic heating, convection, heat transfer, surface temperature, thermography, wind tunnels, Ory (D.), *7816*
Balakleyevskiy (Yu.I.), condensation, jet streams, plates, *1726*
Balakovskii (O.B.), displacement, dynamics, fatigue, testing equipment, *2492*
Balakrishna (S.), see Thibodeaux (J.J.), *5063*
balance system, calibration, wind tunnels, Dubois (M.), *2772*
- flight, flying platforms, gliders, models, strain gages, wing body combinations, Ramachandra (S.M.), *8651*
- blowdown, rolling motion, supersonic flow, wind tunnels, Murthy (H.S.), *9681*

balancing, high speed, machinery, pitching, rotating shafts, yawing, Freudenstein (F.), Macey (J.P.), (et al.), *6553*
- flexibility, impedance, rotors, Shimada (K.), Miwa (S.), *6558*
- automatic control, pneumatic components, three dimensional flow, velocimeters, Wachter (J.), Heneka (A.), (et al.), *6739*
- four bar linkage, kinematics, kinetics, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *8475*
- flexible bodies, machine design, rotors, variable mass, vibration, Cveticanin (L.J.), *8476*
- four bar linkage, linkages, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *9478*
- bearings (gas lubricated), bearings (spherical), lubricants (gas), rotors, Karpov (V.S.), Prokulevich (L.A.), *9973*
- bearings (gas lubricated), bearings (spherical), lubricants (gas), Lyusin (V.M.), Smimov (B.I.), (et al.), *9974*
- dynamic behavior, rotating shafts, vibration (forced), Shiohata (K.), Fujisawa (F.), (et al.), *10216*
- dynamic response, flexible bodies, rotating shafts, Van De Vegte (J.), *10217*
- dynamic response, flexible bodies, rotating shafts, torque, Markert (R.), Pfutzner (H.), (et al.), *10220*
- four bar linkage, linkages, mechanisms, vibration, Bagci (C.), *10378*
- dynamic analysis, rotating shafts, Woomer (E.), Pilkey (W.), *11145*
- dynamic analysis, flexible bodies, rotating shafts, Shiohata (K.), Fujisawa (F.), *11146*

Balanin (B.A.), drag, experimental results, two phase flow, Zlobin (V.V.), *5812*
Balas (M.J.), beams, control, convection, distributed parameters, modal control, observability, phase locked loops, *203*
- asymptotic methods, control, feedback, space vehicle structures, stability theory, *3922*
- control, feedback, space vehicle structures, structural response, *4298*
- see Juang (J.N.), *8852*

Balasanyan (V.S.), bearing capacity, bearings (gas lubricated), loads, lubricants (gas), lubrication (hydrodynamic), surface flaws, *9975*
Balasubramanian (R.), analog simulation, cardiovascular system, respiratory system, simulation, *230*
- feedback, limit cycles, on off systems, oscillations, relay systems, stability theory, *8161*

Balaza (M.), approximation methods, banach space, existence theorems, Goldner (G.), *63*
Balchen (J.G.), anchors, kalman filters, optimal control, ship maneuvers, ships, Jenssen (N.A.), (et al.), *6147*
Baldur (R.), finite element techniques, mesh generation, shells (thick), structural design, thermal diffusion, *8156*
Balejova (M.), coils, ducts (curved), heat exchangers, laminar flow, pipe flow, secondary flow, Cakrt (J.), (et al.), *9576*
Balena (F.J.), see Revell (J.D.), *9850*
Balendra (T.), bridges (suspension), modal analysis, piers, seismic loading, substructuring, *6525*
- modeling, seismic loading, soil structure interaction, Tan (Y.-P.), (et al.), *8964*

Balestrino (A.), control, design, feedback, linear systems, multivariable systems, pole placement, Celentano (G.), *6125*
Baliga (B.R.), convection, diffusion, finite element techniques, heat transfer, Patankar (S.V.), *96*
Baligh (M.M.), field tests, penetration, soils, Vivatrat (V.), (et al.), *7447*
Balje (O.E.), compressible flow, design, incompressible flow, turbomachinery, *3739, book*
- see Arnold (D.J.), *5658*

Balk (P.I.), geophysics, gravity, surveys, *962*
- algorithms, decision theory, identification, linear systems, *3207*

Ball (A.A.), computer programming, finite element techniques, interpolation, *2068*
Ball (D.J.), cylindrical bodies, drag, grids, piers, piles, reynolds stresses, submerged bodies, Hall (C.D.), *2585*
Ballal (D.R.), flames (turbulent), models, premixed fuel air, *3862*
Ballhaus (W.F.), aerodynamics, computing techniques, transonic flow, wings, Bailey (F.R.), *2748*
Ballio (G.), bending (plastic), cranes, elastoplasticity, girders (plate), Poggi (C.), (et al.), *7318*
- dynamic behavior, pinned joints, seismic loading, structural response, Gobetti (A.), (et al.), *8321*

ballistics, estimation, least squares, trajectories, Chang (C.B.), *130*
- launching, propellants, shock waves, Taylor (T.D.), Lin (T.C.), *2929*
- cylindrical bodies, ricochet, rotating cylinders, water, water surface, Bai (Y.L.), Johnson (W.), *11652*

ballistics (exterior), aerodynamic performance, drag coefficient, rockets, Barbera (F.J.), *886*
- aerodynamic performance, control stability, missiles, rockets, Murphy (C.H.), *3926*
- flight tests, missiles, subsonic flow, Whyte (R.H.), Winchenbach (G.L.), (et al.), *6722*
- aerodynamic performance, control stability, drag, missiles, Qasrawi (A.M.S.), East (R.A.), *6892*
- launching, trajectory optimization, wind loads, Churchyard (J.N.), *7929*

ballistics (interior), burning rate, deflagration, detonation, propellants, Goliger (J.), Lucotte (J.-P.), *2928*
- heat transfer, projectiles, thermal explosions, Grewal (B.S.), *5716*
- blast effects, launching, projectiles, solid fuels, Taylor (T.D.), Lin (T.C.), *6891*
- detonation, heat transfer, particle dynamics, propagation, turbulent flow, Buckingham (A.C.), *8855*

ballistics (terminal), drag coefficient, optimization, recovery systems, reentry, Williamson (W.E.) Jr., *1793*
- dispersion, reentry, rockets, trajectories, Platus (D.J.), *1796*
- optimal control, planetary atmospheres, planetary entry, reentry, Ivanov (N.M.), Martynov (A.I.), (et al.), *5713*

balloons, meteorology (physical), Demchenko (P.F.), Golitsyn (G.S.), *4068*
- data acquisition, meteorology, weather forecasting, Dushkin (P.K.), Belov (A.I.), (et al.), *4090*
- boundary layer (atmospheric), turbulence (geophysical), Asimakopoulos (D.N.), Lalas (D.P.), (et al.), *7062*
- convection, Glagolev (Yu.A.), *8995*

Balmer (R.T.), see Kovac (J.), *3628*
- non newtonian flow, pipe flow, power law fluids, unsteady flow, velocity profiles, Fiorina (M.A.), *11497*

Baloev (A.A.), design, observers, regulator problem, *4296*
- aerospace vehicles, design, regulator problem, rotating bodies, structural response, *4307*

Balogh (V.), dynamic loads, railroad cars, statically indeterminate structures, substructuring, trains (railroad), vehicles, *6499*
Balquet (R.J.), mission analysis, ship design, surface effect, towing tanks, *8046*
Balsa (T.F.), see Kerschen (E.J.), *5459*
Balter (I.I.), see Berezovszkij (A.M.), *3447*
Baltsevich (Ya.A.), plates (parallel), radiant interchange, radiation, thermal waves, Rubtsov (N.A.), *1707*
Balu (R.), boundary layer, boundary value problems, difference equations, nonlinear analysis, stagnation point, *5436*
Baluch (M.H.), see Voyiadjis (G.Z.), *368*
- higher order theories, plates, Voyiadjis (G.Z.), *4378*

Balzer (L.A.), algorithms, lyapunov's functions, matrix methods, numerical methods, riccati equation, *11042*
- design, hovercraft, optimal control, suspension systems, vehicles, *11078*

Bam-Zelikovich (G.M.), boundary layer (three dimensional), boundary layer (turbulent), streamlines, *596*
Bamiro (O.A.), fracture mechanics, griffith cracks, micromechanics, nucleation, Provan (J.W.), *10299*
Bampi (F.), internal state variables, shear waves, viscoelastic fluids, viscoelastic waves, Morro (A.), *1971*
banach space, differential equations (ordinary), functional equations, time delay systems, Thompson (R.J.), *32*
- cauchy problem, differential equations (partial), evolution equations, quasilinearization, Altman (M.), *33*
- approximation methods, existence theorems, Balazs (M.), Goldner (G.), *63*
- control, functional analyis, functional equations, nonconvex control, Caligaris (O.), Oliva (P.), *7242*

Banaszek (J.), computing techniques, finite element techniques, nonlinear theory, Staniszewski (B.), *9151*

Banda (S.S.), see Wells (W.R.), *6730*
Bandis (S.), see Barton (N.), *429*
Bandopadhayay (P.C.), friction factor, hydraulic diameter, noncircular pipes, turbulent flow, Ambrose (C.W.), *614*
Bandyopadhyay (S.N.), crack propagation, photoelasticity, stress intensity factor, wiener-hopf technique, Deysarker (H.K.), *2430*
• crack opening displacement, photoelasticity, plastic flow, steel, stress intensity factor, Singh (N.), (et al.), *5304*
Bandyszewski (W.), beams, deflections, elastoplasticity, frames, plasticity, yield condition, Sawczuk (A.), *8438*
Banerjee (B.), large displacement, plates (circular), plates (holed), *9276*
• concentrated loads, large displacement, plates, plates (nonlinear), shear stress, *10159*
Banerjee (M.B.), bearings (hydrodynamic), bearings (journal), lubrication (hydrodynamic), reynolds equation, Gupta (R.S.), (et al.), *1012*
• convection, hydrodynamic stability, stability theory, Katoch (D.C.), (et al.), *10467*
Banerjee (P.K.), clay, elastoplasticity, mathematical models, Stipho (A.S.), *6375*
• boundary elements, groundwater, transient effects, two dimensional flow, Butterfield (R.), (et al.), *8948*
Banerjee (P.P.), acoustics, dispersion, eigenvalue problems, nonlinear waves, Korpel (A.), *11936*
Banerjee (S.), finite amplitude, korteweg de vries equation, separated flow, transient effects, two phase flow, Chan (A.M.C.), *940*
• dispersion, separated flow, two phase flow, *4830*
• electro-osmosis, field tests, mechanical properties, soils, Mitchell (J.K.), *7445*
• see Mitchell (J.K.), *7446*
• see Hau (K.-F.F.-L.), *7970*
• see Chan (A.M.C.), *10825*
Banfi (C.), continuum mechanics, functional analyis, geometrical properties, topological techniques, Fabrizio (M.), *7135*
bang-bang control, optimal control, suboptimal control, synthesis, Gonzalez (R.), *7241*
Bangash (Y.), composite vessels, conduction (heat), conductivity, nuclear reactors, prestressed concrete, *774*
• concrete, gravity platforms, offshore structures, wave loads, *6539*
Banichuk (N.V.), anisotropy, composite materials, structural optimization, *4342*
• composite materials, granular media, optimization, Kobelev (V.V.), *11322*
Bank (R.E.), elliptic equations, finite element techniques, iterative methods, linear equations, *5023*
Banki (I.), computing techniques, difference equations, poisson equation, relaxation methods, torsion, *9124*
Bankoff (S.G.), condensation, safety, two phase flow, *6983*
• see Sharon (A.), *10719*
• see Inoue (A.), *11760*
Banks (A.J.), bones, human body, prosthetic devices, spine, Dervin (E.), *3071*
• bones, fracture, injuries, prosthetic devices, Dervin (E.), *4922*
Banks (H.T.), algorithms, estimation, identification, time delay systems, Burns (J.A.), (et al.), *11060*
Banks (P.J.), see Maclaine-Cross (I.L.), *11767*
Bannerjee (R.), design, lateral pressure, piles, *10255*
Bannink (W.J.), see Bakker (P.G.), *584*
Bannister (R.L.), see Donato (V.), *3370*
Bannister (R.W.), interference, sloping bottom, sound propagation, underwater acoustics, Pedersen (M.A.), *5724*
Banon (G.), control, diffusion, estimation, nonlinear systems, Nguyen (H.T.), *8122*
Bansal (P.K.), see Sodha (M.S.), *9737*
Bar (W.), design, feedback, frequency domain techniques, multivariable systems, process control, state space techniques, *9163*
Bar-Cohen (A.), channel flow, heat addition, laminar flow, *737*
• asymptotic behavior, bubble dynamics, fluidized beds, prediction, Hughes (R.W.), *6989*
• bubble dynamics, fluidized beds, prediction, two phase flow, Glicksman (L.R.), (et al.), *7965*
• see Sonn (A.), *11771*
Bar-Ilan (M.), see Rosenhouse (G.), *11932*
Bar-Itzhack (I.Y.), alignment, gyroscopes, inertial guidance, Porat (B.), *2165*
• inertial guidance, kalman filters, model reduction, navigation, *10083*
Bar-Shalom (Y.), estimation, stochastic processes, tracking, Marcus (G.D.), *4264*
Bar-Tikva (D.), crack opening displacement, fracture toughness, material testing, stress intensity factor, surface flaws, weight function, Grandt (A.F.) Jr., (et al.), *3478*
Bar-Yoseph (P.), inertia, navier stokes equation, reynolds number (small), rotating disks, Salan (A.), (et al.), *579*
• composite materials, interlaminar stresses, laminates, perturbation methods, rayleigh ritz method, Pian (T.H.H.), *9249*
• axisymmetric flow, finite element techniques, hydraulic machinery, incompressible flow, swirl flow, viscous flow, Blech (J.J.), (et al.), *10533*
Barabanova (G.Ya.), bubble dynamics, cavitation, fluids, sound generation, Ilin (V.P.), (et al.), *9853*
Baradello (C.S.), adaptive systems, identification, synthesis, tracking, Neuman (C.P.), *2092*
Baram (J.), acoustic emission, aluminum alloys, fatigue, low cycle fatigue, nondestructive tests, tension, Rosen (M.), *7559*
Baram (Y.), estimation, filters, mathematical models, *145*
Baran (N.), see Pimsner (V.), *4740*
Barannik (V.A.), coasts, currents, oceanography, *4884*
Baranov (E.G.), explosions, explosive loading, explosive solid interactions, impulsive loading, soil mechanics, Kovalenko (V.A.), (et al.), *9841*
Baranov (N.A.), copper, creep, material testing, necking, Likhachev (V.A.), (et al.), *6430*
Baranov (S.M.), brittle fracture, grain boundaries, steel, Sarrak (V.I.), (et al.), *6425*
Baranovsky (S.I.), fluid injection, injection, supersonic flow, Schetz (J.A.), *4636*
Baranski (F.), conduction (heat), fourier problem, green function, Musialek (J.), *10600*
Barantsev (R.G.), asymptotic behavior, blunt bodies, hypersonic flow, separation, shock layer, two dimensional flow, Engelgart (V.N.), *8636*
Barash (Yu.S.), generators, magnetic field, models, rotors, spherical bodies, Kropachev (E.P.), *11830*
Barashkin (S.T.), molecular beams, rarefied gases, tube bundles, Neudachin (I.G.), (et al.), *591*
Baratta (A.), reliability analysis, safety, structural analysis, *10356*
Baratta (F.I.), see Rooke (D.P.), *2431*
Barbato (G.), design (elastic), load cells, rings, Desogus (S.), (et al.), *3512*
Barber (J.R.), conduction (steady), penny shaped crack, stress intensity factor, thermal stresses, *2967*
• contact problems, stability theory, thermoelasticity, *6949*
• see Comninou (M.), *8870*
Barber (S.D.), concrete, field tests, highways, sand, subgrade design, Knapton (J.), *3417*
Barbera (F.J.), aerodynamic performance, ballistics (exterior), drag coefficient, rockets, *886*
Barbu (V.), existence theorems, hyperbolic equations, uniqueness, water hammer, Morosanu (G.), *2006*
• control, inequalities, optimal control, variational methods, *2029*
• functional analyis, nonlinear methods, optimal control, Da Prato (G.), *3187*
Barche (J.), corrections, green function, inviscid fluid, potential flow, wall effects, walls, *8523*
Barcilon (A.), cloud physics, flow obstructions, latent heat, meteorology (physical), two dimensional flow, Jusem (J.C.), (et al.), *7677*
Barcilon (V.), distributed systems, eigenvalue problems, inverse problems, iterative methods, vibration, Turchetti (G.), *27*
Barclay (D.W.), elastic waves, penetration, plates, unloading, Moodie (T.B.), (et al.), *1292*
• bodies (liquid filled), compressional waves, ducts, flexible walls, Moodie (T.B.), (et al.), *11661*
Barclay (W.H.), corners, fluid mechanics, transition, Ridha (A.H.), *5427*
• boundary layer, corners, curvature, three dimensional flow, *10429*
Bard (S.), combustion, flames (diffusion), lasers, scattering, spectral analysis, Pagni (P.J.), *3878*
Bardell (G.R.), beams, fatigue, steel, textiles, welded structures, Kulak (G.L.), *495*
Bardina (J.), diffusers, numerical methods, plane flow, stalling, Lyrio (A.), (et al.), *1567*
Bardocz (L.), see Mikolas (M.), *2648*
Bardon (C.), interface phenomena, permeability, porous media, Longeron (D.G), *8929*
Bardos (C.), characteristic methods, euler equations, finite element techniques, vorticity, Bercovier (M.), (et al.), *7680*
Bardsley (B.G.), arrays, transducers (ultrasonic), transfer functions, Christensen (D.A.), *10797*
Bardzokas (D.), see Theocaris (P.S.), *5086*
Bareiss (M.), convection (free), cylindrical bodies, melting, Beer (H.), *1728*
Bareket (M.), differential equations (partial), eigenvalues, helmholtz equation, *4960*
Barelko (V.V.), see Zhukov (S.A.), *4704*
• see Zhukov (S.A.), *6772*
Barenblatt (G.I.), asymptotic behavior, dimensional analysis, similarity methods, *4998*
• constitutive equations, creep, fracture, nonlinear materials, Botvina (L.R.), *7137*
Barez (F.), elastic waves, impact, shells (conical), Goldsmith (W.), *11157*
Barger (R.L.), airplane structures, design, forebodies, geometrical properties, pressure distribution, *2738*
Bargmann (H.), conduction (unsteady), thermal waves, thermoelasticity (transient), *2972*
Barinov (S.M.), brittle fracture, brittle materials, crack growth, fracture energy, graphite, Grevtsev (S.N.), (et al.), *2497*
• brittle materials, crack initiation, cracks, failure, porous media, powders, Krasulin (Yu.L.), *10308*
Barlo (F.), boundary layer, wakes, wind tunnels, Charney (G.), (et al.), *9592*
Barker (D.B.), see Fourney (W.L.), *8408*
Barker (H.A.), springs, testing equipment, vibration isolation, Noble (A.E.), (et al.), *226*
Barker (R.L.), material testing, strength, textiles, Poole (H.W.), (et al.), *5139*

Barker (T.G.), failure, propagation, radiation, seismic waves, **Minster (J.B.)**, *961*

Barkin (Iu.V.), artificial satellites, averaging, libration theory, resonance, restricted three body problem, **Markov (Iu.G.)**, *3915*

Barkin (Yu.V.), artificial satellites, libration theory, periodic orbits, resonance, restricted three body problem, **Markov (Yu.G.)**, *3916*

- libration theory, orbit mechanics, rotating bodies, space vehicles, three body problem, *5699*
- see **Demin (V.G.)**, *7913*

Barkov (Yu.D.), see **Arkhipenko (V.I.)**, *851*

- see **Arkhipenko (V.I.)**, *10745*
- see **Arkhipenko (V.I.)**, *11821*
- drops, equilibrium, magneto fluid dynamics, shape, stability theory, **Berkovskii (B.M.)**, *11822*

Barlow (J.B.), see **Tischler (M.B.)**, *692*

Barman (S.), see **Deb (S.R.)**, *4203*

Barndorff-Nielsen (O.), probability theory, reynolds number (high), stochastic processes, turbulence, *4986*

Barnea (D.), liquid gas mixture, pipe flow, transition, two phase flow, **Shoham (O.)**, **(et al.)**, *938*

- conducting fluid, electrical conductivity, two phase flow, **Shoham (O.)**, **(et al.)**, *2989*

Barnes (C.R.), composite materials, crack arrest, crack propagation, polymers, **Rosenfield (A.R.)**, *455*

Barnett (D.M.), see **Kino (G.S.)**, *7586*

baroclinic instability, coriolis forces, currents, eddies, geostrophic flow, ocean air interaction, **Mcwilliams (J.C.)**, **Holland (W.R.)**, **(et al.)**, *1890*

- atmospheric circulation, finite difference methods, hydrodynamic stability, **Dymnikov (V.P.)**, *3018*
- atmospheric circulation, hydrodynamic stability, **Shakina (N.P.)**, *3019*
- bottom irregularities, hydrodynamic stability, oceanography, **Tang (C.-M.)**, *4050*
- hydrodynamic stability, oceanography, rotating fluids, stratified flow, **Killworth (P.D.)**, *5919*
- oceanography, sloping bottom, stratification, **Wright (D.G.)**, *8023*
- hydrodynamic stability, ocean waves, **Mysak (L.A.)**, *10468*

baroclinic waves, hydrodynamic stability, multilayer, stability theory, **Donahue (J.F.)**, *3704*

- stratified flow, **Johnson (E.R.)**, *5937*
- convection, geophysics, rotating fluids, **Leach (H.)**, *6788*
- bottom irregularities, internal waves, kelvin waves, **Chao (S.-Y.)**, *8976*

Baron (M.L.), see **Atkatsh (R.S.)**, *5226*

Baroncini (C.), conduction (heat), hydrocarbons, thermal properties, thermodynamic properties, **Di Filippo (P.)**, **(et al.)**, *724*

Barone (M.R.), approximations, boundary integral methods, holes, laplace equation, **Caulk (D.A.)**, *4161*

Baronets (P.N.), collapse, discharges, plasma, schlieren methods, shock waves, **Saprykin (A.I.)**, **(et al.)**, *4667*

Barr (D.I.H.), channel flow, free boundary, froude number, sediment transport, **Alam (M.K.)**, **(et al.)**, *2592*

- friction factor, laminar flow, poiseuille flow, transition, *2643*
- dimensional analysis, osborne reynolds formulae, pipe flow, turbulent flow, *5440*
- channels, discontinuities, free boundary, surface profiles, surge, **Das (M.M.)**, *7651*

Barr (W.L.), see **Blum (A.S.)**, *6968*

Barratt (P.J.), heat addition, liquid crystals (nematic), magnetic fluids, plates (parallel), thermal instability, **Sloan (D.M.)**, *11368*

Barrau (J.-J.), channels, multicomponent flow, multiphase flow, **Fabre (J.)**, **(et al.)**, *4824*

Barrau (J.J.), see **Piquemal (J.)**, *3759*

Barreteau (D.), see **Sadasivan (N.)**, *7011*

Barrett (A.J.), constitutive equations, micromechanisms, stresses (normal), viscoelastic fluids, **De Kee (D.)**, *8504*

Barrett (D.), beams, finite element techniques, mathematical models, **Soler (A.)**, *89*

Barrett (J.D.), see **Foschi (R.O.)**, *1224*

Barrett (J.W.), boundary layer (thermal), convection, diffusion, mathematical models, **Morton (K.W.)**, *8749*

barriers, absorption, attenuation, noise abatement, **Czarnecki (S.)**, *916*

- ducts, sound propagation, **Cummings (A.)**, *1806*
- acoustics, plates, **Freedman (A.)**, *1810*
- acoustic waves, diffraction, transmission, wave energy, **Czarnecki (S.)**, **Engel (Z.)**, **(et al.)**, *3933*
- acoustic waves, diffraction, wedges, **Poruchikov (V.B.)**, *3936*
- baffles, flexural waves, viscoelastic materials, wave absorbers, **Ko (S.-H.)**, *4764*
- acoustic waves, diffraction, wedges, **Borovikov (V.A.)**, *4780*
- noise, noise abatement, **Medwin (H.)**, *4799*
- attenuation, diffraction, heat exchangers (crossflow), noise (aerodynamic), vortex shedding, **Howe (M.S.)**, *6931*
- impact, magneto fluid dynamics, streams, waves, **Berkovskii (B.M.)**, **Bashtovoi (V.G.)**, **(et al.)**, *9798*
- acoustic waves, acoustics, diffraction, wedges, **Bhattacharyya (S.)**, *10800*
- acoustic waves, liquid solid interface, plane waves, reflection, ultrasonics, **Claeys (J.M.)**, **Leroy (O.J.)**, **(et al.)**, *11648*
- acoustics (architectural), noise abatement, **Rosenhouse (G.)**, **Bar-Ilan (M.)**, *11932*
- diffraction, sound, sound fields, **Kawai (T.)**, *11968*
- diffraction, plane waves, **Kendig (R.P.)**, *11972*

Barron (A.R.), see **Cleveland (D.)**, *7584*

Barron (M.), acoustic measurements, acoustic properties, acoustics (architectural), concert halls, reflection, **Marshall (A.H.)**, *10789*

Barron (R.), dynamic properties, shells (cylindrical), vibration (free), **Villanueva (C.)**, *10212*

Barron (R.A.), edge effects, landslides, seepage, *952*

Barron (R.M.), see **Chandna (O.P.)**, *8814*

- dust, hypersonic flow, slender bodies, **Wiley (J.T.)**, *8892*

Barrow (H.), see **Mirhosseini (A.)**, *733*

- see **Ogunba (V.)**, *1690*
- see **Hornby (R.P.)**, *2047*
- see **El-Hadik (A.A.B.)**, *9694*

Barrows (T.M.), see **Garg (D.P.)**, *10768*

bars, frames, structural analysis, **Abdul-Shafi (A.)**, *1226*

- eddy currents, flaw detection, surface flaws, wires, **Stumm (W.)**, *3508*
- dispersion, elastic waves, elasticity (three dimensional), **Nagaya (K.)**, *4442*
- thermal shock, thermal waves, thermoelasticity (transient), **Szalontay (M.)**, **Szekeres (A.)**, *5804*
- dynamic analysis, elastic bodies, hamiltonian equations, **Buculei (M.)**, **Bagnaru (D.)**, *6052*
- photoelasticity, stress concentration, **Fessler (H.)**, **Woods (P.J.)**, *7284*
- elastic bodies, optimization, shape factors, torsion, **Dems (K.)**, *7599*
- cavities, conduction (heat), cylindrical bodies, shape factors, **Naghdi (A.K.)**, *7847*
- buckling, stability theory, vibration, **Panovko (Ya.G.)**, **Gubanova (I.I.)**, *8257*, *book*
- imperfections, notch tests, tension, ultimate strength, **Miastkowski (J.)**, **Skrocki (H.)**, *8437*
- beams, end effects, residual stresses, **Schilling (C.G.)**, *9262*
- beams (anisotropic), beams (variable cross section), torsion, **Gawecki (A.)**, **Boruszak (A.)**, *10137*
- beaches, bottom irregularities, drag, sediment transport, **Holman (R.A.)**, **Bowen (A.J.)**, *10400*

Barsikow (B.), see **Neise (W.)**, *10802*

Barsukov (O.M.), earthquakes, electrical conductivity, initiation, *9914*

Bartel (T.W.), absorption, geometrical properties, noise abatement, reverberation, *4800*

Bartenev (G.M.), see **Kartashov (E.M.)**, *9400*

Barthelemy (B.M.), see **Sih (G.C.)**, *1371*

Barthelemy (J.-F.M.), see **Hallauer (W.L.) Jr.**, *7257*

Barthole-Delaunay (C.), electrochemical mass transfer, fluidized beds, reactors, **Storck (A.)**, **(et al.)**, *834*

Bartlett (R.A.), see **Plumbridge (W.J.)**, *10276*

Bartolomei (A.A.), field tests, piles, saturation, soils, stress strain relationships, **Yushkov (B.S.)**, **(et al.)**, *3408*

Barton (C.K.), acoustic measurements, airplane structures, noise abatement, **Mixson (J.S.)**, *10805*

Barton (D.C.), deformation, plastics, pressure vessels, reinforced bodies, shells (torispherical), strength, **Soden (P.D.)**, **(et al.)**, *10367*

Barton (D.E.), see **Pardoen (G.C.)**, *5163*

Barton (N.), joints, rocks, scale effects, shear strength, **Bandis (S.)**, *429*

Barton (S.G.), see **Pollock (J.T.A.)**, *6473*

Baruah (P.C.), see **Low (S.C.)**, *6967*

Baruch (M.), dynamic testing, stiffness matrix, vibration, *9329*

- dynamic analysis, hamiltonian equations, mathematical methods, **Riff (R.)**, *10007*

Baruh (H.), see **Meirovitch (L.)**, *5001*

- see **Meirovitch (L.)**, *9170*
- see **Meirovitch (L.)**, *11061*

Barvashov (V.A.), elastic foundations, footings, smoke stacks, winkler foundation, **Fedorovsky (V.G.)**, *7321*

Barzam (V.A.), dynamic properties, elastic waves, porous media, stratification, waves, *9897*

Basatskaya (L.V.), acoustic waves, mathematical methods, sublayers, ultrasonics, **Ermolov (I.N.)**, *1294*

Bascoul (A.), brittle materials, cracking, fracture criteria, strength, **Maso (J.C.)**, *8398*

- steel, strain, stresses, tension, yield criteria, **Maso (J.C.)**, *8431*

base flow, cylindrical bodies, wakes, **Morel (T.)**, *1573*

- compressible flow, jets, supersonic flow, **Wagner (B.)**, **White (R.A.)**, *7689*

base pressure, airfoils, drag, subsonic flow, trailing edge, **Gai (S.L.)**, **Sharma (S.D.)**, *3725*

- airfoils, compressible flow, vortex shedding, **Motallebi (F.)**, **Norbury (J.F.)**, *7736*
- blunt bodies, compressible flow, experimental results, spherical bodies, subsonic flow, **Kuptsov (V.M.)**, *8553*
- aerodynamic interference, blunt bodies, jets, wakes, **Gai (S.L.)**, **Kapoor (K.)**, *9857*

Basehore (M.L.), in-plane displacement, measurements, moire methods, photoelasticity, propagation, waves, Post (D.), *2472*
Basharin (G.P.), distribution function, mathematical models, matrix methods, queue theory, Gromov (A.I.), *151*
Bashkirov (A.G.), hydrodynamics, multicomponent flow, statistical mechanics, thermodynamics (nonequilibrium), transport phenomena, *6747*
Bashtovoi (V.G.), boundary layer (thermal), heat transfer, hydromagnetic stability, magneto fluid dynamics, theory, Pavlinov (M.I.), *861*
- cylindrical bodies, liquid metals, magneto fluid dynamics, theory, velocity profiles, *2880*
- boundary layer (thermal), heat transfer (combined modes), magneto fluid dynamics, stability, surface effect, Pavlinov (M.I.), *8813*
- film flow, liquid metals, magneto fluid dynamics, stabilization, transport phenomena, Denisenko (T.D.), (et al.), *9785*
- interfaces, jet boundaries, layered media, magneto fluid dynamics, transport phenomena, Krakov (M.S.), *9794*
- see Berkovskii (B.M.), *9798*

Basilico (C.), convection, convection (forced), crossflow, cylindrical bodies, heat transfer, sprays, unsteady flow, Jung (G.), (et al.), *6775*
Basilievitch (V.), beams (variable cross section), bending, *5148*
Basin (F.I.), see Kainer (D.A.), *3497*
Baskakov (A.P.), see Sokolov (A.V.), *7994*
Baskaran (V.), airfoil characteristics, incompressible flow, pressure distribution, stagnation point, trailing edge, Holla (V.S.), *1616*
Basko (E.M.), charpy tests, crack resistance, dynamic loads, fracture toughness, steel, strain energy, Makhutov (N.A.), *4519*
Baskov (V.B.), conduction (heat), duct flow, pulsatile flow, thermal loading, Platonov (E.G.), (et al.), *7849*
Basov (N.G.), design criteria, laser plasma interaction, nuclear fusion, reactor structures, thermonuclear energy, Krokhin (O.N.), (et al.), *5686*
Basovich (A.Ya.), internal waves, spectra, surface waves, wave interactions, *669*
Basovich (I.B.), laminar flow, non newtonian flow, poiseuille flow, Bernadiner (M.G.), (et al.), *613*
Bassani (J.L.), crack opening displacement, creep, finite element techniques, relaxation, Mcclintock (F.A.), *1387*
Bassani (R.), bearings (hydrostatic), hydrostatics, screws, *1018*
Bassim (M.N.), acoustic emission, dislocations, iron, nondestructive tests, strain, Veillette (M.), *6463*
Bassina (I.A.), boundary layer, chemically reactive flow, frozen flow, lasers (gasdynamic), nozzles, supersonic flow, Dorot (V.L.), (et al.), *2639*
Bastenhof (D.), cavitation, diesel engines, erosion, injectors, unsteady flow, visualization, *8661*
Bastia (S.N.), see Rath (R.S.), *3787*
Bastin (H.), difference differential equations, runge kutta method, stability theory, van der pol equation, Delchambre (M.), *3102*
Bastun (V.N.), metals, micromechanisms, work hardening, yield criteria, *6183*
Basu (A.K.), frames, multistory frames, shear walls, structural analysis, Nagpal (A.K.), *2536*
Basu (R.S.), critical region, steam, transport properties, viscosity, Sengers (J.V.), *5529*
Basu (U.), elastic foundations, plates (circular), plates (holed), vibration (free), *4429*
Basudhar (P.K.), earth pressure, finite element methods, nonlinear programming, soil mechanics, Valsangkar (A.J.), (et al.), *3403*
Bataille (J.), entropy, materials possessing memory, thermodynamic processes, thermodynamics (irreversible), thermodynamics (nonequilibrium), Kestin (J.), *720*
Batchelor (B. De V.), cable nets, cables, dynamic analysis, networks, Gambhir (M.L.), *2257*
- beams, reinforced concrete, shear, shear stress, Kwun (M.), *10359*

Bates (H.F.), ice, plates, viscoelastic waves, Shapiro (L.H.), *1303*
- floating structures, gravity waves, icebreakers, Shapiro (L.H.), *8631*

Bathe (K.-J.), finite element techniques, fluid-structure interaction, lumped systems, numerical methods, Sonnad (V.), *1608*
- finite element methods (hybrid), mesh generation, seepage, surface flow, Khoshgoftaar (M.R.), *1870*
- dynamic analysis, modal analysis, nonlinear analysis, substructuring, Gracewski (S.), *5228*
- see Ishizaki (T.), *7216*

Bathe (K.J.), elbows, penalty function, pipes, shells, stiffness matrix, Almeida (C.A.), *10063*
Bathelt (A.G.), extended surfaces, fins, heat transfer, melting, solidification, Viskanta (R.), *7853*
Bathias (C.), see Saanouni (K.), *10270*
Batievskii (V.L.), boundary layer, combustion, heat transfer, hydrocarbons, mass transfer, porous media, Sergeev (G.T.), *1753*
Batista (R.C.), see Croll (J.G.A.), *10177*
Batkov (A.M.), algorithms, dynamic programming, stochastic control, suboptimal control, synthesis, Grinchenko (S.T.), *6145*
Batkov (Yu.V.), experimental methods, shear stress, shock waves (normal), Novikov (S.A.), (et al.), *6366*
Bator (B.), see Polinszky (K.), *844*
Batoz (J.-L.), arches, beams (curved), buckling (nonlinear), rings, *11120*
Batterman (S.C.), see Sullivan (B.J.), *10154*
Battjes (J.A.), gravity waves (breaking), velocity profiles, visualization, wakes, Sakai (T.), *11586*
Batu (V.), groundwater, infiltration, porous media, *8970*
Batycky (J.P.), experimental methods, permeability, porous media, rocks, Mccaffery (F.G.), (et al.), *7990*
Bau (H.H.), duct flow, flow reversal, hydrodynamic stability, porous media, unsteady flow, Torrance (K.E.), *7840*
- boiling, porous media, *11779*

Bauchau (O.A.), elastic constants, fibers, graphite, tubes, *1402*
Bauche (B.), see Bouhadef (M.), *9510*
Bauer (H.F.), containers (partially filled), sloshing, surface waves, tanks, wedge-shaped tanks, *674*
- containers (partially filled), hydroelasticity, rectangular container, sloshing, tanks, *675*
- containers (partially filled), dynamic loads, excitation, fluid-structure interaction, membranes, sloshing, *4661*
- beams (flexural), rotating bodies, vibration (free), *9306*
- axial waves, compressional waves, flexible walls, pulsatile flow, Metten (S.), (et al.), *11607*

Bauer (H.P.), convection, diffusion, pipe flow, plug flow, *3851*
Bauer (J.), lattices, minimization, structural optimization, trusses, Gutkowski (W.), (et al.), *4522*
Bauer (K.), boundary layer (thermal), boundary layer (turbulent), nozzles, turbulence (freestream), turbulent flow, Straub (J.), (et al.), *2787*
Bauer (R.E.), see Ermi (A.M.), *2406*
Bauer (V.O.), frequency response, rotating shafts, vibration (free), *8319*
Baughn (J.W.), see Young (M.F.), *4714*
Bauld (N.R.) Jr., see Akkas (N.), *2010*
Baum (J.S.), aging, elastic constants, polymers, Schultz (J.M.), *1403*
Baum (M.R.), brittle materials, experimental mechanics, pipes, rupture, Elston (M.J.H.), *4548*
Baumeister (K.J.), ducts, ducts (variable area), finite element techniques, sound propagation, *11933*
Baumer (K.), combustion, diesel engines, evaporation, injection systems, modeling, Hartje (J.), (et al.), *8804*
Baumgarte (J.), dynamic analysis, lagrange equations, mathematical methods, *1977*
- dynamic analysis, lagrange equations, mathematical methods, *1980*

Baumgarten (J.R.), see Sayar (B.A.), *9632*
Baumshtein (M.V.), see Tsvilyuk (I.S.), *3254*
bauschinger effect, heat treatment, plastic behavior, thermal effects, Aran (A.), Demirkol (M.), *2237*
- anisotropy, experimental results, yield criteria, Shevchenko (Yu.N.), Kulakov (S.V.), (et al.), *5115*
- anisotropy, plasticity, stress strain relationships, work hardening, Rees (D.W.A.), *7285*

Baushev (V.S.), combustion, mathematical models, stability (numerical), thermal diffusion, Vilunov (V.N.), (et al.), *5643*
Bawden (W.F.), fracture, numerical methods, permeability, Curran (J.H.), (et al.), *4028*
Bayada (G.), see Lebrun (M.), *6231*
Bayazitoglu (Y.), see Iyican (L.), *7839*
- axial flow, conduction (heat), graetz problem, mathematical models, Ozisik (M.N.), *9725*
- see Yucel (A.), *9727*

Baydakov (V.G.), diffusion, liquids, thermal instability, thermal waves, *8674*
Bayer (R.G.), abrasion, particle size, sliding, wear, *1927*
Bayer (Z.), polytropic processes, steam, thermodynamic processes, two phase flow, *1651*
Bayley (F.J.), axial turbines, blades, cascades, heat transfer, turbulence (freestream), Priddy (W.J.), *5504*
Bayliss (A.), boundary conditions, computing techniques, hyperbolic equations, wave equations, Turkel (E.), *4187*
- acoustic waves, airplane structures, jet engines, numerical methods, scattering, *7942*

Bayvel (L.P.), electromagnetic waves, particles, scattering, suspensions, Jones (A.R.), *8088, book*
Baz (A.), dynamic analysis, fluidics, pneumatic components, pumps, Khafagy (S.), (et al.), *219*
Bazant (Z.P.), concrete, endochronic theory, fracture, strain softening, Shieh (C.-L.), *430*
- asymptotic behavior, crack propagation, finite element techniques, stress intensity factor, Cedolin (L.), *479*
- anelasticity, concrete, constitutive relations, strain, Tsubaki (T.), *1334*
- fracture, inequalities, microcracks, plastic behavior, *2443*
- cracks, reinforced concrete, shear transfer, Tsubaki (T.), (et al.), *2519*
- cracks, reinforced concrete, stress analysis, Tsubaki (T.), *4533*
- fluid injection, geothermal energy, heat extraction, Ohtsubo (H.), *5886*
- columns, creep buckling, reinforced concrete, Tsubaki (T.), *6269*

Bazarov (S.M.), condensation (dropwise), kinetics, multiphase flow, saturation, supersaturation, Shpenzer (G.G.), *2845*
Bazergui (A.), see Blach (A.E.), *8464*

Bazhenov (A.I.), hydraulic machinery, mathematical models, servomechanisms, stability theory, *127*
Bazhenov (V.A.), see Gulyaev (V.I.), *311, book*
Bazhenov (V.G.), flexure, gears, hardness, strength, Kravchenko (A.A.), (et al.), *1471*
Bazhenova (T.V.), see Gvozdeva (L.G.), *9641*
Bazley (N.W.), ignition, mathematical models, reactive systems, thermal ignition, Wake (G.C.), *9743*
Bdzil (J.B.), detonation (condensed phase), explosions, thermal explosions, *6890*
Bea (R.G.), offshore structures, reliability analysis, safety, wave loads, *6535*
Beacher (B.), coal, combustion products, particulate flow, three dimensional flow, trajectories, turbomachinery, Tabakoff (W.), (et al.), *7889*
beaches, ocean waves, shallow water, Guza (R.T.), Thorton (E.B.), *977*
- coastal engineering, currents, ocean waves, sediment transport, Horikawa (K.), *4578*
- currents, surface waves, Kirby (J.T.) Jr., Dalrymple (R.A.), (et al.), *4853*
- bottom irregularities, coastal engineering, piers, sediment transport, Hashimoto (H.), Uda (T.-A.), *5393*
- coasts, erosion, Mizumura (K.), Shiraishi (N.), *5916*
- breakers, surf, surface waves, Johns (B.), Jefferson (R.J.), *9928*
- bars, bottom irregularities, drag, sediment transport, Holman (R.A.), Bowen (A.J.), *10400*
- gravity waves (breaking), nonlinear analysis, Kirkgoz (M.S.), *11591*
- breakers, surface waves, Halliwell (A.R.), Machen (P.C.), *12072*

beam columns, columns (variable cross section), probability theory, safety, Frangopol (D.), Nguyen Dang Hung, *335*
- combined loading, Cheong-Siat-Moy (F.), Downs (T.), *336*
- buckling, Parnes (R.), *337*
- structural stability, viscoelastic materials, Madan (V.P.), *357*
- approximation methods, eigenvalue problems, Ruge (P.), *1245*
- postbuckling behavior, tubes, Supple (W.J.), Collins (I.), *1246*
- framed structures, structural stability, Garcia (G.), *1247*
- beams (thin section), collapse, tubes, Graves Smith (T.R.), Sridharan (S.), *1248*
- buried structures, connections, discontinuities, underground, Brockenbrough (R.L.), Frost (R.W.), (et al.), *1435*
- elastic behavior, elastica, large displacement, Ivanov (B.P.), Ilyukhin (A.A.), *2262*
- beams (variable cross section), buckling, structural stability, Komkov (V.), *2288*
- beams, design criteria, floors, Kitipornchai (S.), Trahair (N.S.), *2293*
- beams (variable cross section), structural stability, Horne (M.R.), Shakir-Khalil (H.), (et al.), *2296*
- finite element methods, frames, Ioannides (S.A.), Tarpy (T.S.) Jr., *2300*
- buckling (experimental), postbuckling behavior, Di Carlo (A.), Pignataro (M.), (et al.), *3321*
- buckling, end effects, imperfections, Chen (W.F.), *3324*
- buckling (plastic), structural optimization, Amari (M.), Okumura (A.), *3325*
- lateral stability, Ojalvo (M.), *3328*
- imperfections, prestrained structures, structural stability, Pavlovic (M.N.), Stevens (L.K.), *3329*
- buckling (torsional), lateral stability, Hancock (G.J.), Bradford (M.A.), (et al.), *3331*
- beams (cantilever), buckling, shear loading, Zalka (K.), *3333*
- buckling (plastic), dynamic stability, plastic behavior, Lepik (U.), *3340*
- beams (thin section), beams (variable cross section), buckling (torsional), postbuckling behavior, Szymczak (C.), *4391*
- beams (variable cross section), structural stability, Kruchoski (B.L.), Leonard (J.W.), *4393*
- buckling, elastic foundations, Teodorescu (P.P.), *4394*
- buckling (plastic), matrix methods, Oliveto (G.), *4400*
- bending, design (optimum), optimization, Karihaloo (B.L.), Parbery (R.D.), *4523*
- design (optimum), sandwich construction, Parbery (R.D.), Karihaloo (B.L.), *4528*
- bending, reinforced concrete, Solanki (H.T.), *5147*
- critical load, Wang (C.-Y.), Drachman (B.), *5172*
- rotating bodies, structural optimization, Adali (S.), *5173*
- beams (variable cross section), buckling (plastic), buckling (torsional), flanges, frames, Lee (G.C.), Hsu (T.L.), *5174*
- beams (variable cross section), buckling (variable section), finite difference methods, Iremonger (M.J.), *5175*
- compression, second order analysis, structural stability, Chattoraj (D.), Bose (S.K.), *5177*
- buckling, buckling (torsional), torsion, Cuk (P.E.), Trahair (N.S.), *6246*
- beams (flexural), buckling (torsional), Chen (S.-F.), *6247*
- design (minimum weight), simply supported structures, Karihaloo (B.L.), *7597*
- cylindrical bodies, elasticity (nonlinear), elasticity (three dimensional), Mussev (D.A.), *9291*
- beams, connections, Chen (W.F.), Patel (K.V.), *10139*
- beams (thin section), buckling, Bradford (M.A.), Trahair (N.S.), *11119*

beam plasma interactions, design, helium, injectors, nuclear fusion, Blum (A.S.), Barr (W.L.), (et al.), *6868*
beams, error, finite element techniques, mathematical methods, variational methods, Thomas (G.), *81*
- finite element techniques, mathematical models, Barrett (D.), Soler (A.), *89*
- control, convection, distributed parameters, modal control, observability, phase locked loops, Balas (M.J.), *203*
- shear stress, Zaslavsky (A.), *296*
- buckling, frames, hinged bodies, postbuckling behavior, Pignataro (M.), Rizzi (N.), (et al.), *343*
- mathematical methods, random excitation, vibration (random), Wedig (W.), *351*
- dynamic response, vibration, Fossman (R.), Sorensen (A.) Jr., *365*
- fatigue, steel, textiles, welded structures, Bardell (G.R.), Kulak (G.L.), *495*
- dynamic response, impact, nonlinear structures, transient loading, Meredith (D.), Morman (K.N.) Jr., (et al.), *514*
- bending, lateral stability, twisting, Warnick (W.L.), Walston (W.H.) Jr., *1218*
- euler equations, loads, Tahiani (C.), Srivastava (N.K.), *1219*
- dynamic response, shock absorbers, Bratt (J.F.), *1273*
- elastic foundations, railroads, vibration (free), Richard (J.), *1274*
- shear strength, weibull statistics, wood structures, Liu (J.Y.), *1433*
- finite difference methods, structural analysis, Jay (B.), *1445*
- finite element methods, flexible bodies, optimal control, Schaechter (D.B.), *2123*
- bonded joints, stress analysis, wood, Marchand (G.E.), *2251*
- beam columns, design criteria, floors, Kitipornchai (S.), Trahair (N.S.), *2293*
- elastic foundations, structural stability, Toscano (R.), Maceri (A.), *2295*
- dynamic response, vibration (nonlinear), Watanabe (T.), *2315*
- distributed parameters, dynamic analysis, vibration isolation, Wauer (J.), *2357*
- fatigue, fibers, reinforced concrete, Korneling (H.A.), *2521*
- deflections, deformation, impulsive loading, Symonds (P.S.), *2525*
- vibration, waves, Pesko (F.), *2932*
- boundary conditions, Thomas (G.), *3287*
- dynamic analysis, ponding, roofs, vibration (free), Mansouri (A.H.), Chinn (J.), *3290*
- floors, joints, spliced joints, wood structures, Soltis (L.A.), *3297*
- buckling, columns, elastic foundations, Williams (F.W.), *3326*
- bending, eigenvalues, modal analysis, vibration (free), Zarek (J.H.B.), Gibbs (B.M.), *3352*
- transient effects, vibration (forced), Hirano (Y.), Nagaya (K.), *3353*
- dynamic response, geometric nonlinearities, vibration (forced), Masri (S.F.), Mariamy (Y.A.), (et al.), *3355*
- rotating bodies, vibration (free), Takeyama (H.), *3373*
- elastoplasticity, plates, Kamtekar (A.G.), *3525*
- bonded joints, laminates, stiffness, strength, wood structures, Marx (C.M.), Moody (R.C.), *3528*
- deflections, floors, stiffness, wood structures, Mccutcheon (W.J.), Vanderbilt (M.D.), (et al.), *3554*
- bolted joints, experimental mechanics, stress analysis, structural elements, Krishnamurthy (N.), *3581*
- decay, reinforced concrete, shear strength, Scribner (C.F.), Wight (J.K.), *4038*
- holes, stress concentration, Mazilu (P.), Ieremia (M.), (et al.), *4201*
- contact problems, creep, elastic foundations, Uvarov (B.V.), *4361*
- bending, reinforced concrete, shear loading, torsion, Rajagopalan (K.S.), *4362*
- dynamic response, vibration (free), Westermo (B.D.), *4410*
- eigenvalues, vibration, Levinson (M.), *4411*
- random excitation, vibration (random), Davies (H.G.), Wahab (M.A.), *4412*
- approximations, rotating bodies, vibration, Hodges (D.H.), *4414*
- dynamic analysis, impulsive loading, vibration (forced), Levin (E.M.), Pankova (N.V.), *4417*
- dynamic stability, vibration (forced), Guzev (V.V.), Nagaev (R.F.), *4419*
- dynamic properties, vibration (free), Sundara Raja Iyengar (K.T.), Raman (P.V.), *4420*
- approximation methods, vibration (free), Mohsin (M.E.), Sadek (E.A.), *4427*
- bending, cyclic loading, residual stresses, strain measurement, Troshchenko (V.T.), Zhabko (N.I.), *4512*
- prestressed concrete, stress concentration, Ficker (M.), *4535*
- continuum mechanics, elasticity, shells, solid mechanics, Reismann (H.), Pawlik (P.S.), *5069, book*
- elasticity (linear), solid mechanics, torsion, Singh (P.N.), Jha (P.K.), *5070, book*
- contact problems, moving loads, Adams (G.G.), Manor (H.), *5143*
- beams (variable cross section), finite element methods, Ciardullo (S.W.), Durocher (L.L.), (et al.), *5144*
- moving loads, Jezequel (L.), *5150*
- large displacement, nonlinear analysis, Bufler (H.), *5152*
- frequency response, vibration (forced), Edstrom (C.R.), *5198*
- galerkin method, vibration (nonlinear), Yamamoto (Y.), Yasuda (K.), (et al.), *5201*
- damping, structural response, vibration (free), Narayanan (S.), Verma (J.P.), (et al.), *5203*
- dynamic stresses, flexural waves, vibration, Hirano (Y.), Nagaya (K.), (et al.), *5204*
- vibration (forced), wave equations, Dixit (L.A.), *5206*
- finite element methods, rotating bodies, vibration (free), Hodges (D.H.), Rutkowski (M.J.), *5213*
- bending, cracks, stress intensity factor, Panko (I.N.), Yakovchik (V.A.), *5299*
- deflections, shakedown structures, Tin Loi (F.), *5340*
- dynamic behavior, reinforced concrete, stiffness, Johns (K.C.), Belanger (M.D.), *5351*

- ductility, multistory frames, seismic loading, Mukudai (Y.), Matsuo (A.), *5892*
- bending, haar functions, plates, stress analysis, Vasarhelyi (A.), *6092*
- finite difference methods, membranes, mesh generation, plates (folded), Mohr (G.A.), *6105*
- integration, mathematical methods, Becker (O.), *6214*
- columns, girders (plate), structural stability, Bjorhovde (R.), *6245*
- friction, stability theory, vibration (parametric), Zajaczkowski (J.), *6279*
- cements, composite materials, fracture mechanics, material testing, Visalvanich (K.), Naaman (A.E.), *6439*
- brittle fracture, failure, probability, weibull statistics, Kittl (P.), Camilo (G.M.), *6443*
- experimental results, fatigue, stiffened structures, Korashy (M.), Varga (J.), *6471*
- boundary conditions, design (optimum), photoelasticity, plates (holed), slots, Durelli (A.J.), Rajaiah (K.), *6504*
- design (optimum), distributed parameters, impulsive loading, inelasticity, structural support, Lepik (U.), *6508*
- grooves, reinforced concrete, strength, torsion, Pandit (G.S.), Gupta (S.P.), *6519*
- deformation (plastic), dynamic loads, materials properties, reinforced concrete, Popov (N.N.), Rastorguev (B.S.), (et al.), *6521*
- frequencies, vibration (free), Hutchinson (J.R.), *7381*
- dynamic response, elastic behavior, seismic loading, Neubert (V.H.), Rangaiah (V.P.), *7383*
- elastic foundations, transient effects, vibration (torsional), Wada (H.), *7410*
- axial loading, design (optimum), reinforced concrete, Melchers (R.E.), *7596*
- elastic foundations, plates, soil structure interaction, Wolfer (K.-H.), *7612*
- bellows, design, mechanical design, plates, Chand (S.), Garg (S.B.L.), *7623*
- stiffness matrix, wood structures, Kiener (G.), *8228*
- distributed systems, finite element techniques, lumped systems, Surana (K.S.), *8230*
- dynamic response, vibration isolation, Davidson (P.B.), Vance (O.L.), *8292*
- dynamic behavior, galerkin method, vibration (nonlinear), Vaughan (N.D.), Adams (R.D.), *8293*
- dynamic response, flexure, thin walled structures, vibration (forced), Voveris (A.V.), Kalinin (V.S.), *8296*
- dynamic analysis, plates (nonhomogeneous), wave engines, Reismann (H.), Yamaguchi (T.), *8297*
- plates, vibration (free), Chikhladze (E.D.), Kislov (A.G.), *8298*
- dynamic stresses, elastic foundations, vibration (free), Dresig (K.F.H.), Labes (M.), *8299*
- acoustic measurements, acoustoelasticity, residual stresses, rolling, transducers, Fukuoka (H.), Toda (H.), (et al.), *8428*
- deflections, elastoplasticity, frames, plasticity, yield condition, Bandyszewski (W.), Sawczuk (A.), *8438*
- design (minimum weight), design (optimum), vibration, Karihaloo (B.L.), Parbery (R.D.), *8441*
- reinforced concrete, repeated loading, shear reinforcement, strain, Farghaly (S.A.), *8449*
- finite element techniques, three dimensional formulation, Resende (L.), Doyle (W.S.), *9143*
- bars, end effects, residual stresses, Schilling (C.G.), *9262*
- foundations, moving loads, Kerr (A.D.), *9263*
- buckling (experimental), lateral stability, statistical design, welded joints, Fukumoto (Y.), Itoh (Y.), *9285*
- dynamic response, elastic foundations, moving loads, vibration (free), Apaydin (T.A.), *9328*
- axial loading, bending, columns, strain gages, strain measurement, Tuttle (M.E.), *9425*
- hinged bodies, optimization, structural optimization, Mikhailishchev (V.Ya.), *9438*
- bending, elastoplasticity, reinforced concrete, shear, Nakazawa (T.), Ohta (T.), *9444*
- seismic loading, Ly (B.L.), *9920*
- differential equations (partial), evolution equations, periodic orbits, vibration, Holmes (P.), Marsden (J.), *10024*
- deformable bodies, kinematics, Keler (M.L.), Beran (M.A.), *10138*
- beam columns, connections, Chen (W.F.), Patel (K.V.), *10139*
- beams (heavy), large displacement, Watson (L.T.), Wang (C.Y.), *10140*
- elastic behavior, solids (fluid immersed), vibration (random), Dinca (D.), *10194*
- dynamic properties, rotary inertia, shear, vibration (free), Doyle (J.F.), *10199*
- composite structures, design (minimum weight), design (optimum), reinforced bodies, structural stability, vibration, Rikards (R.B.), *10348*
- reinforced concrete, shear strength, ultimate strength, Megahid (A.), Maamoun (A.), (et al.), *10358*
- reinforced concrete, shear, shear stress, Batchelor (B. De V.), Kwun (M.), *10359*
- energy dissipation, failure, reinforced concrete, Okada (K.), Koyanagi (W.), (et al.), *10360*
- crack initiation, crack propagation, cracking, prestressed concrete, Labib (F.), Edwards (A.D.), *10361*
- deformation, reinforced concrete, Christiansen (K.), *11327*
- sound generation, vibration, Rzhevkin (S.N.), *11950*

beams (anisotropic), beams (flexural), beams (torsional), finite strain, plates (anisotropic), Reissner (E.), *4365*

- bars, beams (variable cross section), torsion, Gawecki (A.), Boruszak (A.), *10137*

beams (box), bridges (box girder), finite element methods, Mikkola (M.J.), Paavola (J.), *1220*

- girders, torsion, wood structures, Heimeshoff (B.), *7316*
- bending, girders (plate), shear loading, Evans (H.R.), Shanmugam (N.E.), *7320*
- eccentric loading, plates, ultimate strength, Rerkshanandana (N.), Usami (T.), (et al.), *7352*
- girders (plate), shear lag, Kuzmanovic (B.O.), *11110*

beams (cantilever), control, modal control, vibration, vibration (flow induced), Horikawa (H.), Dowell (E.H.), (et al.), *228*

- bonding, Prakash (B.G.), *297*
- large displacement, nonlinear theory, Lau (J.H.), *298*
- flexure, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), *366*
- large displacement, Wang (C.Y.), *2261*
- beams (composite), buckling, buckling, holes, Coull (A.), Alvarez (M.C.), *2292*
- beams (composite), strain gages, strain measurement, Lakin (D.F.), *2483*
- flutter, forced systems, Kounadis (A.N.), Katsikadelis (J.T.), *2911*
- buckling, lateral stability, shear loading, Reissner (E.), *3330*
- beams (thin section), buckling (torsional), lateral stability, Zalka (K.), *3332*
- beam columns, buckling, shear loading, Zalka (K.), *3333*
- eigenvalues, vibration (free), Akesson (B.A.), Friberg (P.O.), *3354*
- eigenvalues, vibration (forced), Dhole (A.), *3359*
- damping, fibers, laminates, reinforced bodies, Plunkett (R.), *4357*
- experimental results, ice mechanics, Svec (O.J.), Frederking (R.M.W.), *5145*
- beams (variable cross section), nonconservative systems, structural stability, Kar (R.C.), *5176*
- frequency response, vibration (free), Kumar (D.), Kulkarni (S.V.), (et al.), *5197*
- frequency response, vibration (torsional), Subrahmanyam (K.B.), Kulkarni (S.V.), *5200*
- dynamic analysis, spinning bodies, vibration, Utku (S.), El-Essawi (M.), (et al.), *5202*
- damping, experimental mechanics, vibration (free), Kerlin (R.L.), *6288*
- damping, dynamic stresses, vibration (forced), Kume (Y.), Hashimoto (F.), (et al.), *7375*
- influence matrix, modal control, simply supported structures, structural analysis, time domain techniques, Vilnay (O.), *7592*
- beams (variable cross section), design (optimum), dynamic programming, Hamada (M.), Seguchi (Y.), (et al.), *8444*
- airfoils, flexure, torsion, Wang (K.-F.), *9259*
- combined loading, large displacement, Lau (J.H.), *9261*
- large displacement, nonlinear materials, Lewis (G.), Monasa (F.), *10141*
- random excitation, vibration (random), Gasparini (D.A.), Debchaudhury (A.), (et al.), *10201*
- bending, blades, rotary inertia, shear, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- measurements (dynamic), strain gages, tension, transducers (load), Haggstrom (R.P.), *10314*
- beams (elastic), design (optimum), Blachut (J.), *10344*

beams (composite), biharmonic equation, curved bars, orthotropic materials, Von Roth (W.), Epple (A.), *2248*

- cracking, reinforced concrete, shrinkage, slabs, Johnson (R.P.), Allison (R.W.), *2265*
- beams (cantilever), buckling, buckling, holes, Coull (A.), Alvarez (M.C.), *2292*
- beams (cantilever), strain gages, strain measurement, Lakin (D.F.), *2483*
- creep, reinforced concrete, viscoelasticity, Lazic (V.B.), Lazic (J.D.), *3251*
- beams (variable cross section), concrete, fracture mechanics, stress analysis, web openings, Swartz (S.E.), Eliufoo (K.S.), *3294*
- concrete, slabs, steel, Pyle (J.C.), *3315*
- bending, design (optimum), shear strength, ultimate strength, Farkas (J.), *4526*
- composite materials, finite element techniques, Hirst (M.J.S.), Yeo (M.F.), *8237*

beams (continuous), design (minimum weight), girders, Azad (A.K.), *1426*

- dynamic behavior, moving loads, Hayashikawa (T.), Watanabe (N.), *3358*
- buckling, elastic foundations, finite element techniques, framed structures, shafts, Bagci (C.), *8261*

beams (curved), beams (prestressed), elastic waves, Farshad (M.), *396*

- nonlinear analysis, Noor (A.K.), Peters (J.M.), *1225*
- bending (elastic), elastica, elasticity (nonlinear), rods, Fosdick (R.L.), James (R.D.), *2216*
- beams (plastic), ultimate strength, Fukumoto (Y.), Nishida (S.), *2263*
- eigenvalues, vibration (forced), Irie (T.), Yamada (G.), (et al.), *3361*
- beams (open section), beams (thin section), design (minimum weight), Petukhov (L.V.), *4363*
- nonlinear analysis, Rosen (A.), Abramovich (H.), *4364*
- nonlinear structures, vibration (free), Reddy (J.N.), Singh (I.R.), *4413*
- statics, Panayotounakos (D.E.), Theocaris (P.S.), *5153*
- beams (elastic), buckling, columns, postbuckling behavior, James (R.D.), *6243*
- finite element techniques, isoparametric elements, plates (stiffened), shells (thick), stiffened structures, Jirousek (J.), *7212*
- deformation (finite), springs, Reissner (E.), *7324*
- curved elements, digital simulation, forming, shells (shallow), Stolarski (H.), Belytschko (T.), *8142*
- arches, buckling (nonlinear), rings, Batoz (J.-L.), *11120*

- dynamic analysis, rotary inertia, shear, vibration (free), Suzuki (K.), Takahashi (S.), *11148*

beams (elastic), dynamic response, vibration (nonlinear), Ichikawa (Y.H.), Konno (K.), (et al.), *2328*
- elastic foundations, elasticity (nonlinear), Beaufait (F.W.), Hoadley (P.W.), *6209*
- deformation (finite), frames, large displacement, Milner (H.R.), *6213*
- beams (curved), buckling, columns, postbuckling behavior, James (R.D.), *6243*
- approximation methods, boundary value problems, elasticity (linear), plates, Karpov (N.I.), *7329*
- beams (thin section), stability, stress analysis, Shirmanov (V.S.), *7356*
- beams (cantilever), design (optimum), Blachut (J.), *10344*

beams (flexural), couple stresses, cylindrical bodies, micropolar media, Craciun (I.), *1057*
- dynamic analysis, shear loading, vibration (nonlinear), Nguyen Xuan Hung, *1263*
- bending (elastic), elasticity (linear), shear, shear centre, Gyarmathy (K.), *2221*
- dynamic response, pumps, vibration (forced), Stecco (S.S.), Janigro (A.), *2358*
- cylindrical bodies, elasticity (three dimensional), Kasano (H.), Oshima (H.), (et al.), *3230*
- composite structures, reinforced concrete, Taylor (R.), Al-Najmi (A.Q.S.), *3531*
- beams (anisotropic), beams (torsional), finite strain, plates (anisotropic), Reissner (E.), *4365*
- elasticity (nonlinear), electrical analogies, Ovsyanko (V.M.), *6206*
- dynamic behavior, moving loads, Raske (T.F.), *6207*
- beam columns, buckling (torsional), Chen (S.-F.), *6247*
- bending, low temperature, reinforced concrete, Goto (Y.), Miura (T.), *6955*
- concrete, cyclic loading, reinforced concrete, Thompson (K.J.), Park (R.), *7290*
- cyclic loading, flexural loading, plastic behavior, Lyubarov (B.I.), *7319*
- beams (plastic), deformation (finite), Gurkok (A.), Hopkins (H.G.), *7323*
- control, space vehicle structures, structural analysis, Schaechter (D.B.), *7413*
- deformation, elastoplasticity, shakedown structures, variational methods, Mazzarella (C.), *8232*
- beams (thin section), nonlinear materials, Szuladzinski (G.), *8233*
- rotating bodies, vibration (free), Bauer (H.F.), *9306*
- large displacement, nonlinear analysis, springs, Watson (L.T.), Wang (C.Y.), *10143*

beams (intersecting), elastic waves, finite element techniques, Dockerty (G.J.), Leech (C.M.), *5235*
- elastic waves, impact, joints, Desmond (T.P.), *6325*

beams (nonhomogeneous), fredholm equations, inclusions, tension, Stadnik (M.M.), Silovanyuk (V.P.), *6163*

beams (open section), beams (curved), beams (thin section), design (minimum weight), Petukhov (L.V.), *4363*
- beams (thin section), finite element techniques, geometric nonlinearities, space frames, three dimensional formulation, Minozzi (D.), Odorizzi (S.), (et al.), *8153*
- beams (thin section), finite strain, stability, Roberts (T.M.), *8231*
- bending, elastic bodies, elastoplasticity, Ducomet (B.), *9258*

beams (plastic), dynamic behavior, rotary inertia, shear stress, Gomes De Oliveira (J.), Jones (N.), *407*
- beams (curved), ultimate strength, Fukumoto (Y.), Nishida (S.), *2263*
- computing techniques, dynamic analysis, reinforced bodies, Laudiero (F.), *3279*
- bearing capacity, indentation, large displacement, Low (H.Y.), *3286*
- deformation (finite), large displacement, plastic behavior, Kondo (K.), Pian (T.H.H.), *6212*
- beams (flexural), deformation (finite), Gurkok (A.), Hopkins (H.G.), *7323*

beams (prestressed), bending, shear lag, t-section, Adekola (A.O.), *294*
- beams (curved), elastic waves, Farshad (M.), *396*
- prestressed concrete, shear strength, Rangan (B.V.), *511*
- concrete, fibers, impulsive loading, reinforced concrete, Hughes (B.P.), *1438*
- dynamic behavior, prestressed concrete, Srinivasulu (P.), Sharma (P.C.), *2524*
- design (optimum), effective widths, flanges, Adekola (A.O.), *3284*
- buckling, flexural loading, variational methods, Wauer (J.), *8229*

beams (sandwich), laminated beams, laminates, tension, Gopu (V.K.A.), *302*
- design (optimum), large displacement, plates (nonlinear), shear, Gierlinski (J.), Mroz (Z.), *1223*
- laminates, strength, Foschi (R.O.), Barrett (J.D.), *1224*
- wood structures, Smith (I.), *2259*
- composite materials, fatigue, weibull statistics, wood, Kyanka (G.H.), *3280*
- hamilton principle, vibration (forced), Simkova (O.), Markus (S.), *10222*

beams (thin section), beam columns, collapse, tubes, Graves Smith (T.R.), Sridharan (S.), *1248*
- beams (torsional), De Silva (C.W.), Wormley (D.N.), *2258*
- buckling (local), structural stability, Studnicka (J.), *2290*
- nonlinear theory, Meredith (D.), Witmer (E.A.), *3293*
- beams (cantilever), buckling (torsional), lateral stability, Zalka (K.), *3332*
- beams (curved), beams (open section), design (minimum weight), Petukhov (L.V.), *4363*
- shear loading, shells (cylindrical), thin walled structures, warping, Kholoptsev (V.V.), *4373*
- beam columns, beams (variable cross section), buckling (torsional), postbuckling behavior, Szymczak (C.), *4391*
- thin walled structures, torsion, Takahashi (K.), Mizuno (M.), *6210*
- shear walls, thin walled structures, Coull (A.), Low (C.K.), *6211*
- structural stability, thin walled structures, Chai Hong Yoo, *6248*
- computer programming, elastoplasticity, shells (shallow), Larkin (L.A.), *7217*
- bending (elastic), shells (cylindrical), thin walled structures, Antonenko (E.V.), *7325*
- beams (elastic), stability, stress analysis, Shirmanov (V.S.), *7356*
- beams (open section), finite element techniques, geometric nonlinearities, space frames, three dimensional formulation, Minozzi (D.), Odorizzi (S.), (et al.), *8153*
- beams (open section), finite strain, stability, Roberts (T.M.), *8231*
- beams (flexural), nonlinear materials, Szuladzinski (G.), *8233*
- structural analysis, wind loads, Capurso (M.), *8264*
- buckling, columns, Hancock (G.J.), *10171*
- biaxial loading, buckling, shells (stiffened), Ashour (H.A.), Sobel (L.H.), *10180*
- beam columns, buckling, Bradford (M.A.), Trahair (N.S.), *11119*

beams (timoshenko), elasticity (three dimensional), shear loading, shearing coefficient, Kelkel (K.), *295*
- rotating shafts, vibration (torsional), Nelson (N.D.), *380*
- dynamic effects, elastic foundations, vehicles, winkler foundation, Newton (S.G.), Clark (R.A.), *1460*
- mindlin plates, plates (rectangular), vibration (free), Roufaeil (O.L.), Dawe (D.J.), *2335*
- impedance methods, shock, vibration (forced), Rangaiah (V.P.), Neubert (V.H.), *3360*
- resonance, rotating bodies, vibration (forced), Victor (F.), Ellyin (F.), *4431*
- fracture mechanics, ice mechanics, Huang (N.C.), *5142*
- frequency response, vibration (free), Rao (J.S.), Kulkarni (S.V.), (et al.), *5199*
- damping, vibration (free), Irie (T.), Yamada (G.), (et al.), *6290*
- optimization, vibration (forced), Rikards (R.B.), *7384*
- dynamic response, laplace transform, transient effects, Huntley (E.), Zinober (A.S.I.), *7385*
- finite element techniques, numerical methods, Tessler (A.), Dong (S.B.), *8236*
- dynamic analysis, vibration (free), Bhashyam (G.R.), Prathap (G.), *9304*
- deflections, design, dynamic loads, gear teeth, transmissions, Nagaya (K.), Uematsu (S.), *10372*
- equations of motion, fluid-structure interaction, follower forces, pipe flow, Laithier (B.E.), Paidoussis (M.P.), *11642*

beams (torsional), elastic bodies, rods, torsion, Jenkins (J.T.), *2220*
- beams (thin section), De Silva (C.W.), Wormley (D.N.), *2258*
- torsion, warping, Gay (D.), Boudet (R.), *3289*
- beams (anisotropic), beams (flexural), finite strain, plates (anisotropic), Reissner (E.), *4365*
- reinforced concrete, torsion, ultimate strength, Izumi (M.), *5363*

beams (variable cross section), deflections, matrix methods, Romhanyi (G.), *2254*
- beam columns, buckling, structural stability, Komkov (V.), *2286*
- beam columns, structural stability, Horne (M.R.), Shakir-Khalil (H.), (et al.), *2296*
- beams (composite), concrete, fracture mechanics, stress analysis, web openings, Swartz (S.E.), Eliufoo (K.S.), *3294*
- bending, dynamic analysis, vibration (free), Trapezon (A.G.), *3356*
- beam columns, beams (thin section), buckling (torsional), postbuckling behavior, Szymczak (C.), *4391*
- beam columns, structural stability, Kruchoski (B.L.), Leonard (J.W.), *4393*
- bending, eigenvalues, experimental mechanics, vibration, Vasinyuk (I.M.), Kruk (B.Z.), (et al.), *4415*
- eigenvalues, rotary inertia, stiffness matrix, vibration, To (C.W.S.), *5033*
- beams, finite element methods, Ciardullo (S.W.), Durocher (L.L.), (et al.), *5144*
- bending, Basilievitch (V.), *5148*
- beam columns, buckling (plastic), buckling (torsional), flanges, frames, Lee (G.C.), Hsu (T.L.), *5174*
- beam columns, buckling (variable section), finite difference methods, Iremonger (M.J.), *5175*
- beams (cantilever), nonconservative systems, structural stability, Kar (R.C.), *5178*
- follower forces, structural stability, viscoelastic materials, Kar (R.C.), *6267*
- beams (cantilever), design (optimum), dynamic programming, Hamada (M.), Seguchi (Y.), (et al.), *8444*
- bars, beams (anisotropic), torsion, Gawecki (A.), Boruszak (A.), *10137*

Bean (B.R.), see Greenhut (G.K.), *981*

Beans (E.W.), heat engines, mathematical models, stirling cycles, thermodynamic processes, *10546*

Beards (C.P.), control, dynamic analysis, vibration, *4402, book*

bearing capacity, axial loading, buckling (nonlinear), shells (cylindrical), shells (orthotropic), Steinhardt (O.), Pfeiffer (M.), *318*
- piles, soils, Rollberg (D.), *1326*
- piles, soils, Murff (J.D.), *1327*
- bridges (box girder), imperfections, ultimate strength, Djubek (J.), Kamikova (I.), (et al.), *1446*
- buckling, finite element methods, thin walled structures, ultimate strength, Pettersen (E.), *2506*
- beams (plastic), indentation, large displacement, Low (H.Y.), *3286*
- rotating disks, rotors, thermal effects, Kozlov (I.A.), *3341*

- footings, layered media, soils, Satyanarayana (B.), Garg (R.K.), *3405*
- axial loading, reinforced concrete, ultimate strength, Salat (G.), *3535*
- composite materials, plastics, shells (cylindrical), thermal effects, Tretyachenko (G.N.), Dzyuba (V.S.), (et al.), *6265*
- deflections, falsework, scaffolding, structural response, ultimate strength, Holmes (M.), Hindson (D.), *8455*
- bearings (gas lubricated), loads, lubricants (gas), lubrication (hydrodynamic), surface flaws, Balasanyan (V.S.), *9975*
- bearings (roller), computer aided design, design, loads, Dziurski (A.), Kania (L.), (et al.), *9977*
- limit analysis, plastic behavior, shells (of revolution), shells (stiffened), Dekhtyar (A.S.), *10152*
- collapse, foundations, plastic behavior, slabs, Dolinski (K.), Sawczuk (A.), *10176*

bearings, adhesion, friction, lubrication, traction, Dowson (D.) eds., Taylor (C.M.), (et al.), *1924, book*

- contact stresses, cylindrical bodies, rings, Kosova (N.V.), Atopov (V.I.), (et al.), *2223*
- damping, dynamic stability, rotors, Lund (J.W.), *3053*
- elasticity (nonlinear), elastomers, loads, springs, Lehmann (D.), *3571*
- bearings (hydrodynamic), bearings (hydrostatic), lubricants, lubrication, Gross (W.A.), Matsch (L.A.), (et al.), *4110, book*
- machine design, spindles, stiffness, Shuzi (Y.), *4561*
- friction, lubrication, machine design, wear, Cameron (A.), Ettles (C.M.Mc.), *7078, book*
- inertia, lubrication (hydrostatic), viscoelastic fluids, Rout (B.), Sinha Roy (J.), *7102*
- damping, earthquake resistant structures, rubber, Derham (C.J.), Thomas (A.G.), *8016*
- dynamics, rotors, turbomachinery, Fleming (D.P.), *8068*
- lubricants, machinery, prediction, wear, Godet (M.), *9017*
- damping, flexible bodies, rotors, squeeze films, vibration isolation, Cookson (R.A.), Kossa (S.S.), *11340*

bearings (ball), contact problems, elastoplasticity, spherical bodies, Shenderov (I.B.), *1198*

- acoustic measurements, diagnostics, spectral analysis, vibration, vibroacoustics, Cempel (C.), *2480*
- high speed, lubricants (liquid), lubrication, Schuller (F.T.), Signer (H.R.), *3577*
- design, experimental methods, hall effect, Kawakita (K.), Halling (J.), *4113*
- bearings (roller), damping, stiffness, Walford (T.L.H.), Stone (B.J.), *4114*
- experimental methods, film thickness, high speed, lubrication (elastohydrodynamic), Coy (J.J.), Zaretsky (E.V.), *4899*
- eddy currents, hardness, heat treatment, inspection, transducers, Melnikov (I.V.), Savikovskii (L.A.), (et al.), *6491*
- design, springs, stiffness, vibration, Tamura (H.), Tsuda (Y.), *8474*
- fatigue, lubrication (elastohydrodynamic), lubrication (hydrodynamic), rolling contact, Hamrock (B.J.), Dowson (D.), *9032, book*
- bearings (thrust), contact problems, lubrication (boundary), Sen Gupta (S.K.), *10896*

bearings (foil), bearings (gas lubricated), bearings (spherical), reynolds equation, Ono (K.), Mizukawa (M.), *1939*

- bearings (gas lubricated), dynamics, high speed, rotors, Licht (L.), Anderson (W.J.), (et al.), *4905*

bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), stability, Etsion (I.), Green (I.), *1024*

- dynamics, rotors, vibration, Marsh (H.), *1030*
- bearings (journal), lubrication (hydrodynamic), lubrication (hydrostatic), Wadhwa (S.S.), Sinhasan (R.), (et al.), *1935*
- bearings (journal), lubrication (hydrostatic), surface profiles, Pande (S.S.), Somasundaram (S.), *1936*
- bearings (foil), bearings (spherical), reynolds equation, Ono (K.), Mizukawa (M.), *1939*
- bearings (journal), lubrication (hydrostatic), reynolds equation, stiffness, Kamala (V.), *1943*
- bearings (liquid lubricated), bearings (thrust), lubrication (hydrostatic), stiffness, Nakahara (T.), Kurisu (T.), (et al.), *4896*
- bearings (foil), dynamics, high speed, rotors, Licht (L.), Anderson (W.J.), (et al.), *4905*
- bearings (slider), film thickness, finite element methods, reynolds equation, Mitsuya (Y.), *5983*
- bearings (journal), finite difference methods, lubrication (hydrostatic), reynolds equation, Pande (S.S.), Somasundaram (S.), *7098*
- bearings (thrust), lubrication (hydrostatic), Chen (N.N.S.), Ho (K.W.), *7099*
- bearings (journal), dynamic stability, lubrication (hydrostatic), rotors, Gudskaya (E.G.), *7101*
- bearings (thrust), lubricants (gas), lubrication (hydrostatic), shock waves, Boffey (D.A.), Wilson (P.M.), *8056*
- bearings (journal), dynamic behavior, lubrication (hydrostatic), whirling shafts, Mori (A.), Aoyama (K.), (et al.), *8066*
- bearings (journal), dynamic behavior, lubrication (hydrostatic), perturbation methods, Murata (S.), Miyake (Y.), (et al.), *8067*
- bearings (journal), bearings (porous metal), lubricants (gas), lubrication (hydrostatic), Rao (N.S.), *9954*
- bearings (thrust), design, reynolds equation, Safar (Z.S.), *9957*
- bearings (journal), laminar flow, reynolds number, thermal effects, Fijalkowski (S.), *9965*
- bearings (thrust), lubricants (gas), reynolds equation, vibration, Wernerowski (K.), *9966*
- deformation, diaphragms, pressure distribution, Wernerowski (K.), *9967*
- bearings (thrust), design (optimum), lubrication (hydrostatic), optimization, Shevchenko (A.V.), Fedotov (V.A.), (et al.), *9968*
- discharges, loads, lubricants (gas), lubrication (hydrostatic), Shatokhin (S.N.), Kodnyanko (V.A.), *9969*
- bearings (journal), deformation, lubricants (gas), lubrication (hydrodynamic), Grudskaya (E.G.), Zablotskii (N.D.), *9971*
- bearings (journal), lubricants (gas), lubrication (hydrodynamic), Bezrodnyi (V.G.), *9972*
- balancing, bearings (spherical), lubricants (gas), rotors, Karpov (V.S.), Prokulevich (L.A.), *9973*
- balancing, bearings (spherical), lubricants (gas), Lyusin (V.M.), Smirnov (B.I.), (et al.), *9974*
- bearing capacity, loads, lubricants (gas), lubrication (hydrodynamic), surface flaws, Balasanyan (V.S.), *9975*
- bearings (spherical), lubricants (gas), optimization, Emelyanova (L.S.), *9976*
- bearings (porous metal), bearings (thrust), lubrication (hydrostatic), stiffness, Singh (K.C.), Rao (N.S.), *10887*

bearings (hydrodynamic), bearings (journal), lubrication (hydrodynamic), reynolds equation, Banerjee (M.B.), Gupta (R.S.), (et al.), *1012*

- bearings, bearings (hydrostatic), lubricants, lubrication, Gross (W.A.), Matsch (L.A.), (et al.), *4110, book*
- dynamic properties, finite element methods, reynolds equation, rotors, Bireml baut (Y.), Peigney (J.), *5997*
- couette flow, friction (solid fluid), torque, viscosity, Pascovici (M.D.), *9025*
- algorithms, cavitation, lubrication (hydrodynamic), Elrod (H.G.), *10891*
- bearings (conical), friction (solid fluid), lubrication (hydrodynamic), oil films, stiffness, Murthy (T.S.R.), *12094*

bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1013*

- film thickness, lubrication (hydrostatic), non newtonian flow, thermal effects, El-Kayar (A.), Salem (E.A.), (et al.), *1014*
- film thickness, lubrication (hydrostatic), non newtonian flow, oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1015*
- hydrostatics, screws, Bassani (R.), *1018*
- bearings, bearings (hydrodynamic), lubricants, lubrication, Gross (W.A.), Matsch (L.A.), (et al.), *4110, book*
- finite element methods, lubrication (hydrostatic), reynolds equation, Belousov (A.I.), Goryunov (L.V.), (et al.), *9960*
- friction, leaks, piston driven flow, positive displacement pumps, Bakhin (I.I.), (et al.), *11752*
- laminar flow, lubrication (hydrostatic), optimization, stiffness, Debailleux (C.), Flamme (J.M.), *12095*

bearings (journal), bearings (hydrodynamic), lubrication (hydrodynamic), reynolds equation, Banerjee (M.B.), Gupta (R.S.), (et al.), *1012*

- laminar flow, lubrication (hydrodynamic), Hinton (R.E.), Roberts (J.B.), *1019*
- additives, graphite, polymers, wear, Korshak (V.V.), Gribova (I.A.), (et al.), *1023*
- bearings (magnetic), ferrofluids, magneto fluid dynamics, non newtonian flow, Wierzcholski (K.), *1026*
- lubricants (liquid), machine design, pumps, rotors, Ruddy (A.B.), *1028*
- bearings (gas lubricated), lubrication (hydrodynamic), lubrication (hydrostatic), Wadhwa (S.S.), Sinhasan (R.), (et al.), *1935*
- bearings (gas lubricated), lubrication (hydrostatic), surface profiles, Pande (S.S.), Somasundaram (S.), *1936*
- lubrication (hydrodynamic), oil films, vibration, Parkins (D.W.), *1937*
- non newtonian flow, polymers, turbulence, Fukayama (H.), Tanaka (M.), (et al.), *1938*
- bearings (gas lubricated), lubrication (hydrostatic), reynolds equation, stiffness, Kamala (V.), *1943*
- bearings (roller), friction, gear trains, transmissions (planetary), Jarchow (F.), Theissen (J.), *2566*
- finite element methods, reynolds equation, stability, Manfrida (G.), Martelli (F.), *2567*
- galerkin method, lubrication (hydrodynamic), reynolds equation, Schmidt (J.), *3044*
- flexible bodies, lubrication (hydrodynamic), rotors, Leader (M.E.), Flack (R.D.), (et al.), *3047*
- lubrication (hydrodynamic), rotating shafts, turbomachinery, vibration, Ruddy (A.V.), Summers-Smith (D.), *3051*
- damping, lubrication (hydrodynamic), surface profiles, whirling shafts, Garner (D.R.), Lee (C.S.), (et al.), *3052*
- lubrication (hydrodynamic), reynolds equation (lubrication), Knoll (G.), Peeken (H.), (et al.), *3146*
- lubrication (hydrodynamic), thermal effects, turbulent flow, Wada (S.), Hashimoto (H.), (et al.), *4109*
- bearings (tilted pad), damping, dynamic behavior, vibration, Springer (H.), *4111*
- chatter, elastomers, vibration, water, Krauter (A.I.), *4890*

- bearings (tilted pad), dynamic stability, perturbation methods, Allaire (P.E.), Parsell (J.K.), (et al.), *4901*
- lubricants (liquid), lubrication (hydrodynamic), Michau (B.), *4902*
- design, design (optimum), lubrication (hydrodynamic), lubrication (hydrostatic), Koshal (D.), Rowe (W.B.), *5979*
- dynamic behavior, dynamic stability, lubrication (hydrodynamic), Li (C.-H.), Rohde (S.M.), *5981*
- impedance methods, mobility, Moes (H.), Bosma (R.), *5994*
- lubricants (liquid), lubrication (hydrodynamic), reynolds equation, whirling shafts, Murata (S.), Miyake (Y.), (et al.), *5995*
- magnetic fluids, magneto fluid dynamics, roughness, surfaces, Wierzcholski (K.), *6000*
- lubrication (hydrodynamic), turbulent flow, Kumar (V.), *7092*
- finite element methods, friction (solid fluid), lubrication (hydrodynamic), non newtonian flow, Tayal (S.P.), Sinhasan (R.), (et al.), *7093*
- bearings (gas lubricated), finite difference methods, lubrication (hydrostatic), reynolds equation, Pande (S.S.), Somasundaram (S.), *7098*
- bearings (gas lubricated), dynamic stability, lubrication (hydrostatic), rotors, Gudskaya (E.G.), *7101*
- lubricants (liquid), lubrication (hydrodynamic), Kumar (V.), *8060*
- bearings (gas lubricated), dynamic behavior, lubrication (hydrostatic), whirling shafts, Mori (A.), Aoyama (K.), (et al.), *8066*
- bearings (gas lubricated), dynamic behavior, lubrication (hydrostatic), perturbation methods, Murata (S.), Miyake (Y.), (et al.), *8067*
- damping, lubrication (hydrodynamic), rotors, stiffness, vibration (self excited), Michalopoulos (D.), Dimarogonas (A.), *9020*
- peclet number, reynolds equation, temperature, viscosity, Smith (R.N.), Tichy (J.A.), *9039*
- cavitation, lubrication (hydrodynamic), numerical methods, reynolds equation, Meyer (G.H.), *9045*
- lubricants (liquid), lubrication (hydrodynamic), power law fluids, squeeze films, viscosity, Shukla (J.B.), Prasad (K.R.), (et al.), *9952*
- bearings (gas lubricated), bearings (porous metal), lubricants (gas), lubrication (hydrostatic), Rao (N.S.), *9954*
- damping, squeeze films, vibration, viscoelasticity, Tichy (J.A.), *9955*
- cavitation, lubrication (hydrodynamic), seals, squeeze films, Pan (C.H.T.), Ibrahim (R.A.), *9959*
- additives, lubrication (hydrodynamic), micropolar media, reynolds equation, Singh (C.), Sinha (P.), *9963*
- computer aided design, finite difference methods, lubrication (hydrodynamic), reynolds equation, thermal effects, Cowking (E.W.), *9964*
- bearings (gas lubricated), laminar flow, reynolds number, thermal effects, Fijalkowski (S.), *9965*
- friction (solid fluid), lubricants (liquid), lubrication (hydrodynamic), mathematical models, Usov (P.P.), Toder (I.A.), (et al.), *9970*
- bearings (gas lubricated), deformation, lubricants (gas), lubrication (hydrodynamic), Grudskaya (E.G.), Zablotskii (N.D.), *9971*
- bearings (gas lubricated), lubricants (gas), lubrication (hydrodynamic), Bezrodnyi (V.G.), *9972*
- dynamic response, rotating shafts, Prabhu (B.S.), Rao (B.V.A.), *10218*
- bearings (tilted pad), lubrication (hydrodynamic), whirling shafts, Malik (M.), Sinhasan (R.), (et al.), *10376*
- design, lubrication (hydrodynamic), optimization, Mokhtar (M.O.A.), *10377*
- lubrication (hydrodynamic), non newtonian flow, squeeze films, Singh (C.), Sinha (P.), *10890*
- damping, turbomachinery, vibration (forced), vibration isolation, Beskletnyi (M.E.), Igumentsev (E.A.), *11147*

bearings (liquid lubricated), lubricants (liquid), machine design, reliability design, Bushe (N.A.), Zakharov (S.M.), *1020*

- dynamics, rotors, vibration, Dowson (D.), Taylor (C.M.), *1029*
- bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), stiffness, Nakahara (T.), Kurisu (T.), (et al.), *4896*
- friction, lubrication (boundary), wear, Habig (K.-H.), Broszeit (E.), (et al.), *7084*
- dynamic analysis, experimental mechanics, rotating bodies, stability theory, Iwatsubo (T.), Kawai (R.), (et al.), *11144*

bearings (magnetic), bearings (journal), ferrofluids, magneto fluid dynamics, non newtonian flow, Wierzcholski (K.), *1026*

- bearings (thrust), dynamics, rotors, Ulbrich (H.), Schweitzer (G.), (et al.), *4115*
- control, servomechanisms, Habermann (H.), Liard (G.), *4903*

bearings (porous metal), bearings (thrust), inertia, lubrication (hydrostatic), magneto fluid dynamics, Zaheeruddin (K.), *1025*

- bearings (thrust), lubrication (hydrodynamic), non newtonian flow, temperature, Gorla (R.S.R.), *5982*
- electro fluid dynamics, film thickness, magneto fluid dynamics, squeeze films, Gupta (J.L.), Patel (K.C.), (et al.), *7095*
- bearings (thrust), lubrication (hydrostatic), pressure distribution, temperature, viscosity, Yadav (J.S.), Kapur (V.K.), *9030*
- lubrication (hydrodynamic), magneto fluid dynamics, squeeze films, Patel (K.C.), *9044*
- bearings (slider), finite element methods, lubrication (hydrodynamic), Malik (M.), Sinhasan (R.), (et al.), *9953*
- bearings (gas lubricated), bearings (journal), lubricants (gas), lubrication (hydrostatic), Rao (N.S.), *9954*
- bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), stiffness, Singh (K.C.), Rao (N.S.), *10887*
- lubrication (hydrodynamic), roughness, squeeze films, surfaces, Prakash (J.), Tiwari (K.), *10889*

bearings (roller), crack propagation, cracking, failure, x ray techniques, Maeda (K.), Tsushima (N.), (et al.), *2410*

- bearings (journal), friction, gear trains, transmissions (planetary), Jarchow (F.), Theissen (J.), *2566*
- high speed, roller skewing, Nypan (L.J.), *2568*
- bearings (ball), damping, stiffness, Walford (T.L.H.), Stone (B.J.), *4114*
- high speed, lubricants (liquid), lubrication (elastohydrodynamic), Coe (H.H.), Schuller (F.T.), *5998*
- couple stresses, lubrication (elastohydrodynamic), non newtonian flow, rolling contact, Sinha (P.), Singh (C.), *9033*
- bearing capacity, computer aided design, design, loads, Dziurski (A.), Kania (L.), (et al.), *9977*
- dynamic response, kinematics, Savage (M.), Loewenthal (S.H.), *10929*

bearings (slider), laplace transform, lubrication (hydrodynamic), reynolds equation, Macdonald (D.A.), *4107*

- bearings (thrust), lubrication (hydrodynamic), turbulent flow, Venkateswarlu (K.), Rodkiewicz (C.M.), *4898*
- bearings (gas lubricated), film thickness, finite element methods, reynolds equation, Mitsuya (Y.), *5983*
- couple stresses, friction, lubrication (hydrodynamic), non newtonian flow, Ramanaiah (G.), Sarkar (P.), *5986*
- bearings (porous metal), finite element methods, lubrication (hydrodynamic), Malik (M.), Sinhasan (R.), (et al.), *9953*
- elastoplasticity, finite element methods, iterative methods, lubrication (elastohydrodynamic), Curnier (A.R.), Taylor (R.L.), *10894*

bearings (spherical), bearings (foil), bearings (gas lubricated), reynolds equation, Ono (K.), Mizukawa (M.), *1939*

- bubbly flow, lubrication (hydrostatic), Khalil (M.F.), Rhodes (E.), *5990*
- balancing, bearings (gas lubricated), lubricants (gas), rotors, Karpov (V.S.), Prokulevich (L.A.), *9973*
- balancing, bearings (gas lubricated), lubricants (gas), Lyusin (V.M.), Smirnov (B.I.), (et al.), *9974*
- bearings (gas lubricated), lubricants (gas), optimization, Emelyanova (L.S.), *9976*

bearings (thrust), bearings (gas lubricated), lubrication (hydrostatic), stability, Etsion (I.), Green (I.), *1024*

- bearings (porous metal), inertia, lubrication (hydrostatic), magneto fluid dynamics, Zaheeruddin (K.), *1025*
- lubrication (hydrostatic), shear flow, turbulent flow, Harada (M.), Aoki (H.), (et al.), *3043*
- bearings (magnetic), dynamics, rotors, Ulbrich (H.), Schweitzer (G.), (et al.), *4115*
- bearings (gas lubricated), bearings (liquid lubricated), lubrication (hydrostatic), stiffness, Nakahara (T.), Kurisu (T.), (et al.), *4896*
- bearings (slider), lubrication (hydrodynamic), turbulent flow, Venkateswarlu (K.), Rodkiewicz (C.M.), *4898*
- bearings (porous metal), lubrication (hydrodynamic), non newtonian flow, temperature, Gorla (R.S.R.), *5982*
- bearings (gas lubricated), lubrication (hydrostatic), Chen (N.N.S.), Ho (K.W.), *7099*
- bearings (gas lubricated), lubricants (gas), lubrication (hydrostatic), shock waves, Boffey (D.A.), Wilson (P.M.), *8056*
- inertia, lubricants (liquid), lubrication (hydrostatic), viscoelastic fluids, Sinha Roy (J.), Biswal (B.), *8058*
- bearings (tilted pad), design, lubrication (hydrostatic), Safar (Z.S.), *8061*
- lubrication (hydrodynamic), lubrication (hydrostatic), turbulence, Wilcock (D.F.), *9029*
- bearings (porous metal), lubrication (hydrostatic), pressure distribution, temperature, viscosity, Yadav (J.S.), Kapur (V.K.), *9030*
- film thickness, friction, lubrication (hydrodynamic), pressure distribution, Safar (Z.S.), *9043*
- damping, film thickness, inertia, lubrication (hydrostatic), stiffness, Prabhu (T.J.), Ganesan (N.), *9956*
- bearings (gas lubricated), design, reynolds equation, Safar (Z.S.), *9957*
- bearings (gas lubricated), lubricants (gas), reynolds equation, vibration, Wernerowski (K.), *9966*
- bearings (gas lubricated), design (optimum), lubrication (hydrostatic), optimization, Shevchenko (A.V.), Fedotov (V.A.), (et al.), *9968*
- damping, experimental methods, stiffness, vibration (forced), Schwanecke (H.), *10219*
- damping, design, ship design, stiffness, vibration, Vassilopoulos (L.), *10375*
- bearings (gas lubricated), bearings (porous metal), lubrication (hydrostatic), stiffness, Singh (K.C.), Rao (N.S.), *10887*
- bearings (ball), contact problems, lubrication (boundary), Sen Gupta (S.K.), *10896*

bearings (tilted pad), bearings (journal), damping, dynamic behavior, vibration, Springer (H.), *4111*

- helium, labyrinth seals, turbines, Franck (D.), Noack (G.), (et al.), *4556*
- bearings (journal), dynamic stability, perturbation methods, Allaire (P.E.), Parsell (J.K.), (et al.), *4901*

- dynamics, lubrication (hydrodynamic), rotors, Malik (M.), Sinhasan (R.), *8059*
- bearings (thrust), design, lubrication (hydrostatic), Safar (Z.S.), *8061*
- design, dynamics, high speed, rotors, Martelli (F.), Manfrida (G.), *9028*
- bearings (journal), lubrication (hydrodynamic), whirling shafts, Malik (M.), Sinhasan (R.), (et al.), *10376*

bearings (unlubricated), contact problems, friction (solid solid), lubrication (solid), Floquet (A.), Play (D.), *5993*
- friction (sliding), friction (solid solid), lubricants (solid), lubrication (boundary), Kato (S.), Yamaguchi (K.), (et al.), *9018*

Beattie (D.R.H.), axial flow, hydrodynamics, two phase flow, Lawther (K.R.), *9886*

Beatty (M.F.), see Cheverton (K.J.), *8182*

Beaudoin (Y.), asymptotic behavior, codes, stability theory, Nerenberg (M.A.H.), *66*

Beaufait (F.W.), beams (elastic), elastic foundations, elasticity (nonlinear), Hoadley (P.W.), *6209*

Beavers (G.S.), free boundary, rheology, rotating cylinders, viscoelastic fluids, Yoo (J.Y.), (et al.), *7642*
- deformable bodies, mass flow, porous media, Hajji (A.), (et al.), *8938*
- deformable bodies, experimental results, mass flow, porous media, Wittenberg (K.), (et al.), *8939*

Bechtel (J.H.), see Blint (R.J.), *10702*

Bechtel (S.E.), drops, impact, surface tension, Bogy (D.B.), (et al.), *9881*

Bechteler (W.), models, particle fluid flow, stochastics, suspensions, *3856*

Beck (B.T.), evaporation, two phase flow, void fraction, Wedekind (G.L.), *2987*

Beck (J.V.), conduction (heat), heat addition, numerical methods, series expansion, *3816*
- conduction (heat), cylindrical bodies, heat addition, transient effects, *10592*

Beck (M.R.) Jr., blood flow, capillary flow, microcirculation, platelet concentration, shear flow, Eckstein (E.C.), *4919*

Beck (R.F.), asymptotic methods, diffraction, ocean waves, ships, slender bodies, wave interactions, Troesch (A.W.), *9012*

Beck (W.K.), see Dowding (C.H.), *7568*

Becker (B.), combustion, heat addition, solar collectors, solar energy, solar radiation, Finckh (H.H.), (et al.), *10632*

Becker (H.F.), bending, material testing, viscoelastic materials, wood, *1401*

Becker (N.), optimal control, sensitivity, time optimal systems, *8171*

Becker (O.), beams, integration, mathematical methods, *6214*

Becker (R.), duhamel's integral, dynamic loads, floors, stress analysis, *2541*

Beckett (P.M.), cylindrical bodies, heat transfer, mathematical methods, solidification, *8775*

Beckmann (G.), abrasion, brittle materials, ductility, friction (sliding), hardness, wear, Westermier (G.), *4106*

Beckmann (J.), blades, experimental mechanics, frequencies, rotating bodies, turbines, vibration (free), Wachter (J.), *7399*

Beckmann (T.), see Wohle (W.), *6894*

Beckstead (M.W.), combustion, models, solid propellants, Mccarty (K.P.), *11786*

bed load, resistance, roughness, sediment transport, Mantz (P.A.), *1496*
- discharges, flow measurement, Reid (I.), Layman (J.T.), (et al.), *1498*
- erosion, jets, sediment transport, shear stress, Chatterjee (S.S.), Ghosh (S.N.), *2591*
- sediment transport, shear stress, stability theory, Nakagawa (H.), Tsujimoto (T.), *3604*
- channels, rivers, sediment transport, Bagnold (R.A.), *3605*
- oscillations, ripples, scour, Honji (H.), *3611*
- piers, scour, sediment transport, Jain (S.C.), Fischer (E.E.), *6601*
- channel flow, free boundary, secondary flow, Ikeda (S.), *7647*
- piers, river beds, scour, vortices, Qadar (A.), *7649*
- bottom irregularities, sediment transport, shear stress, Ranga Raju (K.G.), Garde (R.J.), (et al.), *9519*

Beds (G.), continuum mechanics, jump conditions, moving surfaces, singular waves, waves, *4127*

Bedding (R.J.), dynamic behavior, elastic waves, half space, Willis (J.R.), *1295*

Bedeaux (D.), acoustic waves, free boundary, immiscible fluids, liquid liquid interface, Oppenheim (I.), *3713*

Bedford (A.), porous media, variational methods, waves, *5837*

Bedford (N.R.), see Mitchell (S.K.), *5730*

Beech (J.F.), calibration, crack growth, finite element methods, fracture toughness, specimen design, stress intensity factor, Ingraffea (A.R.), *10337*

Beeckmans (J.M.), classification, particle size, testing equipment, *5826*

Beer (G.), boundary elements, finite element techniques, holes, infinite medium, mesh generation, mining, Meek (J.L.), *7206*

Beer (H.), see Bareiss (M.), *1728*
- see Burow (P.), *1865*
- see Rannenberg (M.), *1873*

Beere (W.), cavities, creep rupture, fracture mechanics, grain boundaries, *7496*

Beevers (C.J.), see Kirby (B.R.), *7484*

Begay (F.), see Ehler (A.W.), *3900*

Begelinger (A.), failure, friction (sliding), lubrication (elastohydrodynamic), oil films, thin films, viscosity, De Gee (A.W.J.), *9037*

Beggs (H.D.), see Shiu (K.C.), *1720*

Beghi (M.), gruneisen parameter, steel, thermal diffusion, thermophysical properties, Bottani (C.E.), *5807*

Begin (M.V.), plates (orthotropic), strain, structural stability, *2302*

Begley (J.A.), see Landes (J.D.), *3460, book*

Beguin (G.H.), bridges, deflections, wind bracing, wind loads, *9453*

Behera (S.C.), see Dash (G.C.), *3669*
- see Dash (G.C.), *7723*

Beinusov (A.G.), channel flow, thermosyphons, two phase flow, Utkin (V.B.), *10619*

Beirao Da Veiga (H.), diffusion, three dimensional flow, two component flow, uniqueness, unsteady flow, Serapioni (R.), (et al.), *9537*

Bejan (A.), boundary layer, heat transfer, porous media, *957*
- augmentation, energy transport, entropy, heat exchangers, heat transfer, pressure drop, viscous effects, Pfister (P.A.) Jr., *2828*
- bubble dynamics, hydrogen, velocity measurement, visualization, Yewell (R.B.), *3758*
- see Anderson (R.), *6778*
- see Kimura (S.), *9703*
- design, thermal effects, thermal sciences, thermodynamics, *11756*

Bekeshko (N.A.), inspection, soldered joints, thermography, *1477*

Bekey (G.A.), see Masri (S.F.), *7367*
- see Masri (S.F.), *9171*

Bekiarian (A.), absorption, experimental results, implosion, laser plasma interaction, nuclear fusion, thermonuclear energy, Decroisette (M.), *5688*

Bekoryukov (V.I.), atmospheric circulation, meteorology (physical), vortices, Makarov-Mironov (A.M.), *4060*

Belanger (M.D.), see Johns (K.C.), *5351*

Belavin (V.A.), nozzles, pulsejets, relaxation, supersonic flow, Golub (V.V.), (et al.), *11515*

Beldei (L.M.), boundary layer, suction, unsteady state, Kulonen (L.A.), *9571*

Belegundu (A.D.), constraints, design (optimum), Arora (J.S.), *7591*

Beletskii (V.V.), biocontrol, gait, locomotion, optimization, Kovaleva (E.D.), (et al.), *7111*

Belevich (M.Yu.), atmospheric circulation, ice, ocean air interaction, oceanography, *1911*

Beliaev (S.Iu.), cylindrical bodies, fourier series, neumann problem, potential theory, semi infinite media, Kuzmin (Iu.N.), *44*

Belie (R.G.), finite element techniques, fracture, fracture mechanics, prediction, structures, Reddy (J.N.), *2463*

Belik (A.V.), charpy tests, crack opening displacement, crack resistance, indentation, notch tests, Dolzhenkov (F.E.), (et al.), *3502*

Belik (N.P.), compressional waves, ducts (variable area), piping systems, resonance, Chirva (L.G.), *11605*
- ducts (variable area), numerical methods, oscillatory flow, piping systems, Chirva (L.G.), *11629*

Belikov (S.A.), design, linear systems, optimal control, Zak (Yu.A.), *3184*

Bellovskii (M.A.), biocontrol, heart, organ replacement, organs, Super (N.A.), (et al.), *3226*

Belin (M.), electron microscopy, friction (sliding), particles, polymers, wear, Mansot (J.L.), (et al.), *5975*

Bell (C.E.), dynamic response, kinematics, railroads, steering, Hedrick (J.K.), *4540*
- dynamic stability, rails, vehicles, Horak (D.), (et al.), *7146*

Bell (J.), reaction kinetics, stability theory, travelling waves, *9634*

Bell (J.B.), cauchy problem, navier stokes equation, three dimensional formulation, time dependence, *8111*

Bell (J.F.W.), elastic constants, high temperature, refractories, ultrasonics, Chen (J.Y.F.), (et al.), *1836*

Bell (K.J.), see Panchal (C.B.), *807*
- see Najjar (M.S.), *5806*

Bellagamba (L.), algorithms, gauss method, inequalities, least squares, numerical methods, optimization, penalty function, *4208*
- constraints, optimization, penalty function, thermal loading, trusses, Yang (T.Y.), *6503*

Bellman (R.) Jr., aluminum alloys, ductility, erosion, metals, Levy (A.), *3039*

Bellomo (N.), friction, kinetics, optimization, torque, Monaco (R.), *2556*
- laminar flow, stochastics, two dimensional flow, Riganti (R.), (et al.), *3107*

bellows, beams, design, mechanical design, plates, Chand (S.), Garg (S.B.L.), *7523*

Belogrivtsev (V.M.), channel flow, magneto fluid dynamics, plates (parallel), theory, velocity profiles, *7895*

Belohradsky (H.-J.), bending, blades, eigenvalues, frequencies, steam turbines, vibration (torsional), *4430*

Beloshitskii (V.V.), accelerators, discharges, magneto plasma dynamics, shock tubes (electromagnetic), similarity methods, Komelkov (V.S.), (et al.), *2900*

Belotserkovski (O.M.), aerodynamics, compressible flow, numerical methods, transonic flow, *8549*

Belotserkovskii (O.M.), conformal mapping, hypersonic flow, magneto plasma dynamics, solar wind, three dimensional flow, Mitnitskii (V.Ya.), *7902*

Belotserkovskii (S.M.), annuli, incompressible flow, jet flaps, singular integral equations, vortices, wings, Lifanov (I.K.), *10496*

Belotserkovskiy (G.M.), rarefied gases, shock waves (normal), simulation, Yanitskiy (V.Ye.), *11456*

Belousov (A.I.), bearings (hydrostatic), finite element methods, lubrication (hydrostatic), reynolds equation, Goryunov (L.V.), (et al.), *9960*

Belousov (L.A.), asymptotic behavior, fourier series, parabolic equations, *4963*
Belousov (S.L.), forecasting, meteorology (physical), weather forecasting, *4083*
Belov (A.I.), see Dushkin (P.K.), *4090*
Belov (I.A.), blunt bodies, flow obstructions, interaction, vortices, wakes, *3614*
- see Pamadi (B.N.), *8540*

Belov (V.I.), filaments, fluid-structure interaction, impact, submerged bodies, Lenskii (E.V.), *11665*
belts, drives, Gerbert (B.G.), *537*
- conveyors, plates (circular), shells (cylindrical), De Boer (R.), Kuntzsch (V.), (et al.), *8242*

Beltzer (A.I.), random media, rayleigh waves, viscoelastic waves, *8337*
- acoustic emission, random media, transient effects, *9299*

Belvedere (G.), heat transfer, rotating bodies, shells (spherical), Paterno (L.), (et al.), *8960*
Belyaev (N.M.), conical bodies, deformation, flexible bodies, pressure distribution, supersonic flow, wedges, Khrushch (V.K.), *4585*
Belyaev (V.A.), diffraction, gravity waves (surface), submerged bodies, wave interactions, *5475*
Belyakov (V.P.), biomechanics, critical heat flux, cryogenics, film boiling, heat transfer, nucleate boiling, Budrik (V.V.), *750*
Belyanskii (V.P.), see Aksenov (A.F.), *3042*
Belytschko (T.), see Flanagan (D.P.), *2059*
- fluid-structure interaction, impact, numerical methods, shells (cylindrical), Mullen (R.), *2711*
- see Flanagan (D.P.), *5196*
- fluid-structure interaction, surveys, *7772*
- see Stolarski (H.), *8142*

Ben-Avraham (O.), air traffic control, airplanes, algorithms, control, dynamic programming, Tabak (D.), *2181*
Ben-Dor (G.), reflection, shock polar, shock waves, unsteady state, *2724*
- see Yakhot (A.), *3657*
- computing techniques, data analysis, interferometry, two dimensional flow, Whitten (B.T.), (et al.), *3760*
- see Takayama (K.), *6711*
- flow measurement, mach reflection, photography, reflection, shock waves, transition, Takayama (K.), *6714*

Ben-Dov (M.), see Walker (P.S.), *4921*
Ben-Reuven (M.), burning rate, chemical kinetics, deflagration, models, solid propellants, Caveny (L.H.), *11790*
Benade (A.H.), see Keefe (D.H.), *3972*
Benati (M.), curved surfaces, membranes, strain analysis, *8244*
- kinematics, manipulators, mechanisms (spatial), optimization, robotics, Morasso (P.), (et al.), *9084*

Benattar (R.), density, interferometry, laser plasma interaction, measurements (dynamic), transport phenomena, Popovics (C.), *5683*
Benda (B.J.), modeling, nuclear reactors, seismic loading, Johnson (J.J.), (et al.), *8965*
Bendat (J.S.), data analysis, fourier transform, frequency domain techniques, random excitation, vibration, *7175*
Bender (E.), actuators, control, design, feedback, pneumatic components, position control, Kotschenreuther (P.), *9194*
Benderskaya (S.L.), channel flow, convection, non newtonian flow, variable fluid properties, Khusid (B.M.), (et al.), *9583*
Bendiksen (O.), bending, cascades, flutter, supersonic flow, torsion, Friedmann (P.), *2908*
bending, curved tubes, finite pure bending, large displacement, shells (nonhomogeneous), tubes, Reissner (E.), *293*
- beams (prestressed), shear lag, t-section, Adekola (A.O.), *294*
- deformation (plastic), plates, Paulun (J.), *304*
- anisotropic media, dynamic relaxation, plates (circular), Sherbourne (A.N.), Murphy (D.N.S.), *305*
- plates (nonlinear), plates (rectangular), postbuckling behavior, shear, Walczak (W.), Jakubowski (S.), *332*
- bridges (box girder), torsion, Kambe (S.-I.), *520*
- bimodulus materials, composite materials, plates (rectangular), plates (thick), thermoelasticity (steady), Reddy (J.N.), Bert (C.W.), (et al.), *920*
- finite element techniques, gear teeth, Reinhart (W.R.), Ferguson (R.J.), (et al.), *1132*
- beams, lateral stability, twisting, Warnick (W.L.), Walston (W.H.) Jr., *1218*
- nonlinear theory, rods, Panayotounakos (D.E.), Theocaris (P.S.), *1222*
- plates (rectangular), slabs, twisting, Nielsen (M.P.), Bach (F.), *1228*
- plastic behavior, plates (circular), shear, Nakamura (Y.), Tatenami (T.), (et al.), *1229*
- bends, pipes, shells (cylindrical), tubes, Kitching (R.), Zarrabi (K.), (et al.), *1241*
- girders (plate), ultimate strength, Shiomi (H.), *1256*
- material testing, viscoelastic materials, wood, Becker (H.F.), *1401*
- ductility, tests, welded joints, Welding Research Council, *1475*
- boundary value problems, differential equations (ordinary), plates, splines, Usmani (R.A.), Warsi (S.A.), *2044*
- finite element techniques, interpolation, locking, matrix methods, mindlin plates, plates, shells, Tsach (U.), *2070*
- axisymmetric loading, shells (perforated), shells (spherical), Nagorski (R.), *2273*
- girders, prestressed concrete, shear, torsion, Taylor (G.), Warwaruk (J.), *2523*
- fatigue, gear teeth, strength, Oda (S.), Shimatomi (Y.), (et al.), *2565*
- fluid-structure interaction, plates (thick), Pierucci (M.), *2709*
- cascades, flutter, supersonic flow, torsion, Bendiksen (O.), Friedmann (P.), *2908*
- elasticity, finite element techniques, Tananaiko (O.D.), *3141*
- shells, shells (parabolic velaroidal), Hadid (H.A.), Lynn (P.P.), *3300*
- boundary value problems, infinite medium, plates (nonhomogeneous), theory, Bogdan (K.), *3301*
- beams, eigenvalues, modal analysis, vibration (free), Zarek (J.H.B.), Gibbs (B.M.), *3352*
- beams (variable cross section), dynamic analysis, vibration (free), Trapezon (A.G.), *3356*
- powder metallurgy, scale effects, strength, Fridman (V.M.), Shcherban (N.I.), *3480*
- panels (flat), reinforced concrete, shear, torsion, ultimate strength, Majid (K.I.), Celik (T.), *3534*
- floors, shear walls, slabs, stiffness, Coull (A.), Wong (Y.C.), *3553*
- bimodulus materials, computing techniques, extension, laminates, Jones (R.M.), Morgan (H.S.), *4358*
- beams, reinforced concrete, shear loading, torsion, Rajagopalan (K.S.), *4362*
- plates (anisotropic), theory, Hirashima (K.-I.), Muramatsu (M.), *4366*
- plates (rectangular), plates (simply supported), theory, Mukhopadhyay (M.), *4368*
- beams (variable cross section), eigenvalues, experimental mechanics, vibration, Vasinyuk (I.M.), Kruk (B.Z.), (et al.), *4415*
- blades, eigenvalues, frequencies, steam turbines, vibration (torsional), Belohradsky (H.-J.), *4430*
- crack propagation, fatigue, surface flaws, Mukai (Y.), Matsuno (H.), (et al.), *4482*
- beams, cyclic loading, residual stresses, strain measurement, Troshchenko (V.T.), Zhabko (N.I.), *4512*
- beam columns, design (optimum), optimization, Karihaloo (B.L.), Parbery (R.D.), *4523*
- beams (composite), design (optimum), shear strength, ultimate strength, Farkas (J.), *4526*
- cables, design, resistance, Shashaty (A.J.), *4552*
- finite element methods (hybrid), mesh generation, plates (thick), Cheung (Y.K.), Wong (P.M.), (et al.), *5029*
- beam columns, reinforced concrete, Solanki (H.T.), *5147*
- beams (variable cross section), Basilevitch (V.), *5148*
- arches, axial loading, buckling, energy methods, Sladkov (S.I.), *5149*
- cosserat solids, plates, plates (annular), Chawla (A.N.), Chaudhary (H.R.), *5159*
- finite strain, shells (nonlinear), theory, Pietraszkiewicz (W.), *5161*
- finite element methods, plates (circular), plates (orthotropic), Pardoen (G.C.), Barton (D.E.), *5163*
- dissipation, rods, stresses (normal), vibration (torsional), Khilchevskii (V.V.), Vasilevich (D.I.), *5208*
- finite difference methods, numerical methods, plates, Atkatsh (R.S.), Baron (M.L.), (et al.), *5226*
- caustics, edge cracks, stress intensity factor, Farahmand (B.), Raftopoulos (D.D.), *5297*
- beams, cracks, stress intensity factor, Panko (I.N.), Yakovchik (V.A.), *5299*
- axial loading, friction, ice, mechanical properties, tests, Schwarz (J.), Frederking (R.), (et al.), *5324*
- defects, fracture toughness, plane strain, steel, Boichenko (Yu.A.), Sosnin (A.V.), (et al.), *5333*
- beams, haar functions, plates, stress analysis, Vasarhelyi (A.), *6092*
- dynamic analysis, finite element techniques, plates, Garnet (H.), Crouzet-Pascal (J.), (et al.), *6109*
- laminates, plates (sandwich), Seide (P.), *6228*
- buckling (plastic), elastoplasticity, pressurized pipes, tubes, Fabian (O.), *6255*
- fatigue, multiaxial fatigue, torsion, Mcdiarmid (D.L.), *6414*
- combined loading, fatigue, notch tests, torsion, Matake (T.), Imai (Y.), *6418*
- damping, fatigue, material testing, metals, Weissmann (G.F.), *6421*
- cyclic loading, fatigue, steel, Gavrilov (D.A.), *6470*
- alloys, cyclic loading, iron, shape factors, testing equipment, thermal fatigue, Pryakhin (V.A.), Ivanova (L.P.), *6474*
- columns (eccentrically loaded), design (ultimate strength), reinforced concrete, tension, Nazir (C.P.), *6500*
- beams (flexural), low temperature, reinforced concrete, Goto (Y.), Miura (T.), *6956*
- bimodulus materials, elastoplasticity, metallic composites, Akhmerov (A.F.), *7306*
- beams (box), girders (plate), shear loading, Evans (H.R.), Shanmugam (N.E.), *7320*
- contact problems, existence theorems, plates, uniqueness, variational methods, Fortune (D.), Bezine (G.), *7330*
- bimodulus materials, laminates, plates (rectangular), plates (thick), Bert (C.W.), Reddy (J.N.), (et al.), *7343*
- boundary value problems, contact problems, plates, Zelentsov (V.B.), *7351*
- flexure, ice, strength, Timco (G.W.), *7565*
- butt welding, fatigue, welded joints, welding, Lawnicki (J.J.), Cutler (V.C.), *7638*
- composite structures, deformation, fibers, layered media, stress concentration, Isupov (L.P.), *8223*

- plates, strain, Reissner (E.), *8238*
- composite materials, experimental results, mixture theories, plates, Constanda (C.), *8240*
- cellular structures, grillages, nonlinear characteristics, structural analysis, ultimate strength, Shanmugam (N.E.), Evans (H.R.), *8263*
- critical speed, flexible bodies, rotating bodies, vibration (forced), Markert (R.), *8320*
- fracture, rocks, strength, Swan (G.), *8357*
- cracks, fracture criteria, j-integral, pipelines, plasticity, Zahoor (A.), Kanninen (M.F.), *8400*
- beams (open section), elastic bodies, elastoplasticity, Ducomet (B.), *9258*
- composite materials, laminates, plates (anisotropic), plates (nonlinear), plates (rectangular), plates (thick), Reddy (J.N.), Chao (W.C.), *9273*
- plates (anisotropic), plates (rectangular), plates (sandwich), Kolesnikov (I.Yu.), *9274*
- hybrid element methods, hybrid techniques, mindlin plates, Spilker (R.L.), Munir (N.I.), *9280*
- buckling, shells (cylindrical), shells (stiffened), Kan (S.N.), Kaplan (Yu. I.), (et al.), *9292*
- axial loading, beams, columns, strain gages, strain measurement, Tuttle (M.E.), *9425*
- crack growth, fracture toughness, steel, Mubeen (A.), *9433*
- beams, elastoplasticity, reinforced concrete, shear, Nakazawa (T.), Ohta (T.), *9444*
- fiber reinforced concrete, fibers, reinforced concrete, torsion, Narayanan (R.), Toorani-Goloosalar (Z.), *9450*
- adhesives, composite materials, joints, shear stress, stress analysis, Yuceoglu (U.), Updike (D.P.), *9488*
- plastic flow, plasticity, shear bands, Triantafyllidis (N.), Needleman (A.), (et al.), *10144*
- complex variables, plates (weakened), Hasebe (N.), Ueda (M.), *10146*
- plates (anisotropic), plates (sandwich), shear stress, Berar (C.), *10158*
- beams (cantilever), blades, rotary inertia, shear, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- crack closure, plates, Heming (F.S.) Jr., *10298*
- cracks, j-integral, material testing, pipes, stability theory, Wilkowski (G.M.), Zahoor (A.), (et al.), *10301*
- finite element techniques, membrane theory, shear loading, tanks, Royles (R.), Sofoluwe (A.B.), *11114*
- drilling, drilling rods, ocean bed, rods, vibration, Aso (K.), Kan (K.), *11659*

bending (elastic), moment distribution, ship design, wave interactions, Loukakis (T.A.), Grivas (S.B.), *994*

- beams (curved), elastica, elasticity (nonlinear), rods, Fosdick (R.L.), James (R.D.), *2216*
- beams (flexural), elasticity (linear), shear, shear centre, Gyarmathy (K.), *2221*
- bending (plastic), finite element methods, plane strain, sheet metal, Oh (S.I.), Kobayashi (S.), *2399*
- thin walled structures, torsion, Zhong-Heng (G.), *6208*
- bends, pressurized pipes, shells (cylindrical), shells (thin), Whatham (J.F.), *6220*
- large displacement, plates, torsion, Simmonds (J.G.), *6222*
- finite difference methods, plates (simply supported), Kant (T.), *6233*
- shells (cylindrical), structural stability, thin walled structures, Makeev (E.M.), *6256*
- beams (thin section), shells (cylindrical), thin walled structures, Antonenko (E.V.), *7325*
- asymptotic behavior, boundary layer, perturbation methods, plates (rectangular), Nazarov (S.A.), *8243*
- inclusions, plates (holed), plates (nonhomogeneous), plates (thick), Kosmodamianskii (A.S.), Shaldyrvan (V.A.), *8251, book*

bending (plastic), bending (elastic), finite element methods, plane strain, sheet metal, Oh (S.I.), Kobayashi (S.), *2399*

- cranes, elastoplasticity, girders (plate), Ballio (G.), Poggi (C.), (et al.), *7318*

bending (viscoelastic), ceramics, creep, micromechanisms, Cohrt (H.), Grathwohl (G.), (et al.), *6175*

- elastic foundations, plates (rectangular), thermoviscoelasticity, viscoelastic materials, Misra (J.C.), Samanta (S.), *6944*

bending (viscoplastic), blades, dynamic response, dynamic testing, matrix methods, steam turbines, Nahlik (A.), Pastia (A.), *10209*

bending elements, design (optimum), finite element techniques, optimization, plates, Haftka (R.T.), Prasad (B.), *3516*

- curved elements, finite element techniques, plates, shape functions, triangular elements, Caramanlian (C.), *4198*

bends, bending, pipes, shells (cylindrical), tubes, Kitching (R.), Zarrabi (K.), (et al.), *1241*

- numerical methods, rivers, secondary flow, shallow water, Kalkwijk (J.P.T.), De Vriend (H.J.), *1494*
- liquid gas mixture, pipe flow, two phase flow, Hoang (K.), Davis (M.R.), *1853*
- attenuation, ducts (curved), green function, sound propagation, El-Raheb (M.), Wagner (P.), *2936*
- bending (elastic), pressurized pipes, shells (cylindrical), shells (thin), Whatham (J.F.), *6220*
- baffles, scour, spillways, Higgins (D.T.), *9506*
- creep, plane strain, pressurized pipes, Zverkov (B.V.), Danyushevskii (A.I.), *10153*

Bendt (P.), focusing, optical techniques, radiant interchange, solar collectors, Gaul (H.), (et al.), *8768*

Benedetti (D.), dynamic response, masonry, structural response, vibration (forced), Castellani (A.), *3379*

Benedict (R.P.), pipe flow, *4616, book*

Benenti (S.), constraints, continuum mechanics, differential geometry, discrete systems, dynamics, Tulczyjew (W.M.), *1*

Benerjee (B.), large displacement, plates (circular), plates (nonhomogeneous), *8250*

Benes (J.), algorithms, artificial intelligence, autonomous systems, vehicles, Kolar (P.), *2196*

Benetka (J.), airfoil characteristics, airfoils, oscillating bodies, pressure distribution, schlieren methods, shock waves, Pernica (Z.), *2733*

- airfoils, oscillating bodies, pressure distribution, transonic flow, wind tunnels, Pernica (Z.), *2771*

Benettin (G.), dynamics, hamiltonian equations, lyapunov's functions, stochastic systems, Galgani (L.), (et al.), *4954*

Bengtsson (H.), see Larsson (S.E.), *1238*

Benilov (M.S.), asymptotic methods, boundary layer, catalytic surface, chemical reactions, Tirskii (G.A.), *3864*

- charged particles, currents, diagnostics, plasma, saturation, Tirskii (G.A.), *6858*

Benitez (F.G.), boundary integral methods, deformation (plastic), elastoplasticity, Alarcon (E.), (et al.), *7294*

Benjamin (M.), see Heifetz (J.), *7362*

Benjamin (T.B.), channel flow, reservoirs, stratification, supercritical flow, variational methods, *1495*

Benjamins (J.), see De Feijter (J.A.), *1489*

Benner (H.), see Koopmann (G.H.), *8868*

Bennett (A.F.), boundary conditions, meteorology (physical), oceanography, Kloeden (P.E.), *1913*

Bennett (C.L.), acoustics, cylindrical bodies, fluids, scattering, Mieras (H.), *11986*

Bennett (C.O.), finite element techniques, oil wells, pressure distribution, Reynolds (A.C.) Jr., (et al.), *4841*

Bennett (D.L.), binary flow, boiling, convection (forced), mixtures, Chen (J.C.), *743*

Bennett (J.A.), design (minimum weight), frames, optimization, plates (stiffened), *3518*

Bennett (J.G.), fluid-structure interaction, heat transfer (combined modes), nuclear reactors, thermal effects, tube bundles, Ju (F.), *8747*

- finite element techniques, fluid-structure interaction, nuclear reactors, reactor core, thermal effects, Ju (F.D.), *11658*

Bennett (J.R.), approximations (higher order), gravity waves (surface), lakes, ocean, rotational flow, Schwab (D.J.), *11573*

Bennett (R.H.), see Mcgregor (B.A.), *410*

- field tests, pore pressure, river beds, sedimentation, soils, Faris (R.), *423*

Benney (D.J.), capillary flow, contact angle, moving surfaces, viscous flow, Timson (W.J.), *6618*

Bennon (W.D.), convection, crossflow, cylindrical bodies, heat transfer, Incropera (F.P.), *8700*

Benson (A.), boundary value problems, elliptic equations, iterative methods, Evans (D.J.), *62*

Benson (D.C.), dynamic analysis, equations of motion, mathematical methods, vibration (nonlinear), *9296*

Benson (D.K.), see Bohn (M.S.), *4718*

- see Bohn (M.S.), *5954*

Benson (R.C.), elastic bodies, large displacement, perturbation methods, rings, stick slip, *9260*

Bensoussan (A.), differential equations (partial), dynamic programming, stochastics, Lions (J.-L.), *10022*

Benton (M.), dynamic interaction, gear teeth, vibration isolation, Seireg (A.), *8324*

Benumof (R.), strings, travelling waves, wave energy, *10136*

Benveniste (Y.), see Sills (L.B.), *1376*

- composite materials, dynamic behavior, laminates, mixture theories, waves, Aboudi (J.), *7142*
- see Aboudi (J.), *7407*

Benyon (P.R.), dynamic analysis, estimation, input-output relationships, inverse problems, *3164*

Berak (P.), airfoil theory, design, incompressible flow, viscous flow, *10604*

Beran (M.A.), see Keler (M.L.), *7626*

- see Keler (M.L.), *10138*

Berar (C.), bended core, plates (sandwich), theory, *5165*

- bending, plates (anisotropic), plates (sandwich), shear stress, *10158*

Bercovier (M.), see Bardos (C.), *7680*

Berdichevskii (A.L.), averaging, bubble dynamics, irrotational flow, two phase flow, *12025*

Berdichevskii (V.L.), dynamic analysis, shells (long), vibration (free), Le Khan Chau, *8314*

Berdnikov (V.S.), buoyant flow, cavities, cellular flow, convection, thermal plumes, Kirdyashkin (A.G.), *8727*

Bereanu (B.) eds., probability theory, statistical design, statistical theory, Grigorescu (S.), (et al.), *7226, book*

Beremin (F.M.), ductile fracture, steel, triaxial loading, *5306*
- elastoplasticity, finite element techniques, fracture criteria, *9409*

Berends (B.E.), experimental methods, soils, Ko (H.-Y.), *6391*
Berent (E.), see Kit (E.), *559*
Berenyi (T.), see Orlandea (N.), *6564*
Berest (P.), cylindrical bodies, elastoplasticity, expansion, finite strain, strain softening, Nguyen (M.D.), *3262*
Berestycki (H.), free boundary, magneto fluid dynamics, plasma (toroidal), tokamak, Brezis (H.), *4969*
Berezhnitskii (L.T.), plates (weakened), stress strain relationships, theory, Mazurak (L.P.), (et al.), *3299*
Berezhnoi (I.A.), elastoplasticity, inequalities, integral inequalities, plasticity, Iviev (D.D.), *4350*
Berezin (Yu.A.), compressible flow, finite difference methods, navier stokes equation, supersonic flow, Kovena (V.M.), (et al.), *589*
Berezovskaia (F.S.), bifurcation, nonlinear analysis, stability theory, vibration (self excited), Khibnik (A.I.), *8282*
Berezovszkij (A.M.), damage (cumulative), fatigue, life expectancy, material testing, random loading, Balter (I.I.), (et al.), *3447*
Berg (J.L.), see Berg (W.F.), *10626*
Berg (W.F.), condensation, freezing, heat exchangers, pressure drop, tube bundles, Berg (J.L.), *10626*
Bergamaschi (S.), see Angrilli (F.), *1255*
Bergan (P.G.), convergence, finite element methods, stiffness matrix, *2068*
Berger (A.E.), computing techniques, finite difference methods, singular perturbations, Solomon (J.M.), (et al.), *3117*
Berger (B.S.), coordinate systems, elasticity, mathematical methods, navier equation, Curtis (D.M.), *4959*
Berger (H.) eds., defects, lasers, layered media, nondestructive tests, residual stresses, ultrasonics, Linzer (M.), *3505, book*
Berghaus (D.G.), lasers, photoelasticity, photoelasticity (three dimensional), scattered light, *3482*
Bergles (A.E.), heat transfer, multiphase flow, power generation, two phase flow, Collier (J.G.), (et al.), *934, book*
- see Kakac (S.) eds., *2825, book*
- see Joshi (S.D.), *7826*
- see Joshi (S.D.), *10582*

Bergles (A.E.) eds., liquid gas mixture, liquid vapor mixture, two phase flow, Ishigai (S.), *4820, book*
Bergman (L.A.), galerkin method, oscillators, random excitation, Heinrich (J.C.), *1267*
- finite element techniques, first passage, galerkin method, particle dynamics, random excitation, stochastic systems, Heinrich (J.C.), *4985*
- finite element techniques, galerkin method, probability theory, weighted residual methods, Heinrich (J.C.), *10033*

Bergner (H.W.) Jr., see Herakovich (C.T.), *2455*
Bergquam (J.B.), see Young (M.F.), *5955*
Berhault (C.), discretization, finite element methods, fredholm equations, free boundary, gravity waves, matrices, variational methods, *9546*
Berk (H.L.), integro differential equations, perturbation methods, plasma, propagation, variational methods, wkb method, Pfirsch (D.), *3105*
Berkery (E.A.), see Rose (R.E.), *1794*
Berkovich (L.V.), atmospheric circulation, boundary layer (atmospheric), forecasting, Shnaidman (V.A.), *1915*
Berkovskii (B.M.), barriers, impact, magneto fluid dynamics, streams, waves, Bashtovoi (V.G.), (et al.), *9798*
- see Barkov (Yu.D.), *11822*

Berkson (J.M.), acoustic measurements, coherent structure, ocean bed, reflection, underwater acoustics, *5749*
Berlamont (J.E.), channel flow, free boundary, froude number, stability, turbulent flow, Vanderstappen (N.), *7648*
Berlin (I.I.), boiling, cooling, thermal properties, transition boiling, unsteady flow, Kalinin (E.K.), (et al.), *1671*
Berman (H.), airplanes, digital control, flight control, fly-by-wire system, navigation, reliability analysis, Boudreau (J.), *2159*
Berman (I.), explosive forming, materials processing, sheet metal, tubes, Schroeder (J.W.), *4473*
Berman (M.I.), boiling, dispersed flow, heat addition, solutions (material), Gorbis (Z.R.), *10606*
Berman (V.S.), asymptotic methods, ignition, thermal excitation, Riazantsev (Iu.S.), (et al.), *2858*
- differential equations (partial), group theory, hyperbolic equations, mass transfer, *10020*

Berman (Ya.R.), aeration, cavitation flow, separation, weirs, *6605*
Bermudez (A.), algorithms, duality, inequalities, variational methods, Moreno (C.), *2030*
Bernadiner (M.G.), see Basovich (I.B.), *613*
Bernadou (M.), differential equations (partial), finite element techniques, mesh generation, Hassan (K.), *2060*
Bernal (L.P.), coherent structure, mixing layers, turbulent mixing, visualization, vortices, *9598*
Bernal (M.J.M.), see Xanthis (L.S.), *6085*
Bernier (J.), decision theory, floods, probability theory, Miquel (J.), *4041*
Bernitsas (M.M.), see Latorre (R.), *8036*
Bernstein (L.S.), molecular theory, radiation, spectroscopy, *1653*
Bernstein (M.D.), see Iotti (R.C.) eds., *2327, book*
Bernstein (R.), see White (W.), *8019*
Bernussou (J.), see Geromel (J.C.), *1147*
Berrill (J.B.), see Davis (R.O.), *9922*
Berry (G.F.), see Johnson (T.R.), *5680*
Berry (J.T.), see Tseng (A.A.), *3477*
Berryman (J.G.), elastic waves, granular media, porous media, saturation, *3000*
- composite materials, elastic waves, inclusions, scattering, sound propagation, spherical waves, *6898*
- elastic waves, porous media, propagation, saturation, *10841*

Bershadskii (A.G.), energy conservation, magneto fluid dynamics, navier stokes equation, nonlinear theory, uniqueness, *10747*
Bershchanskii (Ya.M.), algorithms, design, functional analyis, linear programming, optimal control, Meerov (M.V.), *3185*
Bershchanskiy (Ya.M.), see Meerov (M.V.), *1152*
Bert (C.W.), see Reddy (J.N.), *920*
- anisotropic media, elliptical bodies, laminates, plates, *5126*
- bimodulus materials, displacement, laminates, plates (rectangular), Sudhakar Reddy (V.), (et al.), *6225*
- bending, bimodulus materials, laminates, plates (rectangular), plates (thick), Reddy (J.N.), (et al.), *7343*

Bertela (M.), incompressible flow, internal flow, rotating cylinders, viscous flow, *1516*
- cylindrical bodies, internal flow, navier stokes equation, rotating disks, torque, Gori (F.), *10404*

Berthe (D.), contact problems, lubrication (elastohydrodynamic), micropitting, rolling contact, roughness, surface profiles, Flamand (L.), (et al.), *1931*
- see Flamand (L.), *2562*

Bertoni (H.L.), see Durnin (J.), *4794*
- see Park (S.K.), *7429*

Bertram (C.D.), arteries, attenuation, blood flow, compressional waves, energy dissipation, *6021*
Bertrand (J.), see Abdelhamid (A.N.), *3744*
Bertschy (J.R.), see Abernathy (F.H.), *8508*
Bertsun (V.N.), see Agranat (V.M.), *9704*
Berveiller (M.), crystals, deformation, metals, plasticity, *3268*
Beryozkina (M.K.), interaction, shock tubes, shock waves, wedges, Syshchikova (M.P.), (et al.), *7778*
Berzak (N.), cams, design, kinematics, optimization, *10371*
Berzilovich (Ye.Yu.), algorithms, dynamic programming, maintenance, operations research, process control, Pavlenko (M.I.), (et al.), *1149*
Besancon (P.), see Paidoussis (M.P.), *8624*
Besdo (D.), anisotropy, plasticity, strain analysis, work hardening, *7282*
Besklietnyi (M.E.), bearings (journal), damping, turbomachinery, vibration (forced), vibration isolation, Igumentsev (E.A.), *11147*
Beskos (D.E.), damping, distributed systems, dynamic analysis, vibration, Boley (B.A.), *3347*
- see Manolis (G.D.), *6160*

Bespalov (A.M.), calorimetry, conduction (heat), inverse problems, plasma, Gorshkov (M.I.), (et al.), *3773*
- cylindrical bodies, separated flow, smoothing splines, supersonic flow, Zhdanov (V.V.), (et al.), *9712*

Bespalova (E.I.), see Prokopov (V.G.), *50*
- dynamic analysis, shells (cylindrical), shells (sandwich), vibration (free), *10221*

bessel functions, layered media, one dimensional waves, wave equations, Kard (P.), *4163*
- dynamic analysis, mathematical methods, vibration (free), Liu (X.-Z.), *9307*
- asymptotic methods, transforms, Wong (R.), *10041*

Besserdich (H.), diffusion coefficient, experimental methods, Kahrib (E.), (et al.), *824*
Bessrour (J.), experimental mechanics, impedance methods, vibration, Senicourt (J.M.), (et al.), *8326*
Best (M.R.), algorithms, least squares, matrix methods, splines, *65*
Best (R.J.), see Holmes (J.D.), *9663*
Beswarick (W.J.), hydraulic machinery, piston driven flow, pumps, *1637*
Betser (A.A.), crack opening displacement, dynamic response, finite element techniques, stress intensity factor, yield criteria, Kobayashi (A.S.), (et al.), *10302*
Betten (J.), creep, elastoplasticity, finite strain, pressure vessels, *8254*
Bettess (P.), finite element techniques, infinite medium, mesh generation, *77*
Bettess (R.), digital simulation, rivers, sediment transport, White (W.R.), *7656*
Betzina (M.D.), aerodynamic performance, attitude control, fans, propulsion, Kita (R.), *7790*
Beyer (F.), joint spacing, joints, rocks, *11182*
Bezhaeva (Z.I.), ergodic properties, markov processes, mathematical methods, probability theory, *2023*
Bezine (G.), boundary integral methods, flexure, plates, *303*
- boundary integral methods, channel flow, fredholm equations, stokes flow, two dimensional flow, Bonneau (D.), *6620*
- see Fortune (D.), *7330*

Bezler (P.), see Prachuktam (S.), *2548*

Bezmenov (V.Ya.), see Ardasheva (M.M.), *5537*
Bezrodnyi (V.G.), bearings (gas lubricated), bearings (journal), lubricants (gas), lubrication (hydrodynamic), *9972*
Bezverkhii (P.P.), diffusion coefficient, gases (nonideal), Martynets (V.G.), (et al.), *820*
bgk model, kinetic theory, mathematical methods, matrix methods, riemann-hilbert problem, Siewert (C.E.), Kelley (C.T.), *1103*
- evaporation, half space, Siewert (C.E.), Thomas (J.R.) Jr., *3644*
- channels, condensation, rarefied gases, two dimensional flow, Gajewski (P.), Wismiewski (A.), *6634*
- gases, kinetic theory, shock waves, Narusawa (U.), *11441*

Bhaduri (D.), see Majumdar (S.), *1748*
Bhaduri (S.), plates (annular), plates (nonhomogeneous), rotating disks, stress analysis, *10162*
Bhaga (D.), bubble dynamics, shape, wakes, Weber (M.E.), *8906*
Bhagat (P.K.), aging, skin, tissues, ultrasonics, Kerrick (W.), (et al.), *6011*
Bhandari (N.C.), elastic foundations, plates (skew), transient effects, vibration (free), Juneja (B.L.), (et al.), *7396*
Bhansali (K.), abrasion, metals, wear, Miller (A.E.), *7087*
Bhargava (R.), see Agarwal (R.S.), *10685*
Bhargava (R.D.), complex variables, elasticity (linear), holes, prisms, torsion, Puranik (S.S.), *4341*
Bhashyam (G.R.), beams (timoshenko), dynamic analysis, vibration (free), Prathap (G.), *9304*
Bhasin (Y.P.), indentation, nonhomogeneous media, slip line methods, work hardening, Oxley (P.L.B.), (et al.), *2234*
Bhaskaran (S.), design, graph theory, networks, optimization, piping systems, Salzborn (F.J.M.), *1165*
Bhat (M.S.), differential equations (partial), lyapunov's functions, mathematical methods, Shrivastava (S.K.), *12*
Bhat (S.P.), see Lee (J.K.), *1353*
Bhat (W.V.), see Shivashankara (B.N.), *10795*
Bhatia (P.K.), see Sankhla (V.D.), *6867*
Bhatia (S.M.), cutting, interfaces, temperature, thermocouples, tools, Pandey (P.C.), (et al.), *8065*
Bhatnagar (R.K.), differential equations (ordinary), magneto fluid dynamics, nonlinear theory, rotating disks, viscoelastic fluids, *2887*
Bhattacharjee (M.C.), dams, fail safe design, failure, optimization, reliability analysis, *10087*
Bhattacharjee (R.C.), see Srivastava (A.C.), *11370*
Bhattacharya (D.K.), see Singh (P.), *5567*
Bhattacharya (M.), see Davies (P.O.A.L.), *5779*
Bhattacharyya (P.), channel flow, laminar flow, porous walls, unsteady flow, *620*
- boundary layer, cyclones, ocean air interaction, *3026*
- see Mukherjee (S.), *3619*
- boundary layer, computing techniques, cyclones, laminar flow, navier stokes equation, rotating fluids, Ghosh (A.), *7704*
- boundary layer (turbulent), computing techniques, cyclones, navier stokes equation, rotating fluids, Ghosh (A.), *7705*

Bhattacharyya (P.K.), boundary elements, elasticity (linear), numerical methods, Symm (G.T.), *2225*
Bhattacharyya (R.), fourier transform, shells (spherical), vibration (free), *5224*
Bhattacharyya (S.), acoustic waves, acoustics, barriers, diffraction, wedges, *10800*
Bhattacharyya (S.K.), see Sengupta (P.R.), *4746*
- cutting, lubricants (liquid), metals, Jetley (S.K.), *5992*

Bhattacharyya (T.K.), moment coefficient, rotating bodies, stokes flow, toroids, viscous flow, *5406*
Bhatti (M.A.), design (optimum), earthquake resistant structures, nonlinear programming, Pister (K.S.), *12070*
Bhavikatti (S.S.), design (optimum), rotating disks, shape factors, Ramakrishnan (C.V.), *1428*
- nonlinear programming, structural optimization, Ramakrishnan (C.V.), *4525*

Bhujangarao (C.H.), classification, grainsize, soils, *3395*
Bhutani (O.P.), boussinesq equation, differential equations (ordinary), differential equations (partial), hydrology, porous media, similarity methods, Sharma (N.L.), *8969*
Bialas (S.), linear systems, lyapunov's functions, matrix methods, state space techniques, *10075*
Bianchi, see Morecki (A.), *209, book*
biaxial loading, crack growth, crack initiation, fatigue, life expectancy, Brown (M.W.), Miller (K.J.), *450*
- crack opening displacement, elasticity (linear), stress intensity factor, Gross (B.), *461*
- high temperature, life expectancy, low cycle fatigue, Brown (M.W.), Miller (K.L.), *1351*
- cracks, inclusions, rigid bodies, Viola (E.), Piva (A.), *1366*
- fibers, multiaxial fatigue, rotating bodies, Calil (S.F.), Goswami (B.C.), (et al.), *2255*
- crack opening displacement, estimation, fatigue, Howard (I.C.), *2418*
- bifurcation, crack growth, cracks, Viola (E.), *2436*
- crack branching, elliptical cracks, failure, Chang (K.J.), *3456*
- cavities, compression, creep, modeling, tension, torsion, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- brittle fracture, fracture, stochastic processes, weibull statistics, Matsuo (Y.), *5295*
- crack propagation, fracture toughness, Gdoutos (E.E.), *5296*
- crack propagation, stability theory, stress intensity factor, Alpa (G.), Bozzo (E.), (et al.), *6454*
- hysteresis, plasticity, Hooker (R.J.), *7138*
- fatigue, fracture, stochastic systems, Troshchenko (V.T.), Sosnovskii (L.A.), *7485*
- crack opening displacement, fracture criteria, stress intensity factor, Chou (C.-T.), Kuo (C.-P.), *9397*
- beams (thin section), buckling, shells (stiffened), Ashour (H.A.), Sobel (L.H.), *10180*
- design, piles, reinforced concrete, Klein (G.K.), Karavaev (V.N.), *10259*
- finite element techniques, holes, multiple cracks, stress intensity factor, Oladimeji (M.K.), *10295*
- fracture mechanics, fracture toughness, microstructures, steel, Ziebs (J.), Aurich (D.), (et al.), *11317*

bibliography, bifurcation, dynamics, mathematical methods, nonlinear mechanics, Holmes (P.J.) ed., *1072, book*
- heat transfer, thermal sciences, thermodynamics, Eckert (E.R.G.), Sparrow (E.M.), (et al.), *4694*

Bicen (A.F.), laser doppler velocimeters, piston driven flow, unsteady flow, vortices, Vlachos (N.S.), (et al.), *707*
Biddell (D.C.), forming, tools, ultrasonics, vibration, vibrational forming, *9375*
Biegler (K.K.), damage, fatigue, fracture mechanics, material testing, time dependence, Sandor (B.I.), *6412*
Bielak (J.), composite materials, discontinuities, eigenvalues, rayleigh ritz method, sturm-liouville problems, *7156*
Biemann (W.), see Lausch (W.), *9024*
Bien (Z.), linear systems, maximum principle, pursuit, rendezvous, time delay systems, Chyung (D.H.), *1141*
- see Kim (B.K.), *11073*
- see Kim (B.K.), *11088*

Bierman (G.J.), see Madrid (G.A.), *194*
bifurcation, codes, differential equations (ordinary), differential equations (partial), mathematical methods, Hassard (B.D.), Kazarinoff (N.D.), (et al.), *21, book*
- buckling, rods, Vielsack (P.), *338*
- buckling (plastic), plates (orthotropic), wrinkling, Triantafyllidis (N.), Needleman (A.), *350*
- cracks, griffith cracks, pressure, Aoki (S.), Sakata (M.), *464*
- numerical analysis, separation, two dimensional flow, Willie (S.O.), *622*
- continuum mechanics, stability theory, Ericksen (J.L.), *1050*
- bibliography, dynamics, mathematical methods, nonlinear mechanics, Holmes (P.J.) ed., *1072, book*
- differential equations (ordinary), sliding, trajectories, Grishin (S.A.), Utkin (V.I.), *1143*
- elastic bodies, energy methods, stability theory, Corsanego (A.), Tafanelli (A.), *1244*
- micropolar media, polar fluids, viscous flow, Russo (R.), Padula (M.), *1491*
- periodic orbits, restricted three body problem, Robin (I.A.), *1788*
- hamiltonian equations, periodic orbits, restricted three body problem, Bottkol (M.), *1997*
- functional analyis, group theory, hamiltonian equations, marsden (j.e.), *2001, book*
- diffusion, periodic orbits, perturbation methods, reaction-diffusion systems, Ermentrout (G.B.), *2003*
- integro differential equations, periodic orbits, stability theory, Landman (K.A.), *2016*
- duality, functional equations, nonlinear programming, variational methods, Sewell (M.J.), *2027*
- biaxial loading, crack growth, cracks, Viola (E.), *2436*
- averaging, dynamic analysis, vibration (nonlinear), Holmes (C.), Holmes (P.), *3343*
- duct flow, numerical analysis, two dimensional flow, Goldman (A.), *3676*
- computing techniques, decay, discontinuities, ducts, Yaushev (K.K.), *3724*
- cooling towers, drops, plumes, vortices, Chen (N.C.J.) Jung (L.), *4058*
- elliptic equations, existence theorems, Brown (K.J.), Ibrahim (M.M.A.), (et al.), *4151*
- existence theorems, functional equations, hopf bifurcation, De Oliveira (J.C.F.), *4153*
- plane strain, sand, soil stability, Vardoulakis (I.), *4389*
- blood flow, modeling, pulsatile flow, Stettler (J.C.), Niederer (P.), (et al.), *4913*
- blood flow, experimental results, modeling, pulsatile flow, Stettler (J.C.), Niederer (P.), (et al.), *4914*
- aorta, blood flow, pulsatile flow, Walburn (F.J.), Stein (P.D.), *4915*
- eigenvalue problems, nonlinear theory, topological techniques, Alexander (J.C.), Antman (S.S.), *4946*
- diffusion, existence theorems, perturbation theory, reaction diffusion equations, Rothe (F.), *4961*
- boundary value problems, boussinesq equation, convection, perturbation methods, Reiss (E.L.), Tavantzis (J.), *4974*

- elliptic equations, free boundary, plasma, tokamak, Sijbrand (J.), *4975*
- benard problem, convection (benard), singularities, Golubitsky (M.), Schaeffer (D.), *4983*
- computing techniques, differential equations (ordinary), perturbation theory, Weber (H.), *5015*
- hopf bifurcation, periodic orbits, stability theory, Spirig (F.), *6068*
- buckling, shells (cylindrical), shells (sandwich), Hegedus (I.), *6257*
- ducts, modes, reflection, sound propagation, Nilsson (B.), Brander (O.), *6927*
- averaging, differential equations (ordinary), hopf bifurcation, Smith (H.L.), *7155*
- catastrophe theory, fluid mechanics, singularities, topological techniques, Stewart (I.), *7172*
- diffusion, dynamics, reactors, stability theory, Pao (C.V.), *7173*
- buckling, plates (annular), thermal instability, vibration, Tani (J.), *7358*
- flexural waves, impact, plastic waves, rods, Lee (L.H.N.), *7419*
- burgers equation, nonlinear analysis, stability theory, Olmstead (W.E.), Davis (S.H.), *7666*
- condensation, interface phenomena, liquid vapor interface, Bychkov (Yu.A.), Iordanskii (S.V.), *7871*
- elastic bodies, flutter, limit cycles, modeling, oscillators, Thompson (J.M.T.), Lunn (T.S.), *7910*
- circumnavigation, differential equations (ordinary), resonance, stability theory, Goltser (I.M.), *7917*
- critical load, plates, Rivlin (R.S.), *8266*
- critical load, shells (cylindrical), shells (nonlinear), shells (shallow), Andreev (L.V.), Zavarykin (L.G.), (et al.), *8267*
- nonlinear analysis, stability theory, vibration (self excited), Berezovskaia (F.S.), Khibnik (A.I.), *8282*
- aerothermochemistry, combustion, propagation, thermal waves, Sivashinsky (G.), *8789*
- biomathematics, differential equations (ordinary), periodic orbits, Holmes (P.), Lewis (D.), *9097*
- perturbation theory, stability theory, Rosenblat (S.), Cohen (D.S.), *9110*
- biomathematics, mathematical models, neural nets, Ermentrout (G.B.), Cowan (J.D.), *9197*
- biomathematics, neural nets, neurons, Plant (R.E.), *9198*
- periodic orbits, stability theory, three body problem, Markellos (V.V.), *9809*
- computing techniques, periodic orbits, Contopoulos (G.), Michaelidis (P.), *9815*
- boundary value problems, functional analyis, imperfections, Hoffman (W.), Kupper (T.), *10169*
- buckling, prestressed structures, rods, Vielsack (P.), *10170*
- circumnavigation, libration theory, mathematical methods, n body problems, periodic orbits, solar system, Szebehely (V.) ed., *10769, book*
- finite amplitude, gravity waves, three dimensional formulation, Ma (Y.-C.), *11561*
- capillary waves, finite amplitude, gravity waves (surface), Chen (B.), Saffman (P.G.), *11595*
- bodies (liquid filled), ducts, vibration (flow induced), Bajaj (A.K.), Sethna (P.R.), (et al.), *11671*

Biggs (J.M.), see Lai (S.-S.P.), *7047*

Bignon (P.G.), cylindrical bodies, impact, nuclear reactors, Riera (J.D.), *6363*

biharmonic equation, beams (composite), curved bars, orthotropic materials, Von Roth (W.), Epple (A.), *2248*

- boundary conditions, matrix inversion, mesh generation, stiffness matrix, Stavitsky (D.), Macagno (E.), (et al.), *3131*
- boundary value problems, elasticity (linear), Evans (D.J.), Murphy (C.P.), *5072*
- boundary value problems, elasticity (linear), singular integral equations, Heise (U.), *7271*
- differential equations (partial), elasticity (linear), Jaswon (M.A.), Shidfar (A.), (et al.), *7272*
- asymptotic methods, finite element methods, plates, Destuynder (P.), *9137*

Bihrle (W.) Jr., airplanes, design, rolling motion, spin recovery, wind tunnels, Bowman (J.S.) Jr., *11734*

Bilanin (A.J.), see Hecht (A.M.), *1505*

Bilek (Z.), crack propagation, dynamic fracture, elastic waves, finite element techniques, *2449*

- see Kuna (M.), *6447*

bilinear systems, biomathematics, mathematical models, population growth, Brewer (J.W.), *2205*

- analytical methods, biomathematics, immunology, inverse problems, mathematical models, Hsu (C.S.), Mohler (R.R.), *3153*
- control, control stability, design, lyapunov's functions, observers, Derese (I.), Noldus (E.), *5040*
- control, design, lyapunov's functions, Franke (D.), *5042*
- control, design, feedback, Derese (I.), Noldus (E.), *9160*
- control, dead-beat control, discrete systems, regulator problem, Grasselli (O.M.), Isidori (A.), (et al.), *11059*

Billardon (R.), cracks, cyclic loading, fatigue, finite element techniques, plastic behavior, Brunet (M.), (et al.), *8370*

Billet (M.L.), cavitation inception, holography, optical techniques, scattered light, Gates (E.M.), *1638*

- bubble dynamics, cavitation flow, cavitation inception, scale effects, Holl (J.W.), *5390*
- cavitation, modeling, turbomachinery, vortices, *8660*
- cavitation, cryogenics, ogives, thermodynamic properties, variable area flow, venturi, Holl (J.W.), (et al.), *10396*

Billig (F.S.), see Waltrup (P.J.), *8809*

- hypersonic flow, missiles, propulsion, ramjets, rockets, Waltrup (P.J.), (et al.), *8810*

Billingsley (J.), acoustic measurements, acoustic sources, sound generation, *3935*

Billington (E.W.), conservation laws, constitutive equations, continuum mechanics, crystallography, deformation, solid mechanics, Tate (A.), *1973, book*

- deformation (finite), elastoplasticity, failure, torsion, *7286*

Billiotte (M.), see Petit (J.-P.), *7899*

Billman (K.W.) ed., energy conversion, lasers, propulsion, radiation, solar energy, space, *5664, book*

Bily (M.), fatigue, random loading, surveys, testing equipment, Kliman (V.), (et al.), *5330*

- dynamic analysis, mathematical models, random loading, Cacko (J.), *9300*

bimodulus materials, caustics, composite materials, crack opening displacement, interface cracks, stress intensity factor, Theocaris (P.S.), Stassinakis (C.A.), *474*

- bending, composite materials, plates (rectangular), plates (thick), thermoelasticity (steady), Reddy (J.N.), Bert (C.W.), (et al.), *920*
- interface cracks, wedges, Vainshelbaum (V.M.), Goldshtein (R.V.), (et al.), *3475*
- bending, computing techniques, extension, laminates, Jones (R.M.), Morgan (H.S.), *4358*
- composite materials, finite element techniques, laminates, Reddy (J.N.), Chao (W.C.), *5128*
- displacement, laminates, plates (rectangular), Bert (C.W.), Sudhakar Reddy (V.), (et al.), *6225*
- elastodynamics, interface cracks, stress intensity factor, waves, Hanzawa (H.), Kishida (M.), (et al.), *6451*
- bending, elastoplasticity, metallic composites, Akhmerov (A.F.), *7306*
- bending, laminates, plates (rectangular), plates (thick), Bert (C.W.), Reddy (J.N.), (et al.), *7343*
- crack arrest, crack coalescence, crack propagation, discontinuities, Theocaris (P.S.), Milios (J.), *7532*

Bin (C.Z.), see Taktarov (N.G.), *11817*

binary flow, boiling, convection (forced), mixtures, Bennett (D.L.), Chen (J.C.), *743*

- condensation, inert gases, Krishna (R.), *811*
- convection (benard), galerkin method, poiseuille flow, thermodynamics (non-equilibrium), Artiz-Cohen (J.A.), Velarde (M.G.), *2801*
- cellular motions, plane flow, thermal instability, thermal waves, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *5554*
- heat transfer, liquid vapor interface, mixtures, vaporization, Fakhretdinov (I.A.), Chalyi (A.V.), *5611*
- channel flow, glaciers, Spring (U.), Hutter (K.), *7872*
- conduction (heat), conductivity, gases, kinetic theory, mixtures, multicomponent flow, Assael (M.J.), Wakeham (W.A.), (et al.), *8575*
- cavities, convection (free), inclined cavity, liquids, thermal diffusion, Pinyagin (A.Yu.), Pshenichnikov (A.F.), *8706*
- distillation, heat transfer, mass transfer, Ito (A.), Asano (K.), *10666*
- critical region, liquid vapor mixture, mixtures, thermodynamic properties, Wielopolski (P.), *11759*
- boiling, bubble dynamics, Cooper (M.G.), Stone (C.R.), *12035*

Bindal (V.N.), acoustic measurements, ultrasonics, wave energy, Kumar (A.), *3975*

Binder, air, energy dissipation, entrainment, hydraulic structures, turbulence, Duport, (et al.), *3603*

Binder (G.), see Favre-Marinet (M.), *10456*

Bingham (C.E.), see Ortega (J.K.E.), *7863*

Binn (J.H.), see Abraham (O.), *623*

Binnie (W.B.), airplanes, design, flight control, side-force control, Stengel (R.F.), *2160*

biocontrol, cardiovascular system, hyperventilation, tests, Bonde-Petersen (F.), Norsk (P.), (et al.), *229*

- biomathematics, mathematical models, nervous system, Gorozhanin (V.S.), *1172*
- biphasic stimulation, design, mathematical models, Donaldson (N.De N.), *1173*
- bones, man machine systems, Paciga (J.E.), Richard (P.D.), (et al.), *3069*
- identification, nervous system, Penev (G.D.), Tairov (O.P.), *3225*
- heart, organ replacement, organs, Belilovskii (M.A.), Super (N.A.), (et al.), *3226*
- design, myoelectric control, prosthetic devices, Shannon (G.F.), *3227*
- muscles, nervous system, Armstrong (D.), Moon (M.), *5067*
- blood flow, prosthetic devices, temperature control, Efremov (A.A.), Andrushchenko (L.I.), *6033*
- dynamic analysis, electroencephalography, mathematical models, nervous system, nonlinear systems, nonlinear theory, Freeman (W.J.), *6149*
- gait, locomotion, optimization, Beletskii (V.V.), Kovaleva (E.D.), (et al.), *7111*
- heat transfer (biological), human body, thermal effects, Schuette (W.H.), Lees (D.E.), (et al.), *7125*
- man machine systems, optimization, rowing, time optimal systems, Senator (M.), *7258*

- muscles, nervous system, oscillations, Oguztoreli (M.N.), Stein (R.B.), *9053*

biodynamics, damping, nonlinear mechanics, oscillations, Bojadziev (G.N.), *1092*

- experimental methods, human body, kinematics, Alexander (M.J.L.), Colbourne (J.), *3057*
- human body, perception thresholds, vibration, yawing, Irwin (A.W.), *7123*
- human body, vibration, Griffin (M.J.), *8080*
- acoustic loading, human body, vibration, Meister (F.J.), *8081*
- gait, muscles, optimization, Patriarco (A.G.), Mann (R.W.), (et al.), *9052*
- biomechanics, gait, locomotion, Tibarewala (D.N.), Ghosh (A.K.), (et al.), *9055*
- gait, human body, pressure, Cavanagh (P.R.), Lafortune (M.A.), *9068*

Biollay (Y.), backward heat problem, conduction (heat), existence theorems, mathematical methods, norms, *39*

- boundary value problems, elasticity (linear), saint venant principle, strain energy, *237*

biological joints, biomechanics, kinematics, shoulder, Engin (A.E.), *1036*

- biomechanics, knees, tendons, Piziali (R.L.), Seering (W.P.), (et al.), *1946*
- biomechanics, knees, tendons, Seering (W.P.), Piziali (R.L.), (et al.), *1947*
- biomechanics, spine, Tencer (A.F.), Ahmed (A.M.), *3055*
- biomechanics, gait, human body, Winter (D.A.), *3058*
- gait, kinematics, muscles, Boccardi (S.), Pedotti (A.), (et al.), *4910*
- mechanical design, ski binding, sports medicine, Hull (M.L.), Allen (K.W.), *6001*
- biomechanics, muscles, An (K.N.), Hui (F.C.), (et al.), *6003*
- biomechanics, hips, stress analysis, Brinckmann (P.), Frobin (W.), (et al.), *6004*
- bones, fracture, ultrasonics, Dzene (I.Ya.), Dzenis (V.V.), (et al.), *6032*
- experimental methods, impact, injuries, sports medicine, Mclaughlin (T.M.), Miller (N.R.), *7122*
- injuries, prosthetic devices, spine, Ghista (D.N.) ed., *8069, book*
- experimental methods, human body, kinematics, Chao (E.Y.S.), *9048*
- hips, prosthetic devices, Gatti (A.M.), *9067*
- human body, joints, linkages, Kinzel (G.L.), *10379*
- friction, prosthetic devices, tribology, wear, Dumbleton (J.H.), *10882*

biomaterials, composite materials, fibers, mechanical properties, teeth, Fox (P.G.), *1034*

- constitutive equations, deformation (finite), tissues, Demiray (H.), *1038*
- arteries, elasticity (nonlinear), tissues, Fung (Y.C.), *1039*
- constitutive equations, nonlinear materials, tissues, viscoelastic materials, Decraemer (W.F.), Maes (M.A.), (et al.), *1951*
- dental prostheses, prosthetic devices, transducers (pressure), Turner (C.H.), Gross (M.J.), *1959*
- bones, frequencies, impact, material testing, Khalil (T.B.), Viano (D.C.), (et al.), *1961*
- lungs, tissues, viscoelastic materials, Grotberg (J.B.), Davis (S.H.), (et al.), *3060*
- tendons, viscoelasticity (dynamic), Schwerdt (H.), Constantinesco (A.), (et al.), *3061*
- lungs, rheology, tissues, Fung (Y.C.), *3062*
- bonded joints, dentistry, polymers, Amin (W.M.), Fletcher (A.M.), (et al.), *3070*
- anisotropy, bones, composite materials, Kreger (A.F.), Zilauts (A.F.), *3248*
- elastic behavior, fixation agents, tissues, Fung (Y.C.), Sobin (S.S.), *4911*

biomathematics, detection, encephalographic data, kalman filters, stochastic processes, Ishii (N.), Iwata (A.), (et al.), *129*

- mathematical models, time invariant systems, Matis (J.H.), Tolley (H.D.), *150*
- biocontrol, mathematical models, nervous system, Gorozhanin (V.S.), *1172*
- bilinear systems, mathematical models, population growth, Brewer (J.W.), *2205*
- catastrophe theory, mathematical models, nervous system, zeeman's equations, Stewart (I.), Woodcock (A.E.R.), *2206*
- gastrointestinal system, mathematical models, myoelectrical activity, oscillations, Smallwood (R.H.), Linkens (D.A.), (et al.), *2207*
- analytical methods, bilinear systems, immunology, inverse problems, mathematical models, Hsu (C.S.), Mohler (R.R.), *3153*
- mathematical models, nervous system, respiratory system, Chestnova (A.A.), Chetayev (A.N.), *3224*
- diagnostics, electroretinogram, eyes, nonlinear analysis, Koblasz (A.J.), *4923*
- heat transfer (biological), human body, temperature, Smith (P.), Twizell (E.H.), *6027*
- dynamic analysis, epidemics, mathematical models, Gripenberg (G.), *6151*
- monte carlo analysis, muscles, Nishiyama (K.), Shimizu (H.), *7107*
- cell behavior, dynamic analysis, fluid mechanics, mathematical models, Aldis (G.), Tognetti (K.), (et al.), *8178*
- bifurcation, differential equations (ordinary), periodic orbits, Holmes (P.), Lewis (D.), *9097*
- algorithms, cybernetics, differential games, pattern recognition, Yablonskij (S.V.), *9152, book*
- optimal control, pharmacokinetics, Kusuoka (H.), Kodama (S.), (et al.), *9196*
- bifurcation, mathematical models, neural nets, Ermentrout (G.B.), Cowan (J.D.), *9197*
- bifurcation, neural nets, neurons, Plant (R.E.), *9198*
- asymptotic behavior, differential equations (ordinary), feedback, Selgrade (J.F.), *10015*

biomechanics, birefringent materials, photoelasticity (dynamic), Harris (J.K.), *481*

- critical heat flux, cryogenics, film boiling, heat transfer, nucleate boiling, Belyakov (V.P.), Budrik (V.V.), *750*
- anisotropy, bones, elastic constants, ultrasonics, Van Buskirk (W.C.), Cowin (S.C.), (et al.), *1031*
- frequency domain techniques, gait, kinematics, Cappozzo (A.), *1033*
- biological joints, kinematics, shoulder, Engin (A.E.), *1036*
- heart, kinematics, strain analysis, Meier (G.D.), Ziskin (M.C.), (et al.), *1037*
- gallstones, hydroelastic waves, organs, travelling waves, wave generation, wave interactions, Wu (Y.P.), Wong (G.R.), (et al.), *1045*
- experimental mechanics, kinematics, photography, Miller (N.R.), Shapiro (R.), (et al.), *1046*
- experimental mechanics, gait, transducers (load), Gola (M.M.), *1047*
- estimation, gait, three dimensional formulation, Woltring (H.J.), *1168*
- continuum mechanics, flow, fluid mechanics, rheology, Dokumentation Rheologie, *1482, book*
- blood flow, human engineering, prosthetic devices, Mow (V.C.) ed., *1945, book*
- biological joints, knees, tendons, Piziali (R.L.), Seering (W.P.), (et al.), *1946*
- biological joints, knees, tendons, Seering (W.P.), Piziali (R.L.), (et al.), *1947*
- gait, transducers (load), Frost (R.B.), Cass (C.A.), *1948*
- cochlea, ear, hydroelasticity, Holmes (M.H.), *1952*
- adhesives, sensor devices, skin, Margules (G.S.), Harris (D.L.), *1963*
- rheology, shear flow, viscometry, Whorlow (R.W.), *2578, book*
- blood, blood flow, tissues, Fung (Y.C.), *3054, book*
- biological joints, spine, Tencer (A.F.), Ahmed (A.M.), *3055*
- acceleration, human body, kinematics, Voge (V.M.), *3056*
- biological joints, gait, human body, Winter (D.A.), *3058*
- bones, dynamic properties, experimental methods, Frasca (P.), Harper (R.A.), (et al.), *3073*
- kidneys, modeling, viscous flow, Radhakrishnamacharya (G.), Chandra (P.), (et al.), *4119*
- channel flow, channels, darcy flow, river beds, roughness, vegetation, Kouwen (N.), Li (R.-M.), *4569*
- material testing, spine, stress strain relationships, Hung (T.-K.), Chang (G.-L.), *4906*
- gait, human body, pressure measurement, Arvikar (R.), Seireg (A.), *4908*
- biological joints, muscles, An (K.N.), Hui (F.C.), (et al.), *6003*
- biological joints, hips, stress analysis, Brinckmann (P.), Frobin (W.), (et al.), *6004*
- constitutive equations, deformation, diagnostics, heart, Ghista (D.N.), Ray (G.), (et al.), *6013*
- constitutive equations, deformation, diagnostics, heart, pulsatile flow, Ghista (D.N.), Ray (G.), (et al.), *6014*
- cell behavior, materials properties, membranes (permeable), Martynov (L.A.), *6015*
- bones, elastic waves, electroelasticity, piezoelectrics, Guzelsu (N.), Saha (S.), *6026*
- bones, kinematics, spine, stiffness, stress strain relationships, Laborde (J.M.), Burstein (A.H.), (et al.), *7104*
- blood flow, heart, muscles, Arts (T.), Reneman (R.S.), (et al.), *7109*
- gait, human body, Kairento (A.-L.), Hellen (G.), *7110*
- aneurysms, blood flow, viscous flow, Mirolyubov (S.G.), *7117*
- center of volume, human body, statics, Gagnon (M.), Montpetit (R.), *7128*
- limit cycles, modal analysis, oscillators, time delay systems, van der pol oscillators, Linkens (D.A.), Kitney (R.I.), *7154*
- finite element techniques, fluid mechanics, peristaltic flow, Stavitsky (D.), Macagno (E.O.), (et al.), *7219*
- deformation, lungs, mechanical properties, tissues, Tai (R.C.), Lee (G.C.), *8071*
- blood flow, flexible walls, fluid-structure interaction, muscles, navier stokes equation, Melbin (J.), Noordergraaf (A.), *8073*
- composite materials, continuum theory, discrete systems, mixtures, porous media, Brulin (O.) eds., Hsieh (R.K.T.), *8090, book*
- heart, modeling, muscles, Panerai (R.B.), *9054*
- biodynamics, gait, locomotion, Tibarewala (D.N.), Ghosh (A.K.), (et al.), *9055*
- closed conduit flow, collapse, rheology, vocal cords, Conrad (W.A.), *9058*
- aneurysms, heart, shells (spherical), stress analysis, Radhakrishnan (S.), Ghista (D.N.), (et al.), *9064*
- ducts (curved), flow reversal, pressure gradient, pulsatile flow, vortex flow, Chandran (K.B.), Yearwood (T.L.), *11485*

biot number, analytical methods, conduction (heat), cylindrical bodies, heisler charts, spherical bodies, unsteady flow, Sha (W.C.), Ganic (E.N.), *9714*

- energy storage, heat exchangers, optimization, packed beds, thermal regenerators, Schmidt (F.W.), Willmott (A.J.), *9730, book*

Bird (R.E.), atmosphere, solar energy, solar radiation, Hulstrom (R.L.), *8035*

birefringence, cyclic loading, elastoviscoplasticity, photoelasticity, polymers, Nishitani (T.), Koike (Y.), *2466*

- experimental methods, extension, polymers, Van Aken (J.A.), Janeschitz-Kriegl (H.), *5384*
- boundary layer, conducting fluid, rarefied gases, Oudeman (P.), Korving (J.), (et al.), *5423*
- bottom irregularities, boundary layer, separation, visualization, Karahan (M.E.), Peterson (A.W.), *6598*
- polymers, secondary flow, Han (C.D.), Yoo (H.J.), *8493*
- anisotropy, colloids, optical techniques, suspensions, Meeten (G.H.), *8502*
- dilute solutions, scattered light, visualization, Krishnamurthy (A.R.), Pindera (J.T.), *9678*

birefringent materials, biomechanics, photoelasticity (dynamic), Harris (J.K.), *481*
- photoelasticity (three dimensional), scattered light, Robert (A.), Royer (J.), *7547*
- polymers, viscometry, Van Aken (J.A.), Gortemaker (F.H.), (et al.), *8498*

Birembaut (Y.), bearings (hydrodynamic), dynamic properties, finite element methods, reynolds equation, rotors, Peigney (J.), *5997*
Birger (V.I.), creep, earth, mantle, thermal waves, Kovtunenko (S.M.), *9915*
Biringen (S.), boundary layer (turbulent), numerical methods, reynolds number, turbulence model, Reynolds (W.C.), *5465*
Biritskii (M.I.), flow measurement, rivers, streams, *1900*
Birjukov (L.V.), dynamic loads, gear teeth, gear trains, transmissions, Krusev (S.D.), *2563*
Birnboim (M.H.), high pressure, thermophysical properties, transport properties, viscosity, Weiss (H.), *5520*
Biron (A.), see Bui-Quoc (T.), *9392*
Biryukov (S.V.), rayleigh waves, scattering, surface barrier, *5244*
Bisch (P.M.), see Hennenberg (M.), *3855*
Bischoff (H.), see Sohngen (B.), *10401*
Bishaev (A.M.), couette flow, gases, heat transfer, plates (parallel), Rykov (V.A.), *11450*
Bishnoi (P.R.), see Cronje (J.S.), *3721*
Bishop (A.), differential equations (ordinary), diffusion, magneto fluid dynamics, nonlinear analysis, reaction kinetics, Campbell (D.), (et al.), *10931*
Bishop (R.E.D.), elastic bodies, ocean waves, ship dynamics, ship motion, vibration, Price (W.G.), *4105*
- dynamic response, vibration (forced), vibration isolation, Mahalingam (S.), *5188*
- flexible bodies, hulls, ocean waves, wave loads, Price (W.G.), (et al.), *12084*

Biskamp (D.), modes, nonlinear theory, plasma (toroidal), stability theory, tokamak, *3896*
Bistagnino (C.), dilute solutions, inlets, laminar flow, pitot tube, polymers, Cancelli (C.), (et al.), *10444*
Biswal (B.), see Sinha Roy (J.), *8058*
- see Roy (J.S.), *9026*

Biswas (N.N.), see Srivatsa (S.K.), *105*
Biswas (P.), anisotropic media, shells (cylindrical), thermoelasticity (steady), *5799*
Bitmead (R.R.), difference equations, lyapunov's functions, stability theory, stochastics, Anderson (B.D.O.), *9119*
Bitner (E.M.), shallow water, surface waves, wind-wave interaction, *3014*
Bitting (K.R.), failure, fatigue, nylon, ropes, *3444*
Bityukov (V.K.), see Stepanov (S.V.), *10602*
Bjeikhagen (H.), see Abramson (N.), *9420*
Bjorhovde (R.), beams, columns, girders (plate), structural stability, *6245*
Bjorkman (G.S.) Jr., see Richards (R.) Jr., *2510*
Blaauboer (C.), see Noback (R.), *11843*
Blach (A.E.), bolted joints, flanges, pipes, pressure vessels, Bazergui (A.), *8464*
Blacher (S.), chaos, computing techniques, hamiltonian equations, spectra, Perdang (J.), *8107*
Blachut (J.), beams (cantilever), beams (elastic), design (optimum), *10344*
Black (S.H.), dynamic response, motorcycles, simulation, vehicles, Taylor (D.L.), *2353*
Black (W.B.), elastic constants, fibers, high strength, organic fibers, polymers, *7280*
Black (W.Z.), see Hartley (J.G.), *830*
Blackburn (W.S.), cracks, finite element techniques, stress intensity factor, Hellen (T.K.), *463*
Blackstock (D.T.), see Webster (D.A.), *2704*
Blackwelder (R.F.), see Gad-El-Hak (M.), *6686*
Blackwell (B.F.), conduction (heat), inverse problems, numerical methods, *5580*
blades, dynamic stresses, rotating bodies, vibration (free), Ramamurti (V.), Sreenivasamurthy (S.), *372*
- cylindrical bodies, film cooling, gas turbines, heat transfer, leading edge, thermal measurements, Mirhosseini (A.), Barrow (H.), *733*
- centrifugal turbines, orthotropic materials, rotating disks, thermal loading, Paul (A.K.), *1243*
- aerodynamic performance, axial turbines, separated flow, Suachev (I.P.), Neuimin (V.M.), (et al.), *1632*
- creep, thermal fatigue, turbomachinery, Peschel (W.), Schreieck (R.), *1835*
- dynamic response, rotors, vibration, Shaw (J.), Albion (N.), *2337*
- cascades, friction, pressure distribution, trailing edge, Ribaut (M.), Niessner (H.), *2654*
- abrasion, centrifugal compressors, dust, Ris (V.F.), *2755*
- axial compressors, cascades, transonic flow, viscous flow, Sator (F.G.), *2756*
- layered media, multilayer, porous surfaces, temperature, turbomachinery, Lokai (V.I.), Zhuikov (V.V.), (et al.), *2822*
- aerodynamic coefficients, aerodynamic loads, cascades, oscillating bodies, Hanamura (Y.), Tanaka (H.), (et al.), *2909*
- dynamic response, turbomachinery, vibration (forced), vibration (random), Huang (W.-H.), *3368*
- measurements (dynamic), steam turbines, vibration, Donato (V.), Bannister (R.L.), (et al.), *3370*
- axial turbines, cascades, transonic flow, visualization, Holliger (K.), *3740*
- design, performance, turbines, Whitney (W.J.), Moffitt (T.P.), (et al.), *3742*
- axial compressors, boundary layer, geometrical properties, subsonic flow, viscid inviscid flow, Calvert (W.J.), Herbert (M.V.), *3745*
- cavitation inception, models, propellers (marine), Kuiper (G.), *3749, book*
- heat transfer, rotating fluids, similarity methods, simulation, turbomachinery, Eckert (E.R.G.), *3802*
- bending, eigenvalues, frequencies, steam turbines, vibration (torsional), Belohradsky (H.-J.), *4430*
- axial turbines, boundary layer, cascades, Fielding (L.), *4675*
- conformal mapping, potential flow, three dimensional flow, turbomachinery, Agarwal (P.K.), Viktorov (G.V.), *4677*
- airfoil characteristics, cascades, turbines, two dimensional flow, Pimsner (V.), Baran (N.), *4740*
- crack propagation, stress intensity factor, thermal fatigue, Getsov (L.B.), Kabelevskii (M.G.), *4817*
- spectral analysis, turbines, vibration, Egorov (I.V.), *5215*
- gas turbines, spectral analysis, vibration, Kanunnikov (I.P.), Sidorenko (M.K.), *5216*
- axial turbines, cascades, heat transfer, turbulence (freestream), Bayley (F.J.), Priddy (W.J.), *5504*
- cooling, high pressure, turbomachinery, Holland (M.J.), Thake (T.F.), *5560*
- cooling, gas turbines, high temperature, water, El-Masri (M.A.), Louis (J.F.), *5557*
- centrifugal fans, noise, noise measurements, Leist (H.), *5780*
- cavities, hardening, turbines, Kravchenko (B.A.), Trofimov (N.G.), (et al.), *5801*
- composite structures, laminates, turbomachinery, Gorlyshkin (V.T.), *6199*
- design, lifting surfaces, mathematical models, propellers, turbomachinery, Brockett (T.E.), *6738*
- film cooling, gas turbines, jets, Ito (S.), Goldstein (R.J.), (et al.), *6850*
- propellers, spectra, vibration (forced), wind turbines, Akesson (B.), Sandstrom (S.), *6870*
- finite element techniques, impact, jet engines, solid solid interface, Brown (K.W.), Krahula (J.L.), *7211*
- finite element methods, friction (sliding), turbines, vibration (forced), vibration (free), Zmitrowicz (A.), *7397*
- experimental mechanics, frequencies, rotating bodies, turbines, vibration (free), Beckmann (J.), Wachter (J.), *7399*
- chemical reactions, cyclic loading, high temperature, surface flaws, Kosygin (E.P.), Verkhovodov (P.A.), *7492*
- cascades, finite difference methods, unsteady flow, Mitchell (N.A.), *7729*
- axial turbines, design, velocity profiles, Hirsch (C.), Denton (J.D.), *7802*
- axial compressors, pressure change, stalling, Koch (C.C.), *7806*
- heat transfer, rotating bodies, slots, turbomachinery, Kogan (G.A.), Dergach (A.A.), *7842*
- axial turbines, leaks, rotors, Booth (T.C.), Dodge (P.R.), (et al.), *7890*
- axial turbines, leaks, numerical analysis, rotors, Wadia (A.R.), Booth (T.C.), *7891*
- turbines, vibration (self excited), Borishanskii (K.N.), Naumov (A.V.), *8312*
- compliance, cutting, turbines, Mamaev (V.S.), Dmitriev (S.N.), (et al.), *8364*
- adhesives, bonding, dynamic loads, steam turbines, strain gages, Petrie (E.M.), *8427*
- cascades, finite element techniques, transonic flow, Deconinck (H.), Hirsch (C.), *8590*
- aerodynamic interference, helicopters, noise (aerodynamic), vortex lines, Widnall (S.E.), Wolf (T.L.), *8648*
- aerodynamics, axial compressors, pressure distribution, rotors, three dimensional flow, Dring (R.P.), Joslyn (H.D.), (et al.), *8656*
- axial compressors, pressure distribution, strain gages, surge, velocity measurement, Shatalov (I.K.), *8657*
- incompressible flow, modeling, three dimensional flow, turbomachinery, Buisine (D.), *8659*
- axial turbines, cascades, combustion products, erosion, particles, synthetic fuels, Wenglarz (R.A.), Menguturk (M.), *8807*
- axial turbines, heat transfer, rotors, thermal measurements, Pochuev (V.P.), Shcherbakov (V.F.), *8808*
- aerodynamic interference, cascades, damping, oscillating bodies, separated flow, turbomachinery, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- dynamic analysis, rotating disks, vibration (free), Irretier (H.), *9316*
- dynamic analysis, helicopters, vibration (forced), Lucjanek (W.), Narkiewicz (J.), *9317*
- cascades, finite volume method, numerical methods, time domain techniques, Younis (M.E.), Camarero (R.), *9588*
- helicopters, lift, rotors, turbulence (geophysical), turbulent flow, Fijimori (Y.), *9664*
- helicopters, numerical methods, pressure distribution, transonic flow, unsteady flow, Chattot (J.-J.), Philippe (J.-J.), *9666*
- heat transfer, steam turbines, Breitkopf (G.E.), *9782*
- aeroelasticity, finite element techniques, helicopters, rotors, Straub (F.K.), Friedmann (P.P.), *9606*
- beams (cantilever), bending, rotary inertia, shear, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- bending (viscoplastic), dynamic response, dynamic testing, matrix methods, steam turbines, Nahlik (A.), Pastia (A.), *10209*

- rayleigh ritz method, shells (cylindrical), vibration (free), Leissa (A.W.), Lee (J.K.), (et al.), *10210*
- impact, strain rate, turbines, Gordon (J.T.) Jr., Reaugh (J.E.), *10244*
- axial turbines, geometrical properties, optimization, Sagadeev (R.G.), Strunkin (V.A.), *10355*
- ducts (curved), laminar flow, secondary flow, turbulent flow, Kreskovsky (J.P.), Briley (W.R.), (et al.), *10439*
- airfoil characteristics, helicopters, oscillating bodies, two dimensional flow, Maresca (C.A.), Favier (D.J.), (et al.), *10502*
- helicopters, three dimensional flow, unsteady flow, wind tunnels, wings, Monnerie (B.), Philippe (J.-J.), *10514*
- aerodynamic interference, aerodynamics, airfoils, rotors, wind turbines, Klimas (P.C.), *10520*
- annular flow, axial compressors, boundary layer, mixing, wakes, Davino (R.M.), Lakshminarayana (B.), *10522*
- convection (forced), gas turbines, heat transfer, thermal loading, Graham (R.W.), *10567*
- aeroelasticity, flutter, turbofan engines, Ford (R.A.J.), *10762*
- axial compressors, cascades, flutter, testing equipment, Jutras (R.R.), Stallone (M.J.), (et al.), *10764*
- axial turbines, dynamic response, rotating disks, vibration, Michimura (S.), Nagamatsu (A.), (et al.), *11130*
- rotors, turbulence, turbulence (structure), wakes, Lakshminarayana (B.), Reynolds (B.), *11553*
- damping, flapping, helicopters, Peters (D.A.), Gaonkar (G.H.), *11736*
- damping, flapping, helicopters, rotors, Gaonkar (G.H.), Peters (D.A.), *11737*
- axial compressors, hot wire, three dimensional flow, wakes, Reynolds (B.), Lakshminarayana (B.), *11738*
- aerodynamic performance, film cooling, gas turbines, pressure drop, Ito (S.), Eckert (E.R.G.), (et al.), *11743*
- axial turbines, cascades, geometrical properties, swirl flow, Aronov (B.M.), Kerzhenkov (A.G.), *11747*
- axial turbines, heat transfer, pressure measurement, walls, Dunn (M.G.), Hause (A.), *11798*

Blaga (P.), approximation theory, finite element methods, multivariable systems, splines, Coman (G.), *3126*

Blaga (Ya.), see Achasov (O.V.), *3841*

Blagonadezhin (V.L.), composite structures, finite element techniques, residual stresses, shells (of revolution), Dmitriev (A.V.), *92*

- composite materials, residual stresses, shells (of revolution), Vorontsov (A.N.), (et al.), *5100*

Blagosklonov (V.I.), hypersonic flow, interaction, multiphase flow, Kuznetsov (V.M.), (et al.), *2983*

Blagoveshchenskaya (Ye.E.), compressional waves, earthquakes, focal point, radiation, *3911*

Blahut (R.E.), codes, error, error control, fourier transform, frequency domain techniques, *4215*

Blair (A.B.) Jr., canard, mechanical systems, missiles, remote control, rolling motion, *6728*

Blair (M.F.), boundary layer, modeling, reynolds number (high), turbomachinery, wind tunnels, Bailey (D.A.), (et al.), *4688*

- see Dring (R.P.), *10687*

Blaisdell (F.W.), asymptotic methods, curve fitting, equilibrium, scour, sediment transport, Anderson (C.L.), (et al.), *7659*

Blanchard (A.), cryogenics, ejectors, injection systems, wind tunnels, Dor (J.-B.), (et al.), *5515*

Blanchard (D.K.), see Cooke (C.H.), *11429*

Blanchard (R.L.), calibration, electrostatic gyro, estimation, gyroscopes, kalman filters, mathematical models, navigation, strapdown systems, *2162*

Bland (S.R.), aerodynamic performance, airfoils, divergence, swept wings, *3909*

Blandford (G.E.), boundary elements, cracks, stress intensity factor, Ingraffea (A.R.), (et al.), *1386*

Blank (A.D.), flow obstructions, irrotational flow, perturbations, two dimensional flow, upper atmosphere, wind, *5395*

Blank (D.), algorithms, avoidance, missiles, singular control, trajectories, variable metric algorithm, Shinar (J.), *1160*

Blankenship (G.L.), see Hopkins (W.E.) Jr., *10027*

Blanton (T.L.) III, deformation, pore pressure, pressure, rocks, *432*

blast effects, boreholes, brittle materials, crack propagation, numerical analysis, Stecher (F.P.), Fourney (W.L.), *424*

- experimental results, fracture mechanics, modeling, oil shale, Grady (D.E.), Kipp (M.E.), (et al.), *6399*
- ballistics (interior), launching, projectiles, solid fuels, Taylor (T.D.), Lin (T.C.), *6891*
- cyclic loading, fatigue, panels, plaster panels, shear loading, vibration, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- explosions, impulsive loading, transient loading, underground, Egorov (V.A.), Kolobashkin (V.M.), (et al.), *9833*
- explosions, impulsive transfers, rarefied gases, Aristov (V.V.), Shakhov (E.M.), *9835*

blast waves, gases, particulate flow, Eidelman (S.), Oved (Y.), (et al.), *2725*

- explosions (underwater), ocean, underwater acoustics, Fridman (V.Ye.), *9643*
- chemical kinetics, detonation (two phase), explosions, explosive loading, Eidelman (S.), Sichel (M.), *9822*
- chemical kinetics, detonation, explosions, propagation, Levin (V.A.), Svalov (A.M.), *9831*
- deformation (plastic), impulsive loading, plastic flow, plates (circular), Yakupov (R.G.), *10245*
- cylindrical waves, explosions, isothermal processes, similarity methods, Lerche (I.), *11827*

blasting, indentation, rocks, Khalaf (F.), Abouzeid (A.-Z.M.), *7449*

Blatt (J.M.), constraints, maximum principle, optimal control, *11068*

Blau (P.J.), friction (sliding), metallography, metals, wear, *9019*

Blech (J.J.), see Bar-Yoseph (P.), *10533*

Blejwas (T.E.), elastic behavior, equations of motion, kinematics, lagrange multiplier, mechanisms, *8100*

Blessing (G.V.), aluminum alloys, composite materials, elastic constants, metallic composites, ultrasonics, Elban (W.L.), *5328*

Bligh (T.P.), see Abdel-Wahed (R.M.), *5526*

Blinowski (A.), continuum mechanics, plasticity, tensor methods, *3094*

Blint (R.J.), flames, gas solid interface, methane, Bechtel (J.H.), *10702*

Blitz (J.), control, eddy currents, temperature, testing equipment, Razzak (G.A.), *1419*

Block (J.A.), condensation, safety, two phase flow, *7963*

Blocki (W.), capsizing, ocean waves, resonance, rolling motion, ship motion, stochastics, *8041*

Blockley (D.I.), failure, safety, structural optimization, *4529*

Blodgett (M.L.), acoustic waves, ocean, propagation, Palmer (D.R.), *1801*

Blokh (A.G.), mathematical models, optical thickness, radiant interchange, temperature, Adzerikho (K.S.), (et al.), *5590*

- see Adzerikho (K.S.), *9721*

Blokhin (I.L.), see Anikeev (G.I.), *6306*

Blokhra (R.L.), electro fluid dynamics, porous media, thermodynamics (nonequilibrium), Kohli (S.), *10843*

blood, cell behavior, experimental methods, membranes, plastic behavior, Waugh (R.E.), La Celle (P.L.), *1949*

- aortic valve, damage, prosthetic devices, shear stress, Figliola (R.S.), Mueller (T.J.), *1960*
- biomechanics, blood flow, tissues, Fung (Y.C.), *3054, book*
- circulatory systems, hemolysis, prosthetic devices, pumps, Fumero (R.), *6022*
- bubble dynamics, oscillatory flow, pressure change, Tsujino (T.), Shima (A.), *7119*
- circulatory systems, oxygen, prosthetic devices, Arunachalam (V.M.), Shettigar (U.R.), *7126*

blood flow, reynolds number (small), spherical bodies, trajectories, Starobin (I.M.), *571*

- aorta, flexible walls, pulsatile flow, shock waves, Forbes (L.K.), *1041*
- particle fluid flow, peristaltic flow, viscoelastic fluids, Shen (M.C.), Lin (K.C.), (et al.), *1042*
- experimental methods, flow measurement, noise (random), Cathignol (D.J.), Fourcade (C.), (et al.), *1043*
- arteries, difference differential equations, Lefevre (J.), Magnus (A.), *1044*
- doppler effect, experimental mechanics, flow measurement, Gill (R.W.), *1048*
- biomechanics, human engineering, prosthetic devices, Mow (V.C.) ed., *1945, book*
- blood vessels, blood volume, circulatory systems, Thirsk (R.B.), Kamm (R.D.), (et al.), *1954*
- blood vessels, cardiovascular system, transition flow, Walburn (F.J.), Stein (P.D.), *1956*
- biomechanics, blood, tissues, Fung (Y.C.), *3054, book*
- diffusion, microcirculation, Sheth (B.V.), Hellums (J.D.), *3063*
- aerodynamics, fluid mechanics, Krause (E.) ed., *3064, book*
- blood vessels, pulsatile flow, Hyman (W.A.), Brewer (M.A.), *3066*
- aorta, finite element methods, navier stokes equation, shear stress, Gokhale (V.V.), Tanner (R.I.), (et al.), *3067*
- arteries, pressure measurement, pulsatile flow, Mauck (G.W.), Smith (C.R.), (et al.), *4120*
- aneurysms, arteries, pulsatile flow, viscous flow, Wille (S.O.), *4912*
- bifurcation, modeling, pulsatile flow, Stettler (J.C.), Niederer (P.), (et al.), *4913*
- bifurcation, experimental results, modeling, pulsatile flow, Stettler (J.C.), Niederer (P.), (et al.), *4914*
- aorta, bifurcation, pulsatile flow, Walburn (F.J.), Stein (P.D.), *4915*
- heart, valves, Reul (H.), Talukder (N.), (et al.), *4917*
- arteries, navier stokes equation, stenoses, Wille (S.O.), *4918*
- capillary flow, microcirculation, platelet concentration, shear flow, Beck (M.R.) Jr., Eckstein (E.C.), *4919*
- diffusion, mass transfer, Schwartz (A.J.), *6016*
- aorta, muscles, Nerem (R.M.), Levesque (M.J.), (et al.), *6017*
- arteries, compressional waves, pulsatile flow, Smit (C.H.), *6018*
- experimental methods, microcirculation, Shagal (D.I.), Tavik (A.I.), (et al.), *6019*
- compressional waves, flexible walls, pulsatile flow, viscoelastic fluids, Kaimal (M.R.), *6020*
- arteries, attenuation, compressional waves, energy dissipation, Bertram (C.D.), *6021*
- anemometers, aorta, hot film, Yearwood (T.L.), Chandran (K.B.), *6023*
- doppler effect, experimental methods, spine, White (D.N.), Ketelaars (C.E.J.), (et al.), *6024*

- biocontrol, prosthetic devices, temperature control, Efremov (A.A.), Andrushchenko (L.I.), *6033*
- ducts, nonaxisymmetric flow, stokes flow, Strigberger (J.), Plotkin (A.), *6647*
- couple stresses, diffusion, non newtonian flow, Soundalgekar (V.M.), Chaturani (P.), *6655*
- biomechanics, heart, muscles, Arts (T.), Reneman (R.S.), (et al.), *7109*
- circulation, heart, Kogan (V.A.), *7116*
- aneurysms, biomechanics, viscous flow, Mirolyubov (S.G.), *7117*
- arteries, compressional waves, pressure measurement, pulsatile flow, Li (J.F-J.), Melbin (J.), (et al.), *7118*
- circulation, elastic constants, frequency response, laplace transform, Skidmore (R.), Woodcock (J.P.), *7120*
- biomechanics, flexible walls, fluid-structure interaction, muscles, navier stokes equation, Melbin (J.), Noordergraaf (A.), *8073*
- closed conduit flow, flexible walls, flexural waves, Bonis (M.), Ribreau (C.), *8074*
- capillary flow, microcirculation, Skalak (R.), Chien (S.), *8075*
- lungs, porous surfaces, pulsatile flow, Gopalan (N.P.), *8076*
- acoustics (physiological), arteries, muscles, sound generation, Grigoryan (S.S.), Saakyan (Yu.Z.), (et al.), *8077*
- hydrodynamic stability, viscometry, Dintenfass (L.), Fu-Lung (L.), *8083*
- couple stresses, poiseuille flow, Chaturani (P.), Rathod (V.P.), *8577*
- flow measurement, laser doppler velocimeters, tissues, Nilsson (G.E.), Tenland (T.), (et al.), *9059*
- couple stresses, mixture theories, particle fluid flow, polar fluids, Chaturani (P.), Upadhya (V.S.), *9060*
- experimental results, laser doppler velocimeters, stenoses, Khalifa (A.M.A.), Giddens (D.P.), *9062*
- numerical analysis, stenoses, three dimensional flow, Liou (R.J.), Clark (M.E.), (et al.), *9063*
- fredholm equations, liver, organs, Holt (J.N.), Bracken (A.J.), *9066*

blood vessels, blood flow, blood volume, circulatory systems, Thirsk (R.B.), Kamm (R.D.), (et al.), *1954*

- blood flow, cardiovascular system, transition flow, Walburn (F.J.), Stein (P.D.), *1956*
- aorta, stress strain relationships, Manak (J.J.), *3059*
- blood flow, pulsatile flow, Hyman (W.A.), Brewer (M.A.), *3066*
- brain, muscles, tissues, viscoelasticity, Misra (J.C.), Chakravarty (S.), *7646*

Bloomer (J.W.) II, see Nunn (R.H.), *8098*

blowdown, boilers, mathematical models, Takeuchi (K.), Squarer (D.), *5663*

- balance system, rolling motion, supersonic flow, wind tunnels, Murthy (H.S.), *9681*

blowoff, flames, mathematical models, methane, viscous flow, Mikolaitis (D.), Buckmaster (J.), *9755*

Blozy (J.T.), see Knott (P.R.), *2944*

Blum (A.S.), beam plasma interactions, design, helium, injectors, nuclear fusion, Barr (W.L.), (et al.), *6868*

Blum (W.), dislocations, plastic behavior, relaxing media, Nix (W.D.), *6187*

blunt bodies, leading edge, reynolds number (small), separated flow, Lane (J.C.), Loehrke (R.I.), *574*

- cylindrical bodies, oscillations, vortex shedding, Graham (J.M.R.), *576*
- oscillations, similarity methods, wakes, Griffin (O.M.), *629*
- aerodynamic heating, chemical reactions, fluid injection, Karashima (K.), Nakahashi (K.), *1733*
- fluctuations, pressure, surfaces, turbulence, Durbin (P.A.), Hunt (J.C.R.), *2694*
- dust, supersonic flow, Golovachov (Yu.P.), Lunkin (Yu.P.), (et al.), *2992*
- flow obstructions, interaction, vortices, wakes, Belov (I.A.), *3614*
- heat transfer, reattachment, separated flow, transition, Ota (T.), Asano (Y.), (et al.), *3654*
- hypersonic flow, vaporization, Mirskii (V.N.), *3847*
- aeroelasticity, models, nonlinear systems, oscillators, Dowell (E.H.), *3908*
- finite difference methods, shock waves, supersonic flow, Gustafsson (B.), Wahlund (P.), *4593*
- finite difference methods, shock waves, supersonic flow, Weilmuenster (K.J.), Graves (R.A.) Jr., *4594*
- prandtl number, reattachment, separated flow, turbulence (transport), Ota (T.), Kon (N.), *4602*
- drag coefficient, fall velocity, sedimentation, stability, Mehta (A.J.), Lee (J.), (et al.), *5391*
- flow measurement, separation, shear layer, wind tunnels (environmental), Castro (I.P.), *6642*
- shock waves, supersonic flow, De Neef (T.), Moretti (G.), *6713*
- compressible flow, numerical methods, real gas effects, supersonic flow, Antonets (A.V.), Marinin (V.P.), *7687*
- galloping, turbulent flow, vortex shedding, Nakamura (Y.), Tomonari (Y.), *7905*
- crack opening displacement, fracture criteria, Kuang (Z.-B.), *8395*
- cylindrical bodies, strouhal number, vortex shedding, Awbi (H.B.), *8535*
- base pressure, compressible flow, experimental results, spherical bodies, subsonic flow, Kuptsov (V.M.), *8553*
- asymptotic behavior, hypersonic flow, separation, shock layer, two dimensional flow, Barantsev (R.G.), Engelgart (V.N.), *8636*
- film flow, rainfall, reynolds number (high), reynolds number (small), Brehm (E.), *9544*
- heat transfer, nonequilibrium flow, supersonic flow, Golovachov (Yu.P.), *9552*
- aerodynamic interference, base pressure, jets, wakes, Gai (S.L.), Kapoor (K.), *9557*
- convection, heat transfer (combined modes), hypersonic flow, radiant interchange, reflection, Rolin (M.N.), Soloukhin (R.I.), (et al.), *9728*
- compressible flow, shock waves, supersonic flow, three dimensional flow, Schwarze (H.-F.), *10416*
- heat transfer, hypersonic flow, vorticity, Zemlyanskii (B.A.), Lunev (V.V.), (et al.), *10428*
- finite difference methods, flow obstructions, navier stokes equation, unsteady flow, Daiguji (H.), Kobayashi (S.), *11385*
- atmosphere, froude number, stagnation point, stratified flow, Kitabayashi (K.), *11386*
- separated flow, two dimensional flow, vortex sheets, Lewis (R.I.), *11389*
- compressible flow, supersonic flow, transonic flow, Weiland (C.), *11394*
- compressible flow, drag, hypersonic flow, optimization, rarefied gases, shape factors, Bunimovich (A.I.), Dubinskii (A.V.), *11405*
- compressible flow, finite difference methods, inviscid fluid, shock layer, Srivastava (B.N.), Werle (M.J.), (et al.), *11428*
- computer programming, delta wings, supersonic flow, viscous flow, Tannehill (J.C.), Venkatapathy (E.), (et al.), *11728*

Blynskaya (A.A.), airfoils, compressible flow, porous walls, transonic flow, wind tunnels, Lifhits (Yu.B.), *6628*

Blythe (P.A.), see Simpkins (P.G.), *5855*

- cavities, convection (forced), heat transfer, porous media, viscous effects, Simpkins (P.G.), *9898*

Blyumin (S.L.), discrete systems, filters, mathematical models, *136*

Bobisud (L.E.), boundary value problems, chemical reactions, diffusion, dirichlet problem, mathematical methods, polymerization, *3853*

Bobrova (N.R.), asymptotic methods, combustion, flame holders, one dimensional flow, Burkina (R.S.), (et al.), *2861*

Bobylev (A.V.), boltzmann equation, gases, mixtures, molecular theory, *10550*

Bobyr (N.I.), see Mozharovskii (N.S.), *5110*

- see Mozharovskii (N.S.), *6186*

Boccardi (S.), biological joints, gait, kinematics, muscles, Pedotti (A.), (et al.), *4910*

Bocek (M.), creep rupture, cyclic loading, life expectancy, thermoelasticity, Hoffmann (M.), *452*

Boch (P.), see Glandus (J.C.), *5803*

Bocheva (M.), kinematics, two phase flow, *5405*

Bochkova (T.N.), atmosphere, forecasting, meteorology, temperature, *4089*

Bochossjan (T.), see Dschagarowa (E.), *6657*

Bocioaca (R.), see Oranescu (A.), *6560*

Bock (W.J.), high pressure, pressure vessels, thermal measurements, *3810*

Bode (K.-H.), conduction (heat), conductivity, edge effects, plates (circular), thermal measurements, *6796*

bodies (liquid filled), boussinesq fluid, cavities, convection (free), moving media, perturbation methods, Zarubin (A.G.), Ngo Zui Kan, *7838*

- fluid-structure interaction, shells (cylindrical), vibration, Chung (H.), Turula (P.), (et al.), *11627*
- annuli, columns, fluid-structure interaction, seismic loading, Fujita (K.), *11637*
- dams, finite element techniques, fluid-structure interaction, Altinisik (D.), Karadeniz (H.), (et al.), *11649*
- compressional waves, ducts, flexible walls, Barclay (D.W.), Moodie (T.B.), (et al.), *11661*
- bifurcation, ducts, vibration (flow induced), Bajaj (A.K.), Sethna (P.R.), (et al.), *11671*
- inertial waves, reynolds number, rotating cylinders, Whiting (R.D.), *11684*
- damping, dynamic stability, rotors, Hendricks (S.L.), *11688*

bodies of revolution, green function, impact jets, separated flow, Shimkovich (D.G.), *1518*

- boundary layer, laminar flow, transition flow, water tunnels, Lauchle (G.C.), Eisenhuth (J.J.), (et al.), *1541*
- drag, navier stokes equation, rotating bodies, secondary flow, Majhi (S.N.), Vasudeviah (M.), *2603*
- asymptotic methods, compressible flow, transonic flow, Brezhnev (A.L.), Chernov (I.A.), *2620*
- boundary layer, laminar flow, rotating bodies, Suwono (A.), *2627*
- axisymmetric flow, cavities, irrotational flow, unsteady flow, Nesteruk (I.G.), *3630*
- compressible flow, hypersonic flow, unsteady flow, Hui (W.H.), Tobak (M.), *3640*
- boundary layer, flow measurement, separation, transition, Meier (H.U.), Kreplin (H.-P.), *3651*
- cavities, motion, Yakimov (Yu.L.), *3690*
- combustion, compressible flow, mathematical models, supersonic flow, Artyukh (L.Yu.), Kashkarov (V.P.), (et al.), *5415*
- compressible flow, hypersonic flow, numerical methods, viscid inviscid flow, Polyanskii (A.F.), Skurin (L.I.), (et al.), *5416*
- pressure distribution, wind tunnels, Smits (A.J.), Lee (S.P.), (et al.), *6624*
- aerodynamic loads, subsonic flow, vortex shedding, wings, Zhu (P.), Shou (W.), (et al.), *6717*
- axisymmetric flow, fredholm equations, least squares, singularities, source distribution, Jones (D.J.), *7681*

- oscillatory flow, spikes, viscous flow, Shang (J.S.), Hankey (W.L.), (et al.), *7794*
- axisymmetric flow, boundary layer (thermal), convection (free), heat transfer, laminar flow, Lin (F.N.), Chern (S.Y.), *7837*
- acoustic waves, cylindrical bodies, scattering, Junger (M.C.), *7940*
- cavitation inception, laminar flow, separation, water tunnels, Pan (S.-S.), Yand (Z.-M.), (et al.), *8514*
- cavitation inception, separation, transition, water tunnels, Huang (T.T.), *8516*
- reynolds number (small), rotating bodies, secondary flow, separated flow, Smith (S.H.), *8527*
- deformation, ellipsoids, integral methods, virtual mass, Apshtein (E.Z.), Kolotilova (N.G.), *8534*
- circumnavigation, gravimetrics, potential theory, Fomin (V.N.), *9807*
- axisymmetric flow, boundary layer, drag reduction, inverse method, Dalton (C.), Zedan (M.F.), *9941*
- cavitation inception, reynolds number, turbulence (freestream), water tunnels, Murai (H.), Ihara (A.), *10397*
- axisymmetric flow, cavitation flow, sound generation, turbulence, ultrasonics, Murai (H.), Ihara (A.), *10532*
- bubble dynamics, cavitation inception, spherical bodies, Parkin (B.R.), *11383*
- capsules, dynamic analysis, floating bodies, pipelines, rafts, rivers, Ginevskii (A.S.), Kolesnikov (A.V.), *11387*
- compressible flow, drag, optimization, transonic flow, wave drag, Sigalov (G.F.), *11396*
- aerodynamics, drag, supersonic flow, wing body combinations, Vasilchenko (V.I.), *11397*

Bodisco (U.V.), see Hammel (J.W.), *4502*

Bodner (V.A.), algorithms, maximum principle, stochastic systems, Rodnishchev (N.E.), (et al.), *5052*

body force convection, acceleration, crystals, cylindrical bodies, heat transfer, mass transfer, Feonychev (A.I.), *10595*

Bodyanskii (E.V.), see Rudenko (O.G.), *4270*

Bodycombe (H.), acoustics (architectural), sound propagation, *3930*

Boegershausen (H.), finite element methods (hybrid), large displacement, shells (nonlinear), *324*

Boermans (L.M.M.), airfoils, design, sailplane, Selen (H.J.W.), *2746*

Boffey (D.A.), bearings (gas lubricated), bearings (thrust), lubricants (gas), lubrication (hydrostatic), shock waves, Wilson (P.M.), *9056*

Boffi (V.C.), see Ganapol (B.D.), *11436*

Bogachev (A.V.), algorithms, design, multivariable systems, pole placement, Grigorev (V.V.), (et al.), *4276*

Bogacz (R.), columns, design (optimum), follower forces, Irretier (H.), (et al.), *4527*

Bogaevskii (V.N.), dynamic response, gyrodynamics, rotating bodies, Ostrer (L.A.), *7149*

Bogan (Yu.A.), asymptotic behavior, composite materials, fibers, rings, *7326*

Bogatyr (B.N.), data acquisition, meteorology, oceanography, *4094*

Bogdan (K.), bending, boundary value problems, infinite medium, plates (nonhomogeneous), theory, *3301*

Bogdanoff (J.L.), see Kozin (F.), *4481*
- damage (cumulative), failure, markov processes, Kozin (F.), *10031*

Bogdanovich (A.E.), nonlinear analysis, shells (cylindrical), vibration (parametric), Feldmane (E.G.), *377*

Boginich (O.E.), see Pisarenko (G.S.), *3362*

Boguslavskaya (T.A.), see Lapshenkov (V.S.), *1899*

Boguslavskii (V.A.), ferrous metals, liquids, magneto fluid dynamics, separation, suspensions, Dvorchik (S.E.), (et al.), *863*

Bogy (D.B.), hydrodynamic stability, jets, liquids, surface tension, *633*
- see Budgayci (N.), *3239*
- see Angel (Y.C.), *9338*
- see Bechtel (S.E.), *9681*

Bohm (E.), see Gabitto (J.F.), *10689*

Bohn (M.S.), energy conversion, ocean, power plants, solar energy, thermoelectric phenomena, Benson (D.K.), (et al.), *4718*
- energy conversion, heat exchangers, ocean, power plants, thermoelectric phenomena, Benson (D.K.), (et al.), *5954*

Bohning (R.), boundary layer, curved surfaces, separation, shock waves (normal), *600*

Boichenko (Yu.A.), bending, defects, fracture toughness, plane strain, steel, Sosnin (A.V.), (et al.), *5333*

Boiko (A.V.), computing techniques, cracks, elasticity, singular integral equations, Karpenko (L.N.), *6458*

Boiko (V.I.), absorption, diffusion, heating, lasers, metals, Bunkin (F.V.), (et al.), *5809*

Boileau (P.E.), acoustic emission, elastic constants, resonance, Grenier (M.), (et al.), *2489*

boilers, digital simulation, dynamic analysis, mathematical models, nonlinear theory, Roder (H.W.), Rosel (G.S.), *74*
- control, design, mathematical models, power generation, Lin (Y.-H.), Nielsen (R.S.), (et al.), *218*
- critical heat flux, dryout, helical flow, pipe flow, pressure drop, tubes, two phase flow, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
- cogeneration, design (optimum), energy conversion, gas turbines, steam power plants, Clifford (D.), Coates (R.), (et al.), *1766*
- flow reversal, furnaces, models, visualization, Kaji (M.), Sallam (T.M.), (et al.), *2764*
- design, nonuniform flow, steam, superheater, Chebulaev (V.V.), Lokshin (V.A.), *3881*
- steel, thermal fatigue, Ginsztler (J.), *3999*
- blowdown, mathematical models, Takeuchi (K.), Squarer (D.), *5663*
- combustors, heat exchangers, magneto plasma dynamics, open loop systems, Johnson (T.R.), Berry (G.F.), (et al.), *5680*
- density, density waves, oscillatory flow, Unal (H.C.), *6699*
- flue gases, fluid mechanics, vibration, Leithner (R.), Hermann (W.), (et al.), *6843*
- combustion chambers, heat transfer, mathematical models, Gulic (M.G.), Gvozdenac (D.D.), *7886*
- channel flow, dynamic stability, liquid vapor mixture, vibration, Vlasov (S.M.), Ratnikov (E.F.), (et al.), *10486*
- coal, combustion products, flyash, particles, radiation, Wall (T.F.), Lowe (A.), (et al.), *10708*
- elastoplasticity, foundations, seismic loading, Nakao (Y.), Murase (Y.), (et al.), *10851*
- convection, experimental results, heat transfer, magneto fluid dynamics, radiation, Im (K.H.), Ahluwalia (R.K.), *11805*

boiling, channel flow, critical heat flux, roughness, surface effect, Styrikovich (M.A.), Leontev (A.I.), (et al.), *742*
- binary flow, convection (forced), mixtures, Bennett (D.L.), Chen (J.C.), *743*
- convection (forced), critical heat flux, water, Katto (Y.), *744*
- convection (forced), critical heat flux, critical region, Katto (Y.), *745*
- convection (forced), critical heat flux, critical region, nucleate boiling, Katto (Y.), *746*
- heat transfer, tubes, Andrizhiyevskiy (A.A.), Dolzhenkova (G.G.), (et al.), *805*
- bubble dynamics, heat transfer, two phase flow, vaporization, Voloshko (A.A.), *945*
- cooling, film cooling, impingement cooling, sprays, Ishigai (S.), Nakanishi (S.), (et al.), *1664*
- convection (forced), evaporation, heat transfer, refrigeration, Mishra (M.P.), Varma (H.K.), (et al.), *1669*
- heat transfer, liquid nitrogen, nucleate boiling, pool boiling, Trepp (C.), V. Hoffmann (T.), *1670*
- cooling, thermal properties, transition boiling, unsteady flow, Berlin (I.I.), Kalinin (E.K.), (et al.), *1671*
- nucleate boiling, transition boiling, tube bundles, Gavrilin (A.I.), *1672*
- convection (forced), critical heat flux, heat transfer, helium, transition boiling, Petukhov (B.S.), Zhukov (V.M.), (et al.), *1673*
- annular flow, critical heat flux, two phase flow, Boltenko (E.A.), Peskov (O.L.), (et al.), *1674*
- critical heat flux, rupture, transition boiling, two phase flow, Borchevkin (Yu.S.), Korolkov (B.P.), *1675*
- experimental methods, nucleate boiling, resistance thermometers, thin films, Oker (E.), Merte (H.) Jr., *1682*
- bubble dynamics, emulsions, nucleation, visualization, Mori (Y.H.), Sano (H.), (et al.), *1693*
- pressure vessels, steam, two phase flow, Pitts (J.H.), *1856*
- coatings, nucleate boiling, polymers, surface effect, thin films, Hinrichs (T.), Hennecke (E.), (et al.), *2792*
- approximations, convection (forced), heat transfer, nucleate boiling, Guglielmini (G.), Nannei (E.), (et al.), *2793*
- bubbly flow, channel flow, convection (forced), critical heat flux, Hebel (W.), Detavernier (W.), (et al.), *2794*
- critical heat flux, pool boiling, Tolubinskii (V.I.), Kichigin (A.M.), (et al.), *2795*
- drops, nucleate boiling, water, Mao (J.R.), Tunc (C.Y.), *3791*
- critical heat flux, heat transfer, impact jets, impingement cooling, jets, water, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- critical heat flux, dispersed flow, drops, impact jets, impingement cooling, Monde (M.), *3793*
- condensation, multiphase flow, nuclear reactors, safety, Veziroglu (T.N.) ed., *3794, book*
- channel flow, critical heat flux, Katto (Y.), *4701*
- critical heat flux, drops, entrainment, film flow, Ueda (T.), Inoue (M.), (et al.), *4702*
- conduction (heat), rewetting, thermal waves, Zhukov (S.A.), Barelko (V.V.), (et al.), *4704*
- channel flow, evaporation, film flow, heat exchangers, heat transfer, Vasilev (L.L.), Abramenko (A.N.), (et al.), *4721*
- capillary flow, cryogenics, gasification, porous surfaces, Orlov (V.K.), Savelev (V.N.), *5543*
- critical heat flux, pipe flow, roughness, Chernobai (V.A.), *5546*
- channel flow, circulation, cooling, heat exchangers, thermal instability, Braginskiy (A.M.), Ivanov (L.B.), *5583*
- condensation, liquid gas mixture, modeling, similarity methods, Kutateladze (S.S.), *6758*
- compressional waves, hydrodynamic stability, nuclear reactors, sodium, thermal instability, Galati (A.), *6770*
- high pressure, hydrocarbons, nucleation, water, Avedisian (C.T.), Glassman (I.), *6771*
- peclet number, rewetting, Bonakdar (H.), Mcassey (E.V.) Jr., *6773*

- chemical reactions, dissociation, unsteady flow, Andrizhievskii (A.A.), Mikhalevich (A.A.), (et al.), *6975*
- high pressure, pipe flow, thermal measurements, Sekoguchi (K.), Tanaka (O.), (et al.), *7830*
- heat transfer, nucleate boiling, refrigerant-oil mixtures, refrigeration, Chongrungreong (S.), Sauer (H.J.) Jr., *7831*
- critical heat flux, film cooling, film flow, tubes, Ueda (T.), Isayama (Y.), *7832*
- channel flow, convection (forced), cooling, critical heat flux, heat exchangers, Zeigarnik (Yu.A.), Privalov (N.P.), (et al.), *7834*
- film boiling, porous surfaces, thermal effects, Strikovich (M.A.), Malyshenko (S.P.), (et al.), *7835*
- critical heat flux, nucleate boiling, roughness, surface effect, Avksentyuk (B.P.), *8690*
- bubble dynamics, film boiling, heat transfer, nucleate boiling, Shekriladza (I.G.), *8691*
- convection (free), critical heat flux, porous walls, tube bundles, Fokin (B.S.), Goldberg (E.N.), *8694*
- critical flow, critical heat flux, dispersed flow, film flow, two phase flow, Andreyev (P.A.), Borishanskiy (V.M.), (et al.), *8695*
- channel flow, evaporation, Mironov (Yu.V.), *8760*
- capillary flow, porous surfaces, Afanasev (B.A.), Smirnov (G.F.), *9687*
- capillary flow, convection (forced), critical heat flux, Koba (A.L.), Kozhelupenko (Yu.D.), (et al.), *10574*
- pipe flow, subcooled boiling, void fraction, Edelman (Z.), Elias (E.), *10575*
- dispersed flow, heat addition, solutions (material), Berman (M.I.), Gorbis (Z.R.), *10606*
- acoustic properties, channel flow, hydrodynamic stability, two phase flow, Romberg (T.M.), Rees (N.W.), *11540*
- heat exchangers, hydrocarbons, lng, natural gas, porous walls, Dvoiris (A.D.), Sirotin (A.G.), (et al.), *11770*
- porous media, Bau (H.H.), *11779*
- binary flow, bubble dynamics, Cooper (M.G.), Stone (C.R.), *12035*
- bubble dynamics, heat transfer, Kusuda (H.), Monde (M.), (et al.), *12047*
- piping systems, two phase flow, water hammer, Wilkinson (D.H.), Dartnell (L.M.), *12102*

Boillat (J.L.), drag coefficient, particle dynamics, reynolds number (small), spherical bodies, visualization, Graf (W.H.), *9541*

Boissenot (J.M.), see Athanassiadis (A.), *10287*

Bojadziev (G.N.), biodynamics, damping, nonlinear mechanics, oscillations, *1092*

Bojarski (N.N.), helmholtz equation, inverse problems, mathematical methods, scattering, sturm-liouville equation, *8112*

Bokov (A.Ye.), see Ganchev (V.G.), *748*

Boland (F.M.), automatic control, discrete systems, feedback, multipass processes, stability theory, Owens (D.H.), *11045*

Bold (G.E.J.), see Tindle (C.T.), *6612*

Boldyrev (E.I.), creep, shells (nonhomogeneous), variational methods, Kurshin (L.M.), (et al.), *7278*

Boley (B.A.), see Jaeger (T.A.) eds., *1325, book*
- see Jaeger (T.A.) eds., *1463, book*
- see Jaeger (T.A.) eds., *1464, book*
- see Jaeger (T.A.) eds., *1465, book*
- see Jaeger (T.A.) eds., *1781, book*
- see Beskos (D.E.), *3347*
- see Jaeger (T.A.) eds., *3565, book*
- see Jaeger (T.A.) eds., *6548, book*
- see Jaeger (T.A.) eds., *7618, book*

Bologa (M.K.), electro fluid dynamics, heat pipes, heat transfer, liquid vapor interface, wick, Kozhukhar (I.A.), (et al.), *791*

Bolotin (S.V.), dynamic analysis, libration theory, mathematical methods, Kozlov (V.V.), *4146*

Bolotin (V.V.), damage (cumulative), life expectancy, reliability, *508*
- dynamic analysis, offshore structures, stress analysis, towers, Chirkov (V.P.), (et al.), *2544*
- reliability design, seismic loading, structural design, *4040*
- fatigue, fracture, material testing, stochastic processes, *4504*
- composite materials, damage (cumulative), delamination, flaws, structural stability, Zebelyan (Z.Kh.), (et al.), *6241*
- dynamic response, elastic behavior, vibration (parametric), *7376*
- fracture, life expectancy, probability, random loading, reliability analysis, *7468*

Bolshakov (A.P.), bonded joints, shear strength, welded joints, Novikov (S.A.), (et al.), *3585*

bolted joints, connections, joints, structural analysis, Richard (R.M.), Gillett (P.E.), (et al.), *525*
- creep, flammability, metallic constructions, Aribert (J.M.), Riaux (H.), *1437*
- beams, experimental mechanics, stress analysis, structural elements, Krishnamurthy (N.), *3581*
- bolts, deformation, holography, Muruyama (K.), Yoshimoto (I.), (et al.), *3582*
- design, mechanical joints, wood, Wilkinson (T.L.), Rowlands (R.E.), *5378*
- screws, split nuts, Cotterell (B.), *5379*
- composite materials, failure, laminates, Tang (S.), *5380*
- bolts, experimental results, shear, torsion, Bahia (C.S.), Martin (L.H.), *6566*
- connections, contact stresses, design, flanges, Jofriet (J.C.), Sze (Y.), (et al.), *7635*
- bolts, connections, finite element methods, modeling, prediction, Krishnamurthy (N.), *7637*
- flanges, pipes, pressure vessels, Blach (A.E.), Bazergui (A.), *8464*
- design, joints, plasticity, riveted joints, Surtees (J.O.), Gildersleeve (C.P.), (et al.), *8482*
- composite materials, fibers, mechanical joints, plastics, Godwin (E.W.), Matthews (F.L.), *10381*

Boltenko (E.A.), annular flow, boiling, critical heat flux, two phase flow, Peskov (O.L.), (et al.), *1674*

bolts, bolted joints, deformation, holography, Muruyama (K.), Yoshimoto (I.), (et al.), *3582*
- shear loading, tension, Shakir-Khalil (H.), Ho (C.M.), *3583*
- anchors, concrete, pull-out tests, strength, Bungey (J.H.), *4506*
- rocks, roof bolts, strain gages, triaxial tests, Haas (C.J.), *6405*
- bolted joints, experimental results, shear, torsion, Bahia (C.S.), Martin (L.H.), *6566*
- screws, stress analysis, stress concentration, threaded joints, Schnack (E.), *7636*
- bolted joints, connections, finite element methods, modeling, prediction, Krishnamurthy (N.), *7637*

boltzmann equation, conductivity, neutrons, nuclear radiation, radiant interchange, transport, Mennig (J.), Ozisik (M.N.), (et al.), *776*
- approximations, green function, scattering, Coppa (G.), Ravetto (P.), *1529*
- iterative methods, pade approximation, Elwakil (S.A.), El Batanoni (F.), (et al.), *1530*
- kinetic theory, Virchenko (Yu.P.), Laskin (N.V.), *1650*
- neutrons, nuclear fusion, scattering, statistical mechanics, transport, Inonu (E.), Tezcan (C.), *2778*
- carleman equation, initial value problems, kinetic theory, nonlinear analysis, Kaper (H.G.), Leaf (G.K.), *4972*
- combustion, kinetic theory, mathematical models, Makashev (N.K.), *5634*
- constitutive equations, mathematical models, thermodynamic functions, thermodynamics (nonequilibrium), Nonnenmacher (T.F.), *6746*
- diffusion, evolution equations, kinetic theory, statistical mechanics, Brunnschweiler (A.), *7164*
- hydrodynamics, initial value problems, rarefied gases, Shapovalov (G.K.), *7694*
- conduction, enskog fluid, kinetic theory, pressure, viscoelasticity (dynamic), viscosity, Schmidt (G.), Kohler (W.E.), (et al.), *7819*
- boundary value problems, internal flow, uniqueness, Burov (A.V.), *10422*
- gases, mixtures, molecular theory, Bobylev (A.V.), *10550*
- collision models, particles, transport, unsteady flow, Ganapol (B.D.), Boffi (V.C.), *11436*
- gases, kinetic theory, particles, Chen (M.), *11440*
- chemical reactions, diffusion, pollution, Muller (K.H.), *11525*

Bonakdar (H.), boiling, peclet number, rewetting, Mcassey (E.V.) Jr., *6773*

Bonapace (A.C.), channel flow, critical speed, free boundary, particle fluid flow, pipe flow, *7658*

Bonczyk (P.A.), see Eckbreth (A.C.), *3879*

Bond (D.), computer aided design, mathematical programming, nonlinear programming, optimization, reinforced concrete, *9442*

Bond (V.R.), canonical elements, hamiltonian equations, mathematical methods, orbit mechanics, Janin (G.), *3919*

bond characteristics, analytical methods, cyclic loading, reinforced concrete, Tassios (T.P.), Yannopoulos (P.J.), *3530*
- crack resistance, cracking, reinforced concrete, Somayaji (S.), Shah (S.P.), *7502*

bond graphs, mechanisms, torque, transmissions, Stecki (J.S.), *2550*
- control, nonlinear theory, simulation, Karnopp (D.), *6122*

Bondal (G.V.), fatigue, fractographic tests, fracture, Kolesnikova (T.V.), *9395*

Bondarenko (A.A.), attenuation, damping, piezoelectric devices, vibration, Kutsenko (G.V.), (et al.), *6324*

Bondarenko (A.N.), attenuation, dispersion, elastic waves, measurements (dynamic), Kondratev (A.I.), *10240*

Bondarenko (N.F.), linearization, magneto fluid dynamics, measurements (dynamic), models, navier stokes equation, Gak (M.Z.), (et al.), *6856*

Bondarenko (Yu.I.), see Nasonov (E.A.), *10631*

Bondarovich (L.A.), crack resistance, impact, material testing, strain rate, Zlochevskii (A.B.), (et al.), *1409*

Bonde (D.H.), inclusions, pressurized components, shells (cylindrical), Rao (K.P.), *253*

Bonde-Petersen (F.), biocontrol, cardiovascular system, hyperventilation, tests, Norsk (P.), (et al.), *229*

bonded joints, cylindrical bodies, reinforced bodies, torsion, Kuo (Y.-M.), Conway (H.D.), *245*
- nondestructive tests, sensitivity, thermal effects, Vavilov (V.), *486*
- adhesives, fracture energy, fracture mechanics, Kinloch (A.J.), Shaw (S.J.), *542*
- adhesives, layered media, ultrasonics, Pilarski (A.), Pawlowski (Z.), *543*
- internal stresses, measurements, Sytov (V.A.), Mirzoev (R.G.), (et al.), *1400*
- adhesives, algorithms, nondestructive tests, ultrasonics, Rose (J.L.), Thomas (G.H.), *1479*
- adhesives, capillary flow, Siekman (J.G.), *1481*

- adhesives, nonlinear materials, viscoelastic materials, Weitsman (Y.), *2227*
- beams, stress analysis, wood, Marchand (G.E.), *2251*
- adhesives, aluminum alloys, failure, Kinloch (A.J.), Smart (N.R.), *2572*
- residual stresses, thermal stresses, Weitsman (Y.), *2975*
- biomaterials, dentistry, polymers, Amin (W.M.), Fletcher (A.M.), (et al.), *3070*
- analogies, inclusions, Rose (L.R.F.), *3474*
- beams, laminates, stiffness, strength, wood structures, Marx (C.M.), Moody (R.C.), *3528*
- shear strength, welded joints, Bolshakov (A.P.), Novikov (S.A.), (et al.), *3585*
- adhesives, shear loading, River (B.H.), Gillespie (R.H.), *3586*
- adhesives, airplane structures, composite materials, moisture, Delasi (R.J.), Schulte (R.L.), *3587*
- contact problems, diffusion bonding, elastoplasticity, half space, Kharitonova (A.N.), Sergeev (A.V.), (et al.), *4565*
- composite materials, edge cracks, fracture, singular integral equations, stress intensity factor, Bakioglu (M.), *5127*
- dispersion, flaw detection, interference, layered media, Budenkov (G.A.), (et al.), *6497*
- adhesives, viscoelastic materials, Nagaraja (Y.R.), Alwar (R.S.), *6568*
- composite materials, fracture, plastics, transient loading, Suvorova (Yu.V.), Sorina (T.G.), (et al.), *7298*
- composite materials, fracture criteria, interface cracks, singularities, Viola (E.), Piva (A.), *7535*
- aluminum alloys, crack propagation, polymers, Mijovic (J.), *7536*
- composite materials, delamination, laminates, ultrasonics, Schramm (S.W.), Daniel (I.M.), (et al.), *7557*
- adhesives, finite element methods, interlaminar stresses, stiffness, time dependence, Gali (S.), Ishai (O.), *8483*
- finite element methods, interface phenomena, lap joints, stress analysis, Carpenter (W.C.), *9489*
- adhesives, fatigue, finite element methods, strength, Sawyer (J.W.), Cooper (P.A.), *10383*
- strength, Zabela (K.A.), Znachkov (Yu.K.), *10384*
- absorption, adhesives, composite materials, laminates, optical techniques, swelling stresses, water, Sargent (J.P.), Ashbee (K.H.G.), *11343*

bonding, beams (cantilever), Prakash (B.G.), *297*
- delamination, glass fibers, holography, plates (sandwich), Erdmann-Jesnitzer (F.), Winkler (T.), *483*
- computing techniques, mathematical models, networks, paper, Smith (J.C.), *1137*
- composite materials, fibers, Liiri (O.), Kivisto (A.), (et al.), *1490*
- airplane structures, aluminum alloys, corrosion fatigue, laminates, Vogelesang (L.B.), Mariseen (R.), (et al.), *2424*
- adhesives, stress analysis, textiles, Hearle (J.W.S.), Ozsanlav (V.), *5135*
- adhesives, fibers, textiles, Hearle (J.W.S.), Ozsanlav (V.), *6202*
- half space, interface cracks, sh waves, Srivastava (K.N.), Palaiya (R.M.), (et al.), *6343*
- dynamic response, elastic foundations, shells (cylindrical), Chonan (S.), *8313*
- adhesives, blades, dynamic loads, steam turbines, strain gages, Petrie (E.M.), *8427*

bones, anisotropy, biomechanics, elastic constants, ultrasonics, Van Buskirk (W.C.), Cowin (S.C.), (et al.), *1031*
- damage, stress analysis, stress concentration, Brown (T.D.), Way (M.E.), (et al.), *1035*
- biomaterials, frequencies, impact, material testing, Khalil (T.B.), Viano (D.C.), (et al.), *1961*
- braces, fracture, human body, injuries, Pratt (D.J.), Bowker (P.), (et al.), *3068*
- biocontrol, man machine systems, Paciga (J.E.), Richard (P.D.), (et al.), *3069*
- human body, prosthetic devices, spine, Banks (A.J.), Dervin (E.), *3071*
- biomechanics, dynamic properties, experimental methods, Frasca (P.), Harper (R.A.), (et al.), *3073*
- anisotropy, biomaterials, composite materials, Kreger (A.F.), Zilauts (A.F.), *3249*
- cartilage, human body, ultrasonics, Rushfeldt (P.D.), Mann (R.W.), *4907*
- fracture, injuries, prosthetic devices, Banks (A.J.), Dervin (E.), *4922*
- demineralization, gravity, strain measurement, zero g phenomena, Hinsenkamp (M.), Burny (F.), (et al.), *6002*
- fracture, prosthetic devices, stress analysis, Carter (D.R.), Vasu (R.), *6005*
- fracture, prosthetic devices, strain measurement, Carter (D.R.), Vasu (R.), (et al.), *6006*
- ceramics, piezoelectrics, Johnson (M.W.), Williams (W.S.), (et al.), *6008*
- attenuation, human body, shock waves, Wosk (J.), Voloshin (A.), *6025*
- biomechanics, elastic waves, electroelasticity, piezoelectrics, Guzelsu (N.), Saha (S.), *6026*
- compression, disks, finite element methods, spine, Spilker (R.L.), *6030*
- biological joints, fracture, ultrasonics, Dzene (I.Ya.), Dzenis (V.V.), (et al.), *6032*
- biomechanics, kinematics, spine, stiffness, stress strain relationships, Laborde (J.M.), Burstein (A.H.), (et al.), *7104*
- experimental methods, mechanical properties, Jaeger (J.H.), Merckx (D.), (et al.), *9047*
- spine, stress strain relationships, viscoelastic materials, Burns (M.L.), Kaleps (I.), *9049*
- fracture, impact, injuries, knees, Viano (D.C.), Stalnaker (R.L.), *9050*
- electroelasticity, materials properties, piezoelectrics, Johnson (M.W.), Chakkalakal (D.A.), (et al.), *9051*
- geometrical properties, rigid bodies, Charit (Y.), *9070*

Bonis (M.), blood flow, closed conduit flow, flexible walls, flexural waves, Ribreau (C.), *8074*

Bonn (W.), annular flow, critical heat flux, critical region, pipe flow, slug flow, Krebs (R.), (et al.), *9689*

Bonneau (D.), see Bezine (G.), *6620*

Bonnecase (D.), experimental mechanics, modal analysis, structural response, vibration (forced), *1290*

Bonnerot (R.), finite element methods, melting, phase changes, stefan problem, vaporization, Jamet (P.), *3820*

Booker (J.R.), see Rowe (R.K.), *2384*
- see Carter (J.P.), *6386*
- see Balaam (N.P.), *11178*

Booth (D.B.), experimental results, freezing, soils, *9358*

Booth (T.C.), axial turbines, blades, leaks, rotors, Dodge (P.R.), (et al.), *7890*
- see Wadia (A.R.), *7891*

Borchevkin (Yu.S.), boiling, critical heat flux, rupture, transition boiling, two phase flow, Korolkov (B.P.), *1675*

Borcia (E.), constitutive relations, deformation (plastic), plasticity, soil mechanics, *7439*

Bordyug (B.A.), gait, locomotion, stabilization, walking apparatus, *539*

boreholes, blast effects, brittle materials, crack propagation, numerical analysis, Stecher (F.P.), Fourney (W.L.), *424*
- earth, heat transfer, measurements, Yokota (T.), Kinoshita (H.), (et al.), *966*
- fracture, rocks, strength, Stimpson (B.), *1337*
- contact problems, liners, shells (long), Warren (W.E.), *2270*
- acoustic waves, elastic waves, Yang (C.-I.), Yu (S.-M.), *4452*
- electromagnetic waves, measurements, soil stability, Laine (E.F.), Lytle (R.J.), (et al.), *6396*
- ducts, sound propagation, Schoenberg (M.), Marzetta (T.), (et al.), *7939*
- explosive loading, oil wells, photoelasticity (dynamic), Fourney (W.L.), Barker (D.B.), (et al.), *8408*

Borejko (P.), acceleration waves, elastic bodies, energy theorems, Chadwick (P.), *395*

bores, breakers, coasts, density currents, oceanography, Stern (M.E.), *8975*

Boretskii (I.V.), controllability, faithful property, linear systems, observability, state space techniques, Paviov (V.G.), *3149*

Borghi (R.), see Moreau (P.), *2968*

Boriotti (J.R.), see Saha (R.K.), *10047*

Boris (J.P.), see Oran (E.S.), *6833*

Borishanskii (K.N.), blades, turbines, vibration (self excited), Naumov (A.V.), *8312*

Borishanskii (V.M.), integral methods, plane flow, radiant interchange, radiation properties, Gotovskii (M.A.), (et al.), *7866*

Borishanskiy (V.M.), see Andreyev (P.A.), *8695*

Borisov (A.A.), see Borisov (A.A.), *682*
- critical region, shock tubes, shock waves, Borisov (A.A.), (et al.), *682*
- aerosols, finite amplitude, heat transfer, plane waves, Vakhgelt (A.F.), (et al.), *7760*
- drops, nozzles, shock tubes, two phase flow, Gelfand (B.E.), (et al.), *12024*

Borisov (V.N.), carbon dioxide, crossflow, helium, jets, Breev (V.V.), (et al.), *2664*

Borisov (Yu.Ya.), cellular flow, experimental results, jets, nozzles, underexpanded jets, Podolskii (S.L.), *1569*

Borisyuk (A.I.), fluid-structure interaction, piezoelectric devices, vibration, Kirichok (I.F.), *5222*

Borkakati (A.K.), acceleration, hall effect, magneto plasma dynamics, panels (flat), unsteady flow, Pop (I.), *11815*

Borland (C.J.), numerical analysis, swept wings, three dimensional flow, transonic flow, unsteady flow, Rizzetta (D.P.), (et al.), *10521*

Bormett (D.W.), conduction (heat), containers, paper, thermal properties, *4001*

Bornea (D.), see Taitel (Y.), *1846*

Borodachev (A.N.), elliptical cracks, infinite medium, stress intensity factor, *10297*

Borodachev (N.M.), crack propagation, sheet metal, stochastic processes, *3440*

Borodkin (L.I.), algorithms, empirical methods, graphical methods, probability theory, stochastics, *1099*

Borodulya (V.A.), fluidized beds, heat transfer, radiant interchange, radiation, Kovenskii (V.I.), *10940*

boron, fibers, high temperature, tension, testing equipment, Erasov (V.S.), Pirogov (E.N.), (et al.), *2485*
- composite materials, damage, fatigue, laminates, stiffness, O'Brien (T.K.), Reifsnider (K.L.), *2493*
- fibers, propagation, torsion, ultrasonics, vibration, Kaplan (M.D.), Veremeenko (S.V.), *6482*
- combustion instability, flame holders, Clarke (J.F.), Mcintosh (A.C.), *6840*
- aluminum alloys, fracture toughness, material testing, Reedy (E.D.) Jr., *7507*
- ignition sensitivity, particles, suspensions, Zolotko (A.N.), Polishchuk (D.I.), (et al.), *10698*

Borovik (V.O.), see Kozhevnikov (Yu.V.), *5669*
- see Kozhevnikov (Yu.V.), *5660*

Borovikov (V.A.), acoustic waves, barriers, diffraction, wedges, *4780*
Borovskii (B.I.), annular flow, centrifugal pumps, design, radial loading, *11751*
Borshchuk (E.M.), cracks, elasticity (linear), plates (weakened), singular integral equations, *4336*
Borstnik (B.), liquid vapor interface, monte carlo analysis, properties, Janezic (D.), (et al.), *8903*
Borucki (W.J.), see Whitten (R.C.), *4065*
Borukhov (V.T.), inverse problems, linear systems, process control, time invariant systems, time lag, *4228*
Borun (F.L.), cams, computer aided design, mechanisms, *2554*
Boruszak (A.), see Gawecki (A.), *10137*
Borzilov (V.A.), condensation (dropwise), drops, evaporation, surfactants, Klepikova (N.V.), (et al.), *1905*
Borzov (V.B.), compressible flow, mathematical models, one dimensional flow, Gutsunaev (T.I.), *6632*
Borzykh (A.A.), cutting, elastic bodies, elastic waves, lasers, supersonic flow, *10242*
Bos (M.G.), canals, discharges, flumes, head, weirs, Reinink (Y.), *3601*
Bose (A.), see Palmer (H.J.), *10644*
Bose (S.K.), elastic waves, random media, scattering, Debnath (L.), *2366*
- see Chattoraj (D.), *5177*

Bose (T.K.), see Suhas (H.K.), *9762*
- boundary layer (turbulent), heat transfer, particle fluid flow, two phase flow, *11556*

Bosgra (O.H.), see Van Der Weiden (A.J.J.), *4235*
Boshenyatov (B.V.), boundary layer, compressible flow, hypersonic flow, inlet flow, Gilyazemdinov (B.N.), (et al.), *7690*
- see Baev (V.K.), *10463*

Bosma (J.), absorption, coatings, heat shields, radiant interchange, solar radiation, space vehicles, spectral analysis, thermal loading, Levadou (F.), *6807*
Bosma (R.), see Moes (H.), *5994*
Bosman (C.), compressible flow, stability (numerical), three dimensional flow, Ahrabian (D.), *9557*
- centrifugal compressors, compressible flow, inviscid fluid, streamlines, three dimensional flow, *11750*

Bossak (M.), see Wood (W.L.), *11331*
Bostrom (A.), cavities, elastic waves, half space, scattering, Kristensson (G.), *2368*
- elastic waves, inclusions, scattering, *2369*
- acoustic waves, reflection, scattering, transmission, waveguides, *3932*
- acoustic waves, elastic bodies, scattering, spherical bodies, *3938*

Bosykh (L.A.), see Shugan (I.V.), *4703*
Botezatu (N.C.), dams, numerical methods, seepage, *7983*
Botezatu (N.P.), compressible flow, flow measurement, pipe flow, viscous flow, *2762*
Botseas (G.), see Lee (D.), *10043*
Bottani (C.E.), see Beghi (M.), *5807*
Bottema (O.), dynamic analysis, kinematics, mathematical methods, Veldkamp (G.R.), *3090*
Bottkol (M.), bifurcation, hamiltonian equations, periodic orbits, restricted three body problem, *1997*
bottom irregularities, channel flow, dimensional analysis, intakes, modeling, Venkataraman (P.), *555*
- channel flow, free boundary, friction (skin), sediment transport, Engel (P.), Lau (Y.L.), *557*
- rivers, sediment transport, shear stress, Todten (H.), Vetter (B.), *1497*
- gravity waves (stratified), nonlinear waves, steepness, Sidorchuk (V.N.), *1592*
- damping, internal waves, Yermakov (S.A.), *1889*
- currents, oceanography, Kozlov (V.F.), Ten (E.V.), *1893*
- existence theorems, gravity waves (surface), nonlinear waves, Potapkin (V.S.), *2703*
- currents, geostrophic flow, oceanography, Kozlov (V.F.), Kropinova (N.A.), (et al.), *3016*
- finite element techniques, ocean air interaction, shallow water, surge, Kawahara (M.), Nakazawa (S.), (et al.), *3023*
- channel flow, free boundary, slots, Nasser (M.S.), Venkataraman (P.), (et al.), *3599*
- baroclinic instability, hydrodynamic stability, oceanography, Tang (C.-M.), *4050*
- channel flow, free boundary, particle fluid flow, turbulence, Sumer (B.M.), Deigaard (R.), *4572*
- discharges, prediction, river beds, Parker (G.), Peterson (A.W.), *4575*
- ocean air interaction, oceanography, stratification, stratified flow, Flierl (G.R.), *4867*
- eddies, spectra, turbulence (geophysical), Holloway (G.), *4876*
- beaches, coastal engineering, piers, sediment transport, Hashimoto (H.), Uda (T.-A.), *5393*
- ocean bed, sound propagation, underwater acoustics, Rutherford (S.R.), Hawker (K.E.), (et al.), *5759*
- birefringence, boundary layer, separation, visualization, Karahan (M.E.), Peterson (A.W.), *6598*
- channel flow, force, gates, hydraulic jump, Narayanan (R.), Schizas (L.S.), *6602*
- ocean, ocean waves, propagation, Brink (K.H.), *6610*
- drag, erosion, icebergs, ocean, Lopez (R.), Chari (T.R.), (et al.), *6611*
- oceanography, rotating fluids, stratification, vorticity, Eliassen (A.), *8973*
- baroclinic waves, internal waves, kelvin waves, Chao (S.-Y.), *8976*
- internal waves, roughness, stratification, surface waves, tsunami, Yermakov (S.A.), Pelinovskiy (Ye.N.), *8982*
- channel flow, free boundary, hydraulic jump, separation, Bouhadef (M.), Bauche (B.), (et al.), *9510*
- laser doppler velocimeters, ocean bed, oscillatory flow, Du Toit (C.G.), Sleath (J.F.A.), *9517*
- bed load, sediment transport, shear stress, Ranga Raju (K.G.), Garde (R.J.), (et al.), *9519*
- currents, energy dissipation, gravity waves (shallow water), Christoffersen (J.B.), Jonsson (I.G.), *9626*
- bars, beaches, drag, sediment transport, Holman (R.A.), Bowen (A.J.), *10400*
- coriolis forces, oceanography, tides, vorticity, Zimmerman (J.T.F.), *10858*
- coasts, diffraction, oceanography, surface waves, Wang (D.-P.), *10859*
- dispersion relation, edges, gravity waves (finite depth), Miles (J.W.), *11584*
- gravity waves (surface), numerical methods, rays, refraction, Selezov (I.T.), Sorokina (V.V.), *11589*
- nonlinear analysis, rossby waves, solitary waves, Malanotte Rizzoli (P.), *11618*
- ocean bed, scattering, shallow water, underwater acoustics, Ivakin (A.N.), Lysanov (Yu.P.), *11912*

Botvina (L.R.), aluminum alloys, fracture criteria, high cycle fatigue, Shabalina (V.N.), (et al.), *2425*
- see Barenblatt (G.I.), *7137*

Bouchardy (A.-M.), air pollution, contamination, plumes, prediction, *4637*
Bouche (R.R.), calibration, dynamic response, shock, transducers, vibration, *1289, book*
Boucher (G.), cylindrical bodies, free boundary, gravity waves (surface), two dimensional flow, walls, *3631*
Boudet (R.), see Gaillard (M.), *3048*
- see Gay (D.), *3289*

Boudreau (A.H.), boundary roughness, hypersonic flow, reynolds equation (turbulence), transition, *9565*
Boudreau (J.), see Berman (H.), *2159*
Bouhadef (M.), bottom irregularities, channel flow, free boundary, hydraulic jump, separation, Bauche (B.), (et al.), *9510*
Boulos (M.I.), containment, discharges, plasma, swirl flow, theory, Gagne (R.), (et al.), *3898*
boundary conditions, cracks, finite element methods (hybrid), finite element techniques, Rhee (H.C.), Atluri (S.N.), *88*
- displacement, shells (shallow), Galimov (K.Z.), *315*
- free boundary, potential flow, time dependence, two dimensional flow, Longuet-Higgins (M.S.), *567*
- channels (closed), conduits, convection (free), transforms, De Socio (L.M.), Misici (L.), *1683*
- drops, interface phenomena, stokes flow, Haber (S.), Hetsroni (G.), *1860*
- meteorology (physical), oceanography, Bennett (A.F.), Kloeden (P.E.), *1913*
- hele-shaw cell, penetration, two component flow, viscous flow, Pitts (E.), *2597*
- compressible flow, transonic flow, unsteady flow, Engquist (B.), Majda (A.), *2622*
- convection, melting, pcm body, Solomon (A.D.), *2816*
- biharmonic equation, matrix inversion, mesh generation, stiffness matrix, Stavitsky (D.), Macagno (E.), (et al.), *3131*
- beams, Thomas (G.), *3287*
- compressible flow, navier stokes equation, subsonic flow, Rudy (D.H.), Strikwerda (J.C.), *3642*
- computing techniques, slots, walls, Cooke (C.H.), *3655*
- computing techniques, hyperbolic equations, wave equations, Bayliss (A.), Turkel (E.), *4187*
- boundary value problems, control, controllability, parabolic equations, pseudoparabolic equations, White (L.W.), *4205*
- shells (cylindrical), variable section, Tawfik (O.M.), *4385*
- buckling, compression, elliptical bodies, plates, Sato (K.), *4396*
- concentration, diffusion, laminar flow, mass transfer, Vorotyntsev (M.A.), Grafov (V.M.), (et al.), *4730*
- acoustic waves, scattering, Weaver (R.L.), Pao (Y.-H.), *4782*
- cylindrical bodies, fredholm equations, perturbation methods, potential theory, Rosenfeld (A.M.), Timsit (R.S.), *4957*
- conduction (unsteady), dirichlet problem, parabolic equations, time dependence, Sommeijer (B.P.), Van Der Houwen (P.J.), (et al.), *5002*
- computing techniques, hyperbolic equations, stability (numerical), Sloan (D.M.), *5004*
- boundary value problems, elasticity (linear), Kozak (I.), *5076*
- compressible flow, numerical methods, transonic flow, unsteady flow, Kwak (D.), *5421*
- forecasting, meteorology (physical), weather forecasting, Gordin (V.A.), Dolmatov (B.K.), *5957*
- beams, design (optimum), photoelasticity, plates (holed), slots, Durelli (A.J.), Rajaiah (K.), *6504*
- half space, thermoelasticity, Wilms (E.V.), Cohen (H.), *6939*
- conservation laws, cosserat solids, micropolar media, Kozak (I.), Szeidl (G.), *7263*
- boundary layer, macroscopic characterization, Laptev (V.A.), Nagnibeda (E.A.), *7695*

- composite structures, connected bodies, shells, vibration, Averbukh (A.Z.), Veitsman (R.I.), (et al.), *8222*
- cylindrical bodies, elastic foundations, vibration (forced), vibration (torsional), Wada (H.), *8322*
- atmospheric circulation, meteorology (physical), Gordon (P.), *8986*
- asymptotic behavior, hyperbolic equations, lyapunov's functions, nonlinear analysis, Radzikowski (J.), Sadkowski (W.), *9104*
- navier stokes equation, numerical methods, stability (numerical), stokes flow, vorticity, Quartapelle (L.), Valz-Gris (F.), *9527*
- channel flow, convection (forced), micropolar media, microstructural fluids, thermal effects, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *10573*
- rigid bodies, two phase flow, Yankov (Ya.D.), *11452*
- estuaries, finite element techniques, gravity waves (shallow water), Walters (R.A.), Cheng (R.T.), *11611*

boundary elements, elasticity (linear), piezoelectrics, Tanaka (K.), Tanaka (M.), *242*
- composite materials, conduction (steady), inclusions, Jaworski (A.R.), *932*
- half space, punch problems, semi infinite media, Telles (J.C.F.), Brebbia (C.A.), *1185*
- cracks, stress intensity factor, Blandford (G.E.), Ingraffea (A.R.), (et al.), *1386*
- elasticity (linear), numerical methods, Bhattacharyya (P.K.), Symm (G.T.), *2225*
- cracks, elliptical cracks, plates, time dependence, Mukherjee (S.), Morjaria (M.), *2459*
- thermoelasticity, variational methods, Tanaka (K.), Tanaka (M.), *2981*
- computing techniques, integration, singularities, Pina (H.L.G.), Fernandes (J.L.M.), Brebbia (C.A.), *4179*
- elasticity (linear), plates, stress analysis, Sirtori (S.), *6172*
- quarter-point elements, stress intensity factor, three dimensional formulation, Ingraffea (A.R.), Manu (C.), *6459*
- finite element techniques, holes, infinite medium, mesh generation, mining, Beer (G.), Meek (J.L.), *7206*
- green function, plates, Irschik (H.), Ziegler (F.), *7347*
- plasticity, pressurized pipes, stress concentration, Oliveira Faria (L.M.), Mota Soares (C.A.), (et al.), *8215*
- elastoplasticity, half space, Telles (J.C.F.), Brebbia (C.A.), *8216*
- fluid-structure interaction, shells (of revolution), Walker (S.), *8512*
- boundary value problems, thermoelasticity (transient), Tanaka (M.), Tanaka (K.), *8875*
- finite element techniques, thermoelasticity (transient), Tanaka (M.), Tanaka (K.), *8889*
- groundwater, transient effects, two dimensional flow, Banerjee (P.K.), Butterfield (R.), (et al.), *8948*
- acoustics, finite element techniques, infinite medium, Felippa (C.A.), *9130*
- energy methods, finite element methods, functional analyis, galerkin method, Fusco (F.B.) Jr., *9132*
- containers (partially filled), finite element techniques, sloshing, Nakayama (T.), Washizu (K.), *11640*

boundary integral methods, flexure, plates, Bezine (G.), *303*
- free boundary, nonlinear analysis, pressure distribution, two dimensional flow, Schwartz (L.W.), *566*
- finite element techniques, mechanics, numerical analysis, *1113, book*
- finite element methods (hybrid), soil structure interaction, Underwood (P.), Geers (T.L.), *3009*
- approximations, holes, laplace equation, Barone (M.R.), Caulk (D.A.), *4161*
- finite element techniques, internal combustion engines, stress strain relationships, Kvitka (A.L.), Voroshko (P.P.), (et al.), *4199*
- anisotropic media, elasticity (linear), green function, half space, Kobayashi (S.), Nishimura (N.), *4344*
- elliptic equations, singularities, stress intensity factor, Xanthis (L.S.), Bernal (M.J.M.), (et al.), *6085*
- elastodynamics, laplace transform, stress concentration, Manolis (G.D.), Beskos (D.E.), *6160*
- crack opening displacement, edge cracks, elastic behavior, stress intensity factor, variable properties (material), Atkinson (C.), Xanthis (L.S.), (et al.), *6441*
- condensation, dynamic response, pressure vessels, reactor structures, shells (spherical), steam, Krieg (R.), Goller (B.), (et al.), *6549*
- channel flow, fredholm equations, stokes flow, two dimensional flow, Bezine (G.), Bonneau (D.), *6620*
- computing techniques, differential equations (partial), finite difference methods, galerkin method, iterative methods, surveys, Noye (J.) ed., *7180, book*
- deformation (plastic), elastoplasticity, Benitez (F.G.), Alarcon (E.), (et al.), *7294*
- computing techniques, fracture, pressure, Hungr (O.), Morgenstern (N.R.), *7538*
- finite element methods (hybrid), stress analysis, Brady (B.H.G.), Wassyng (A.), *8150*
- discontinuities, elasticity (three dimensional), Hartmann (F.), *8185*
- darcy flow, three dimensional flow, Lennon (G.P.), Liu (P.L.-F.), (et al.), *8950*
- boundary value problems, existence theorems, helmholtz equation, scattering, Angell (T.S.), Kleinman (R.E.), *10019*
- elliptical cracks, fracture mechanics, stress intensity factor, surface flaws, Athanassiadis (A.), Boissenot (J.M.), (et al.), *10287*
- fredholm equations, free boundary, sluices, spillways, surface flow, Cheng (A.H.-D.), Liggett (J.A.), (et al.), *10391*
- fredholm equations, free boundary, gates, irrotational flow, Sohngen (B.), Bischoff (H.), *10401*

boundary layer, nonlinear analysis, rotating fluids, spin-up, Smith (S.H.), *580*
- asymptotic methods, laminar flow, moving surfaces, Chernyy (G.G.), *593*
- hypersonic flow, interaction, laminar flow, Rodkiewicz (C.M.), Gupta (R.N.), *599*
- curved surfaces, separation, shock waves (normal), Bohning (R.), *600*
- cylindrical bodies, incompressible flow, non newtonian flow, separated flow, Shvets (Yu.I.), Vishnevskii (V.K.), *603*
- navier stokes equation, numerical analysis, reynolds number, Hedstrom (G.W.), Osterheld (A.), *606*
- incompressible flow, laminar flow, navier stokes equation, Krause (E.), Kordulla (W.), *608*
- conical flow, diffusers, entrainment, shape factors, Odukwe (O.), *625*
- blasius flow, hydrodynamic stability, three dimensional flow, Cebeci (T.), Stewartson (K.), *632*
- mesolayer, shear flow, turbulence, turbulence model, Long (R.R.), Chen (T.-C.), *645*
- nonuniform flow, shock tubes, Cunningham (A.J.), Ogram (G.L.), (et al.), *715*
- diffusion, impact, mass transfer, particle dynamics, Valentin (G.), Le Goff (P.), *803*
- ducts (curved), liquid metals, magneto fluid dynamics, theory, Arai (S.), Tomita (Y.), (et al.), *853*
- magneto fluid dynamics, numerical methods, plates (perforated), thermal effects, Drymonitou (M.A.), Geroyannis (V.S.), (et al.), *856*
- induced drag, magneto fluid dynamics, perturbation methods, rotating fluids, Sneyd (A.D.), *860*
- heat transfer, porous media, Bejan (A.), *957*
- free jets, similarity methods, transformation, transition flow, Hunt (R.), Wilks (G.), *1532*
- hypersonic flow, laminar flow, oscillating bodies, Stepanov (G.N.), *1535*
- explosions, transition, transition flow, Volodin (A.G.), Zelman (M.B.), *1538*
- reynolds number, shape factors, transition, turbulence, Wazzan (A.R.), Gazley (C.) Jr., (et al.), *1540*
- bodies of revolution, laminar flow, transition flow, water tunnels, Lauchle (G.C.), Eisenhuth (J.J.), (et al.), *1541*
- corners, three dimensional flow, transition, Nomura (Y.), Kotake (M.), *1542*
- computing techniques, laminar flow, three dimensional flow, Dwyer (H.A.), *1543*
- elliptical bodies, laminar flow, three dimensional flow, Stock (H.W.), *1544*
- compressible flow, similarity methods, stagnation point, three dimensional flow, unsteady flow, Kumari (M.), Nath (G.), *1545*
- computing techniques, navier stokes equation, recirculation, viscous flow, Brandeis (J.), Rom (J.), *1548*
- asymptotic methods, incompressible flow, interaction, separation, singular perturbations, Veldman (A.E.P.), *1549*
- asymptotic methods, incompressible flow, reynolds number (high), separation, surveys, Ruban (A.I.), Sychev (V.V.), *1550*
- integral methods, interaction, suction, Gray (J.D.), Maus (J.R.), *1551*
- free boundary, gravity waves (surface), surface tension, viscosity, Trad (A.), *1593*
- combustion, heat transfer, hydrocarbons, mass transfer, porous media, Batievskii (V.L.), Sergeev (G.T.), *1753*
- flames, plates, velocity profiles, Garo (A.), Puechberty (D.), (et al.), *1757*
- convection (free), polar fluids, similarity methods, Jena (S.K.), Mathur (M.N.), *1976*
- aerodynamics, algorithms, boundary value problems, singular perturbations, Calise (A.J.), *2120*
- cylindrical bodies, laminar flow, similarity methods, Stock (H.W.), *2626*
- bodies of revolution, laminar flow, rotating bodies, Suwono (A.), *2627*
- asymptotic behavior, laminar flow, time dependence, Hultgren (L.S.), Gustavsson (L.H.), *2631*
- channel flow, reynolds number, sediment transport, transition flow, Ramaprian (B.R.), Mueller (A.), *2632*
- pressure gradient, transition flow, turbulence, Abu-Ghannam (B.J.), Shaw (R.), *2633*
- eigenvalues, internal waves, unsteady state, Ryzhov (O.S.), Zhuk (V.I.), *2634*
- convex surfaces, flow measurement, separated flow, Lakshmana Gowda (B.H.), Aswatha Narayana (P.A.), *2637*
- heat transfer, mass transfer, porous surfaces, Pavlov (K.B.), Pokrovskii (L.D.), (et al.), *2638*
- chemically reactive flow, frozen flow, lasers (gasdynamic), nozzles, supersonic flow, Bassina (I.A.), Dorot (V.L.), (et al.), *2639*
- asymptotic behavior, boundary value problems, Jones (E.), *2640*
- hydrodynamic stability, orr sommerfeld equation, roughness, shear flow, stability theory, Lewkowicz (A.K.), *2681*
- coherent structure, jets, pipe flow, turbulence (structure), Cantwell (B.J.), *2698*
- shear layer, stability theory, turbulence (structure), wakes, Taneda (S.), *2692*
- experimental results, time delay systems, turbulence (correlations), Legendre (R.), *2693*
- nonlinear waves, tubes, Keller (J.J.), *2722*
- mathematical models, micropolar media, stagnation point, Unsworth (K.), Chiam (T.C.), *2806*
- disks, hall effect, magneto fluid dynamics, torsional waves, Krishna (D.V.), Prasada Rao (D.R.V.), *2883*

- cylindrical bodies, differential equations (partial), magneto fluid dynamics, transport, Venkatachala (B.J.), Nath (G.), *2686*
- cyclones, ocean air interaction, Bhattacharyya (P.), *3026*
- laminar flow, similarity methods, turbulence (transport), Sokolov (M.), Antonia (R.A.), (et al.), *3648*
- bodies of revolution, flow measurement, separation, transition, Meier (H.U.), Kreplin (H.-P.), *3651*
- asymptotic behavior, computing techniques, laminar flow, pressure gradient, separation, Curle (N.), *3653*
- fluid injection, laminar flow, reynolds number (high), subsonic flow, Napolitano (M.), Messick (R.E.), *3656*
- cauchy problem, compressible flow, computing techniques, plates, reynolds equation, Yakhot (A.), Ben-Dor (G.), (et al.), *3657*
- damping, liquids, oscillations, slip flow, u-shaped tube, Kozlov (L.F.), Nikitina (G.D.), *3661*
- interference, wakes, Kanemoto (T.), Toyokura (T.), (et al.), *3683*
- falling films, film flow, nonlinear analysis, surface waves, Esmail (M.N.), *3709*
- axial compressors, blades, geometrical properties, subsonic flow, viscid invisicid flow, Calvert (W.J.), Herbert (M.V.), *3745*
- airfoils, supercritical flow, transonic flow, wind tunnels, Spaid (F.W.), Stivers (L.S.) Jr., *3764*
- asymptotic methods, catalytic surface, chemical reactions, Benilov (M.S.), Tirskii (G.A.), *3964*
- chemically reactive flow, ignition, plates, vaporization, Law (C.K.), Law (H.K.), *3965*
- chemically reactive flow, ignition, nonequilibrium flow, plates, vaporization, Ahluwalia (R.K.), Chung (P.M.), *3966*
- approximations, perturbation methods, Jovanovic (J.), Askovic (R.), *4597*
- friction (skin), porous surfaces, supersonic flow, three dimensional flow, Brykina (I.G.), Gershbein (E.A.), (et al.), *4606*
- mathematical methods, three dimensional flow, unsteady state, Vereshchagina (L.I.), *4607*
- heat transfer, oscillatory flow, plates, unsteady state, Ishida (M.), Yamada (T.), *4608*
- finite difference methods, laminar flow, navier stokes equation, separated flow, Horton (H.P.), *4614*
- collocation, falkner-skan equation, splines, Mastro (R.A.), Voss (D.A.), *4615*
- pipe flow, turbulence, turbulence model, Lam (C.K.G.), Bremhorst (K.), *4646*
- axial turbines, blades, cascades, Fielding (L.), *4675*
- modeling, reynolds number (high), turbomachinery, wind tunnels, Blair (M.F.), Bailey (D.A.), (et al.), *4688*
- convection, friction (skin), laminar flow, plates (vertical), shear stress, Hunt (R.), Wilks (G.), *4696*
- noise, stability, wings, Mangiarotty (R.A.), *4808*
- crack propagation, dynamic fracture, elastoplasticity, perturbation methods, Dunayevsky (V.), Achenbach (J.D.), *5308*
- birefringence, conducting fluid, rarefied gases, Oudeman (P.), Korving (J.), (et al.), *5423*
- asymptotic behavior, cylindrical bodies, existence theorems, gortler series, uniqueness, yawing, Schwierz (K.-P.), *5426*
- fluid mechanics, reynolds number (high), transition, Fraser (C.J.), Milne (J.S.), *5430*
- moving surfaces, recirculation, supersonic flow, Zhuk (V.I.), Ryzhov (O.S.), *5431*
- interaction, mach number, navier stokes equation, reynolds number, shock waves, Mateer (G.G.), Viegas (J.R.), *5432*
- transition, unsteady state, Pfeil (H.), Herbst (R.), *5433*
- friction (skin), porous media, suction, unsteady state, Lal (K.), *5435*
- boundary value problems, difference equations, nonlinear analysis, stagnation point, Balu (R.), *5436*
- experimental results, hydrodynamic stability, perturbations, tollmien schlichting waves, Dovgal (A.V.), Kozlov (V.V.), (et al.), *5463*
- airfoils, design, gliders, laminar flow, sailplanes, Ostrowski (J.), Skrzynski (S.), (et al.), *5492*
- calibration, friction (skin), preston tubes, shear, Nitsche (W.), *5507*
- eigenvalues, riccati equation, semi infinite media, Bramley (J.S.), Sloan (D.M.), *6065*
- birefringence, bottom irregularities, separation, visualization, Karahan (M.E.), Peterson (A.W.), *6598*
- navier stokes equation, stability theory, turbulent flow, viscous flow, Solopenko (V.M.), *6615*
- compressible flow, real gas effects, Schreier (S.), *6626*
- cylindrical bodies, laminar flow, Curle (S.N.), *6636*
- laminar flow, supersonic flow, swept wings, Brykina (I.G.), Gershbein (E.A.), (et al.), *6637*
- flow measurement, interaction, shock waves, Paynter (G.C.), *6643*
- entrainment, hydrodynamic stability, turbulence, Gad-El-Hak (M.), Blackwelder (R.F.), (et al.), *6686*
- finite difference methods, navier stokes equation, parabolic equations, shear flow, Spradley (L.W.), Stalnaker (J.F.), (et al.), *7684*
- compressible flow, hypersonic flow, inlet flow, Boshenyatov (B.V.), Gilyazemdinov (B.N.), (et al.), *7690*
- boundary conditions, macroscopic characterization, Laptev (V.A.), Nagnibeda (E.A.), *7695*
- computing techniques, cyclones, laminar flow, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7704*
- computing techniques, laminar flow, navier stokes equation, transition, Dumitrescu (H.), Savulescu (S.N.), *7706*
- moving surfaces, shock waves, Zhuk (V.I.), Ryzhov (O.S.), *7707*
- combustion (turbulent), computing techniques, Kang (S.-W.), Levatin (J.L.), *7710*
- computing techniques, differential equations (ordinary), differential equations (partial), nonlinear analysis, Shih (T.M.), Huang (H.J.), *7712*
- finite element techniques, galerkin method, mesh generation, steps, viscous flow, Leone (J.M.) Jr., Gresho (P.M.), *7713*
- blockage, centrifugal compressors, pressure distribution, rotors, Pampreen (R.C.), *7803*
- annular flow, cascades, swirl flow, vortex flow, wakes, Tan (C.S.), *7807*
- asymptotic behavior, bending (elastic), perturbation methods, plates (rectangular), Nazarov (S.A.), *8243*
- dilute solutions, polymers, Kiya (M.), Arie (M.), (et al.), *8499*
- oil films, pollution, Sundaram (T.R.), *8501*
- finite difference methods, plates, submerged bodies, turbulence model, Markatos (N.-C.G.), Wills (C.B.), *8537*
- axisymmetric flow, impact jets, impingement, jets, plates, Pamadi (B.N.), Belov (I.A.), *8540*
- fluid injection, oscillators, supersonic flow, wedges, Kornienko (E.S.), Shmanenkov (V.N.), *8562*
- compressible flow, deposition, gas turbines, particles, two dimensional flow, Menguturk (M.), Sverdrup (E.F.), *8564*
- diffusers, oscillatory flow, transonic flow, Sajben (M.), Kroutil (J.C.), *8586*
- flow reversal, heat tracer, incompressible flow, shear stress, two dimensional flow, velocity measurement, Westphal (R.V.), Eaton (J.K.), (et al.), *8664*
- compressible flow, edge effects, laminar flow, rotating disks, Toren (M.), Solan (A.), *8718*
- convection (free), elastico-viscous liquids, oscillatory flow, viscoelastic fluids, Mishra (S.P.), Mohapatra (U.), *8723*
- radiating flow, scattering, stagnation point, Kim (K.H.), Ozisik (M.N.), *8744*
- heat transfer, mass transfer, moving surfaces, thermal diffusion, Chen (T.S.), Strobel (F.A.), *8776*
- generators, insulation, magneto fluid dynamics, walls, Rankin (R.R.), Self (S.A.), (et al.), *8815*
- absorption, diffusion, drops, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *8896*
- entrainment, interface phenomena, sprays, Macha (J.M.), Norton (D.J.), *8910*
- boundary value problems, elliptic equations, perturbation theory, singular perturbations, Jiang (F.-R.), *9108*
- asymptotic methods, laminar flow, Osiptsov (A.N.), *9560*
- corners, secondary flow, viscous flow, Mojola (O.O.), *9567*
- flow obstructions, laminar flow, separated flow, singularities, Smith (F.T.), Daniels (P.G.), *9569*
- stability theory, suction, swept wings, transition flow, Mack (L.M.), *9570*
- suction, unsteady state, Beidei (L.M.), Kulonen (L.A.), *9571*
- boundary layer (three dimensional), coordinate systems, optimization, Legner (H.H.), *9572*
- convergence, finite difference methods, finite element techniques, galerkin method, Soliman (M.O.), Baker (A.J.), *9573*
- wakes, wind tunnels, Bario (F.), Charnay (G.), (et al.), *9592*
- conical bodies, hydrodynamic stability, rotating bodies, Kobayashi (R.), *9601*
- cylindrical bodies, interaction, shock waves, Gvozdeva (L.G.), Bazhenova (T.V.), (et al.), *9641*
- reflection, shock tubes, shock waves, Walenta (Z.A.), *9642*
- airfoils, potential flow, velocity profiles, Dutt (H.N.V.), Sreekanth (A.K.), *9654*
- critical heat flux, cylindrical bodies, drops, trajectories, two phase flow, Lu (C.C.), Heyt (J.W.), *9690*
- flames, jets, plates, Gateau (P.), Puechberty (D.), (et al.), *9758*
- electrical conductivity, magneto fluid dynamics, numerical analysis, vortex flow, Kalis (Kh.E.), Koiesnikov (Yu.B.), *9786*
- axisymmetric flow, bodies of revolution, drag reduction, inverse method, Dalton (C.), Zedan (M.F.), *9941*
- asymptotic methods, finite difference methods, grids, supersonic flow, Rai (M.M.), Anderson (D.A.), *10414*
- flow obstructions, reynolds number (high), two dimensional flow, Smith (F.T.), Brighton (P.W.M.), (et al.), *10423*
- asymptotic behavior, fluid mechanics, heat transfer, navier stokes equation, Kuiken (H.K.), *10424*
- boundary layer (turbulent), equilibrium, pressure gradient, Schofield (W.H.), *10426*
- hypersonic flow, supersonic flow, unsteady state, Gupta (R.N.), Mukherjee (S.), (et al.), *10427*
- corners, curvature, three dimensional flow, Barclay (W.H.), *10429*
- compressible flow, laminar flow, unsteady state, Chang (L.M.), Chen (C.-J.), *10430*
- convection, heat transfer, hydrodynamic stability, vortex flow, Moutsoglou (A.), Chen (T.S.), (et al.), *10465*
- hydrodynamic stability, potential flow, turbulence, Van Atta (C.W.), Sokolov (M.), (et al.), *10471*
- annular flow, axial compressors, blades, mixing, wakes, Davino (R.M.), Lakshminarayana (B.), *10522*

- annular flow, axial turbines, velocity measurement, visualization, Hunter (I.H.), *10527*
- asymptotic methods, buoyant flow, convection (free), stokes flow, wells, De Socio (L.M.), Gaffuri (G.), (et al.), *10568*
- constitutive equations, heat transfer, micropolar media, plane flow, Takhar (H.S.), Soundalgekar (V.M.), *10583*
- ablation, heat transfer, injection, mass transfer, radiant interchange, radiating flow, stagnation point, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10608*
- latent heat, phase boundaries, stefan problem, Langerholc (J.), *10658*
- fluid injection, heat transfer, shells (spherical), supersonic flow, Zinchenko (V.I.), Trofimchuk (E.G.), *10682*
- convection (free), curvature, cylindrical bodies, oscillations, spherical bodies, temperature, Srivastava (A.C.), Bhattacharjee (R.C.), *11370*
- convection, dispersion, smoke stacks, thermal plumes, Venkatram (A.), *11519*
- curved surfaces, heat transfer, hydrodynamic stability, taylor instability, Kohama (Y.), Kobayashi (R.), *11527*
- hydrodynamic stability, perturbations, supersonic flow, Gaponov (S.A.), *11529*
- convection, diffusion, numerical methods, Kanarachos (A.), *11764*
- catalyzed ignition, plates, Trevino (C.), Fernandez-Pello (A.C.), *11781*
- ocean air interaction, oceanography, Ginzburg (A.I.), *12079*

boundary layer (atmospheric), drag coefficient, heat transfer (atmospheric), mass transfer, Greenhut (G.K.), Bean (B.R.), *981*

- ekman layer, Panchev (S.), Atanasov (D.), *982*
- drag coefficient, ocean air interaction, ocean waves, wind-wave interaction, Ariel (N.Z.), Byutner (E.K.), (et al.), *983*
- atmospheric circulation, Pushistov (P.Yu.), Shlychkov (V.A.), *984*
- mass transfer, ocean air interaction, Furnes (G.K.), *985*
- ocean air interaction, spray flow, wind-wave interaction, Wang (C.S.), Street (R.L.), *986*
- injection, modeling, velocity measurement, wind tunnels, Sluman (T.J.), Van Maanen (H.R.E.), (et al.), *1648*
- atmospheric circulation, forecasting, Berkovich (L.V.), Shnaidman (V.A.), *1915*
- atmospheric circulation, meteorology (physical), Penenko (V.V.), Aloyan (A.E.), (et al.), *1916*
- energy dissipation, turbulence (geophysical), Tarnopolskii (A.G.), Shnaidman (V.A.), *2959*
- atmospheric circulation, ekman layer, Dobryshman (E.M.), *4054*
- boundary layer (thermal), boundary layer (turbulent), convection (forced), Ivanov (L.I.), Ingel (L.Kh.), *4061*
- air pollution, dispersion, stratified flow, Tangermann (G.), *4080*
- atmosphere, boundary layer (turbulent), generation, Arie (M.), Kiya (M.), (et al.), *4600*
- structures, wind, wind loads, wind turbines, Deaves (D.M.), *4604*
- ground effect, heat transfer (atmospheric), Gibson (M.M.), Launder (B.E.), *4886*
- dispersion, Venkatram (A.), *5928*
- atmospheric circulation, currents, Shnaidman (V.A.), *5939*
- convection, mixing layers, turbulence (geophysical), Coulman (C.E.), *5944*
- dissipation, turbulence (geophysical), Fairall (C.W.), Markson (R.), (et al.), *5945*
- heat transfer (atmospheric), radiation, Schonwald (B.), *5948*
- heat transfer (atmospheric), mass transfer, turbulence (geophysical), Reinking (R.F.), *5949*
- heat transfer (atmospheric), ocean air interaction, surface waves, Dvoryaninov (G.S.), *5950*
- heat transfer (atmospheric), mass transfer, ocean air interaction, turbulence (geophysical), Pedersen (K.), Boyum (G.), *5951*
- boundary layer (thermal), environmental tests, roughness, stratified flow, Ogawa (Y.), Diosey (P.G.), *6646*
- diffusion, mathematical methods, mathematical models, Nieuwstadt (F.T.M.), *6830*
- currents, ice, icebergs, oscillations, surface flow, Mcphee (M.G.), *7055*
- eddies, Emery (W.J.), Ebbesmeyer (C.C.), (et al.), *7056*
- clouds, diffusion, shear flow, turbulence (geophysical), wind, Skhirtladze (G.I.), Yurchak (B.S.), *7061*
- balloons, turbulence (geophysical), Asimakopoulos (D.N.), Lalas (D.P.), (et al.), *7062*
- buildings (tall), wind, wind tunnels, Dye (R.C.F.), *7063*
- buildings (tall), wind, Cermak (J.E.), *7068*
- anemometers, turbulence (geophysical), velocimeters, velocity measurement, Wyngaard (J.C.), *7070*
- boundary layer (turbulent), mass transfer, surface flow, surface flow, turbulence (transport), Dawkins (R.A.), Davies (D.R.), *7699*
- air pollution, plumes, smoke stacks, turbulence (geophysical), Ooms (G.), Mahieu (A.P.), *8028*
- diffusion, evaporation, mass transfer, Reijnhart (R.), Piepers (J.), (et al.), *8030*
- shear flow, turbulence (geophysical), wind-wave interaction, Chao (S.P.), *8034*
- drag coefficient, friction coefficient, friction velocity, ocean air interaction, reynolds stresses, roughness, turbulence (geophysical), Wu (J.), *8960*
- meteorology (physical), Krishna (K.), *8985*
- ekman layer, geostrophic flow, rotating fluids, James (I.N.), *8990*
- friction coefficient, friction velocity, heat transfer (atmospheric), ocean air interaction, reynolds stresses, turbulence (geophysical), Smith (S.D.), *8997*
- clouds, convection (free), mixing layers, Manton (M.J.), *9932*
- convection (forced), heat transfer (atmospheric), Andre (J.-C.), Artaz (M.-A.), *9935*
- spectra, turbulence (geophysical), wind-wave interaction, Antonia (R.A.), Chambers (A.J.), *9939*
- turbulence (geophysical), turbulence (structure), Raupach (M.R.), Thom (A.S.), *11554*
- clouds, heat transfer (atmospheric), meteorology (physical), Buikov (M.V.), Khvorostyanov (V.I.), *12077*

boundary layer (control), hydrodynamic stability, reynolds number (critical), tollmien schlichting waves, Milling (R.W.), *1579*

- hydrodynamic stability, perturbations, tollmien schlichting waves, Levchenko (V.Ya.), Solovev (A.S.), *3699*
- delta wings, drag, leading edge, subsonic flow, Rao (D.M.), Johnson (T.D.) Jr., *9652*
- aerodynamic interference, aerodynamic performance, airplanes, longitudinal stability, stol, thrust, Paulson (J.W.) Jr., *10511*
- jet boundaries, laminar mixing, magneto fluid dynamics, walled structures, Kiryushchenko (E.V.), Sheryazdanov (G.B.), *11813*

boundary layer (thermal), non newtonian flow, unsteady flow, Gorla (R.S.R.), *547*

- heat transfer, hydromagnetic stability, magneto fluid dynamics, theory, Bashtovoi (V.G.), Pavlinov (M.I.), *861*
- plane flow, thermal measurements, turbulent flow, Andreopoulos (J.), Bradshaw (P.), *1678*
- convection (free), nusselt number, perturbation methods, porous walls, Cheng (P.), Chang (I.-D.), *1680*
- buoyant flow, closed conduit flow, convection (free), plane flow, Sparrow (E.M.), Prakash (C.), *1681*
- drag, heat transfer, polar fluids, stagnation point, Subhadra Ramachandran (P.), Mathur (M.N.), *1685*
- heat transfer (combined modes), laminar flow, nusselt number, plane flow, Gosse (J.), *1710*
- conical bodies, incompressible flow, laminar flow, singular perturbations, Kortikov (N.N.), Novikova (I.B.), *2608*
- computer programming, finite difference methods, Bradeanu (D.), *2641*
- computing techniques, reflection, shock waves, unsteady state, Brun (R.), Chauvin (C.), (et al.), *2723*
- boundary layer (turbulent), nozzles, turbulence (freestream), turbulent flow, Bauer (K.), Straub (J.), (et al.), *2787*
- heat transfer, rotating disks, stanton number, turbulent flow, Johnson (M.C.), *2803*
- experimental methods, thermal measurements, thermometer, Torkelsson (S.A.), *3775*
- experimental methods, heat transfer, temperature, thermal measurements, Schreiber (V.), Christ (A.), *3776*
- boundary layer (turbulent), convection, heat transfer, plane flow, transient effects, turbulent flow, Hanawa (J.), *3781*
- convection, heat transfer, plates (parallel), porous media, Merkin (J.H.), *3782*
- convection (free), heat transfer, laminar flow, plates (vertical), Sokovishin (Yu.A.), Semenov (A.G.), *3798*
- boundary layer (atmospheric), boundary layer (turbulent), convection (forced), Ivanov (L.I.), Ingel (L.Kh.), *4061*
- convection (free), cooling, fiber optics, optical techniques, Kuiken (H.K.), *4695*
- convection (free), heat transfer, plates (vertical), Sparrow (E.M.), Faghri (M.), *4697*
- convection, crossflow, laminar flow, Eichhorn (R.), Hasan (M.M.), *4707*
- convection (free), heat transfer, integral methods, variational methods, Singh (P.), Bhattacharya (D.K.), *5567*
- boundary layer (atmospheric), environmental tests, roughness, stratified flow, Ogawa (Y.), Diosey (P.G.), *6646*
- axisymmetric flow, bodies of revolution, convection (free), heat transfer, laminar flow, Lin (F.N.), Chern (S.Y.), *7837*
- bounded media, convection, hydrodynamic stability, porous media, stagnation point, vortex flow, Hsu (C.T.), Cheng (P.), *8711*
- annular flow, convection, ekman layer, rotating fluids, thermal instability, Hignett (P.), Ibbetson (A.), (et al.), *8717*
- convection, diffusion, mathematical models, Barrett (J.W.), Morton (K.W.), *8749*
- heat transfer (combined modes), magneto fluid dynamics, stability, surface effect, Bashtovoi (V.G.), Pavlinov (M.I.), *8813*
- channel flow, heat transfer, magneto fluid dynamics, performance, Ahluwalia (R.K.), Doss (E.D.), *8826*
- magneto fluid dynamics, rotating disks, similarity methods, Glazov (O.A.), *8710*
- convection (forced), cylindrical bodies, galerkin method, laminar flow, mathematical models, Graebel (W.P.), Hsu (C.C.), *9711*
- heat transfer, rotating disks, viscous effects, Vira (N.R.), Fan (D.-N.), *11552*
- heat transfer (atmospheric), Katsaros (K.B.), *12074*

boundary layer (three dimensional), boundary layer (turbulent), streamlines, Bam-Zelikovich (G.M.), *596*

- aerodynamic heating, friction (skin), hypersonic flow, leading edge, Dudin (G.N.), Neiland (V.Ya.), *598*
- boundary layer (turbulent), mathematical models, shock layer, Kussoy (M.I.), Viegas (J.R.), (et al.), *601*
- aerodynamics, numerical methods, turbulence, wings, Humphreys (D.A.), *646*

- boundary layer (turbulent), separation, singularities, Cousteix (J.), Houdeville (R.), *3652*
- flow obstructions, iterative methods, separated flow, surface profiles, Sykes (R.I.), *8559*
- elliptical bodies, impulsive propulsion, separated flow, Wang (K.C.), Fan (Z.Q.), *8560*
- asymptotic methods, parabolic equations, ships, wakes, Mori (K.), *9016*
- disks, fluid mechanics, machinery, rotational flow, Toren (M.), Solan (A.), (et al.), *9559*
- cylindrical bodies, measurements, pressure gradient, turbulence, Fernholz (H.H.), Vagt (J.D.), *9563*
- asymptotic behavior, pressure gradient, unsteady state, Ryzhov (O.S.), *9566*
- boundary layer, coordinate systems, optimization, Legner (H.H.), *9572*

boundary layer (turbulent), eddies, pressure gradient, Potemkin (V.F.), *594*

- asymptotic behavior, flow obstructions, incompressible flow, reynolds number (high), Sykes (R.I.), *595*
- boundary layer (three dimensional), streamlines, Bam-Zelikovich (G.M.), *596*
- friction (skin), turbulence (freestream), Prihoda (J.), *597*
- boundary layer (three dimensional), mathematical models, shock layer, Kussoy (M.I.), Viegas (J.R.), (et al.), *601*
- axisymmetric flow, hot wire, turbulence, Adomaitis (E.I.), *649*
- fluid injection, heat transfer, porous media, turbulence, Mamonov (V.N.), *655*
- airfoils, laser doppler velocimeters, transonic flow, Johnson (D.A.), Bachalo (W.D.), (et al.), *684*
- combustion, discharges, magneto fluid dynamics, waves, Okazaki (K.), Mori (Y.), (et al.), *857*
- computer programming, froude number, hulls, three dimensional formulation, Krogstad (P.-A.), *1537*
- fluid injection, permeability, roughness, Alimpiyev (A.I.), Alimpiyev (V.I.), *1552*
- fences, porous surfaces, separated flow, two dimensional flow, Perera (M.D.A.E.S.), *2628*
- gas turbines, heat exchangers, heat transfer, roughness, Coleman (H.W.), Moffat (R.J.), (et al.), *2629*
- correlation, flow measurement, Repik (Ye.U.), Sosedko (Yu.P.), *2630*
- boundary layer (thermal), nozzles, turbulence (freestream), turbulent flow, Bauer (K.), Straub (J.), (et al.), *2787*
- noise (aerodynamic), sound generation, trailing edge, Howe (M.S.), *2941*
- flow measurement, injection, interaction, shock waves, Squire (L.C.), Smith (M.J.), *3649*
- flow measurement, pressure gradient, Schofield (W.H.), *3650*
- boundary layer (three dimensional), separation, singularities, Cousteix (J.), Houdeville (R.), *3652*
- fluid injection, mass transfer, Alp (E.), Strong (A.B.), *3706*
- boundary layer (thermal), convection, heat transfer, plane flow, transient effects, turbulent flow, Hanawa (J.), *3781*
- ablation, heat transfer, mass transfer, space vehicles, transpiration, Suzuki (K.), *3957*
- boundary layer (atmospheric), boundary layer (thermal), convection (forced), Ivanov (L.I.), Ingel (L.Kh.), *4061*
- channel flow, preston tubes, shear stress, walls, Kiske (S.), Vasanta Ram (V.), (et al.), *4599*
- atmosphere, boundary layer (atmospheric), generation, Arie (M.), Kiya (M.), (et al.), *4600*
- flow measurement, pressure gradient, roughness, Aswatha Narayana (P.A.), *4601*
- flow measurement, wind generation, wind tunnels (environmental), Katayama (T.), Gotoh (S.), (et al.), *4603*
- friction (skin), separation, Dumitrescu (H.), Cleja (V.), (et al.), *4612*
- condensation (filmwise), heat transfer, pipe flow, turbulent flow, Chisholm (D.), *4706*
- friction, pressure gradient, Nesterenko (B.N.), Fedorov (A.V.), (et al.), *5429*
- numerical methods, reynolds number, turbulence model, Biringen (S.), Reynolds (W.C.), *5465*
- separation, viscid inviscid flow, Whitfield (D.L.), Swafford (T.W.), (et al.), *6638*
- computing techniques, convergence, galerkin method, Soliman (M.O.), Baker (A.J.), *6639*
- noise (aerodynamic), oscillatory flow, turbulent flow, Antonov (A.N.), *6640*
- friction (skin), heat transfer, reynolds analogy, Repik (E.U.), Kuzenkov (V.K.), *6765*
- buoyancy, entrainment, stratified flow, Kitaigorodskii (S.A.), *7066*
- integral methods, pressure gradient, two dimensional flow, Yeung (W.-S.), Yang (R.-J.), *7697*
- coatings, compliant materials, interaction, surface flow, viscoelastic materials, Airapetov (A.B.), *7698*
- boundary layer (atmospheric), mass transfer, surface flow, surface flow, turbulence (transport), Dawkins (R.A.), Davies (D.R.), *7699*
- flow irregularities, hot wire, visualization, Taneda (S.), *7700*
- coatings, compliant materials, flow measurement, Kanarskiy (M.V.), Teslo (A.P.), *7701*
- pressure gradient, two dimensional flow, Schofield (W.H.), *7702*
- flow reversal, return flow, unsteady state, Cousteix (J.), Le Balleur (J.-C.), (et al.), *7703*
- computing techniques, cyclones, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7705*
- length-scale, turbulence, turbulence model, El-Hawary (M.A.), Nicoll (W.B.), *7749*
- friction (skin), roughness, spherical bodies, stanton number, transpiration cooling, velocity profiles, Ligrani (P.M.), Kays (W.M.), (et al.), *7824*
- flow measurement, interface phenomena, richardson number, Piat (J.-F.), Hopfinger (E.J.), *8557*
- heat transfer, incompressible flow, integral methods, Thomas (L.C.), Al-Sharif (M.M.), *8558*
- prediction, separation, turbulent flow, Savulescu (T.N.), Dumitrescu (H.), *8611*
- curvature, structure, Ramaprian (B.R.), Shivaprasad (B.G.), *9561*
- integral methods, oscillatory flow, perturbation methods, turbulence (structure), Patel (M.H.), *9562*
- axial flow, spinning bodies, Nakamura (I.), Yamashita (S.), (et al.), *9564*
- experimental methods, turbulence, turbulence (structure), Polyakov (A.F.), Tsypulev (Yu.V.), (et al.), *9606*
- heat transfer, turbulence (geophysical), Subramanian (C.S.), Antonia (R.A.), *9908*
- boundary layer, equilibrium, pressure gradient, Schofield (W.H.), *10426*
- cascades, integral methods, rotors, turbomachinery, Lakshminarayana (B.), Govindan (T.R.), *10449*
- convection (forced), heat transfer, shear flow, turbulence, Thomas (L.C.), Ibrahim (M.B.), *10472*
- temperature, turbulence model, Subramanian (C.S.), Antonia (R.A.), *10485*
- dispersion, inhomogeneities, wind, Durbin (P.A.), Hunt (J.C.R.), *11520*
- channel flow, swirl flow, turbulence (structure), velocity profiles, Shchukin (V.K.), Khalatov (A.A.), (et al.), *11547*
- rotating bodies, separation, three dimensional flow, turbomachinery, Ugryumov (M.L.), *11551*
- heat transfer, particle fluid flow, two phase flow, Bose (T.K.), *11556*

boundary roughness, cylindrical bodies, roughness, surface flow, Buresti (G.), *604*

- dynamic analysis, film thickness, mathematical models, Vorontsov (Ye.G.), Yakhno (O.M.), *605*
- rivers, waterways, Motayed (A.K.), Krishnamurthy (M.), *3598*
- channel flow, plates (parallel), stokes flow, Phan-Thien (N.), *4583*
- hypersonic flow, reynolds equation (turbulence), transition, Boudreau (A.H.), *9565*

boundary value problems, differential equations (ordinary), shock layer, singular perturbations, Howes (F.A.), *25*

- differential equations (ordinary), existence theorems, falkner-skan equation, Utz (W.R.), *31*
- cracks, elasticity (linear), potential theory, three dimensional formulation, England (A.H.), *38*
- differential equations (ordinary), discrete systems, finite difference methods, Chawla (M.M.), Katti (C.P.), *57*
- computing techniques, differential equations (ordinary), splines, Usmani (R.A.), Warsi (S.A.), *60*
- elliptic equations, iterative methods, Benson (A.), Evans (D.J.), *62*
- collocation, finite element techniques, parabolic equations, Hayes (L.J.), *82*
- elasticity (linear), saint venant principle, strain energy, Biollay (Y.), *237*
- edge cracks, wedges, Kipnis (L.A.), *240*
- anisotropic media, axisymmetric loading, half space, punch problems, Dhawan (G.K.), *247*
- deformation (finite), plasticity, variational methods, Klie (W.), *265*
- hydrodynamic stability, orr sommerfeld equation, Solopenko (V.I.), *635*
- coordinate systems, mathematical methods, nonlinear methods, numerical analysis, Murray (J.C.), *1071*
- mathematical methods, mechanics, Gelman (B.D.), Gliklikh (Iu.E.), *1075*
- differential equations (partial), elastic foundations, strips, Tsamasphyros (G.J.), Theocaris (P.S.), *1186*
- nonlinear analysis, power law fluids, variational methods, Anderson (N.), Arthurs (A.M.), *1533*
- differential equations (ordinary), discontinuities, variational methods, Kriz (J.), *1992*
- eigenvalue problems, inverse problems, sturm-liouville problems, Mclaughlin (J.R.), Handelman (G.H.), *1999*
- bending, differential equations (ordinary), plates, splines, Usmani (R.A.), Warsi (S.A.), *2044*
- elliptic equations, finite element techniques, galerkin method, rayleigh ritz method, Schreiber (R.), Eisenstat (S.C.), *2058*
- aerodynamics, algorithms, boundary layer, singular perturbations, Calise (A.J.), *2120*
- elasticity (linear), periodic problems, uniqueness, Howell (K.B.), *2209*
- cracks, elasticity, griffith cracks, Golecki (J.J.), *2429*
- initial value problems, inviscid fluid, penetration, unsteady flow, Karzhikhov (A.V.), Ragulin (V.V.), *2598*
- asymptotic behavior, boundary layer, Jones (E.), *2640*
- differential equations (ordinary), mathematical methods, Struwe (M.), *3097*
- approximation theory, infinite medium, De Hoog (E.R.), Weiss (R.), *3099*
- acoustics, mathematical methods, reynolds number (high), viscous flow, Geymonat (G.), Sanchez-Palencia (E.), *3104*
- constraints, elasticity (linear), functional analyis, Rostamian (R.), *3228*
- differential equations (partial), elasticity (three dimensional), functional analyis, Tereshchenko (V.Ya.), *3231*

- elasticity (linear), variational methods, Kozak (I.), *3241*
- half space, punch problems, shear loading, Hara (T.), Shibuya (T.), (et al.), *3245*
- anisotropic media, cracks, plates (weakened), Lyubchak (V.A.), Filshtinskii (L.A.), *3249*
- bending, infinite medium, plates (nonhomogeneous), theory, Bogdan (K.), *3301*
- plates (anisotropic), plates (circular), theory, Bresar (F.), *3316*
- conduction (heat), nonlinear systems, radiant interchange, Tao (L.N.), *3815*
- chemical reactions, diffusion, dirichlet problem, mathematical methods, polymerization, Bobisud (L.E.), *3853*
- elasticity (linear), infinite medium, uniqueness, Howell (K.B.), *4125*
- green function, initial value problems, soil consolidation, Bowen (R.M.), *4160*
- differential equations (partial), iterative methods, Wenston (P.R.), *4162*
- elasticity, galerkin method, Agaev (G.N.), Gamidov (V.S.), *4168*
- differential equations (ordinary), iterative methods, kinetics, Pennline (J.A.), *4178*
- boundary conditions, control, controllability, parabolic equations, pseudoparabolic equations, White (L.W.), *4205*
- linear systems, optimization, regulator problem, stability theory, Tsygankova (L.A.), *4253*
- algorithms, multiple shooting algorithm, numerical methods, singular control, solar energy, Oberle (H.J.), *4304*
- plastic behavior, plates (annular), yield condition, Sanguineti (G.), *4354*
- functional analyis, plasticity, variational methods, Kuznetsov (V.N.), *4355*
- asymptotic behavior, asymptotic methods, averaging, nonlinear mechanics, Akulenko (L.D.), *4948*
- elasticity, orthogonal functions, viscoelasticity, Melnikov (V.P.), *4962*
- geodesy, potential theory, uniqueness, Witsch (K.J.), *4965*
- diffusion, maximum principle, parabolic equations, Aifantis (E.C.), Hill (J.M.), *4973*
- bifurcation, boussinesq equation, convection, perturbation methods, Reiss (E.L.), Tavantzis (J.), *4974*
- laplace equation, mellin transform, singular integral equations, transforms, wedges, Chakrabarti (A.), *4979*
- green function, green theorem, helmholtz equation, stability (numerical), Mattioli (F.), *4982*
- finite amplitude, perturbation methods, plates, series expansion, Kayuk (Ya.F.), Alekseeva (M.K.), *4991*
- acoustics, elliptic equations, harmonic waves, time dependence, Neittaanmaki (P.), Picard (R.), *5026*
- cauchy problem, optimal control, parabolic equations, Reid (D.W.), Teo (K.L.), *5049*
- biharmonic equation, elasticity (linear), Evans (D.J.), Murphy (C.P.), *5072*
- boundary conditions, elasticity (linear), Kozak (I.), *5076*
- elastoplasticity, functional analyis, Brovko (G.L.), *5109*
- boundary layer, difference equations, nonlinear analysis, stagnation point, Balu (R.), *5436*
- conduction (heat), gradient techniques, inverse problems, numerical methods, Artyukhin (E.A.), Rumyantsev (S.V.), *5581*
- fire control, fire spread, forest fires, Cekirge (H.M.), *5642*
- froude number, hulls, nonlinear theory, ship resistance, wavemaking resistance, Maruo (H.), *5969*
- existence theorems, initial value problems, plates, uniqueness, vibration, Uroev (V.M.), *6073*
- computer algebra, differential equations, newton method, Hanson (J.N.), *6098*
- constraints, elasticity, incompressible media, Lazarev (M.I.), *6153*
- elastic constants, elasticity (linear), Zavoichinskii (B.I.), *6157*
- cracks, plates, Chen (Y.-Z.), Chen (Y.-H.), *6444*
- composite structures, diffusion, mass transfer, models, moisture, Miller (R.K.), *6827*
- diffusion, mathematical models, nonlinear analysis, porous media, Alikakos (N.D.), Rostamian (R.), *6831*
- duct flow, sound fields, vibration (flow induced), Myers (M.K.), *6935*
- computer programming, differential equations (ordinary), stiff systems, Mahony (J.J.), Shepherd (J.J.), *7153*
- differential equations (ordinary), eigenvalues, singular perturbations, stiff systems, Mahony (J.J.), Shepherd (J.J.), *7157*
- existence theorems, infinite medium, navier stokes equation, Ladyzhenskaya (O.A.), Solonnikov (V.A.), *7169*
- elasticity (linear), elastostatics, integro differential equations, Heise (U.), *7186*
- conduction (unsteady), differential equations (ordinary), lanczos-chebyshev, stress analysis, Chen (P.Y.P.), *7192*
- convergence, iterative methods, newton method, Paumier (J.-C.), *7195*
- elasticity (linear), potential theory, Ton Tran-Cong, *7262*
- biharmonic equation, elasticity (linear), singular integral equations, Heise (U.), *7271*
- cavities, creep, half space, inclusions, Anderson (C.A.), *7276*
- elliptic equations, green function, layered media, sturm-liouville problem, Popov (G.Ya.), Gribnyak (S.T.), *7303*
- elastic foundations, elasticity (linear), rings, Siemer (H.), Weiskopf (H.), *7328*
- approximation methods, beams (elastic), elasticity (linear), plates, Karpov (N.I.), *7329*
- elastic foundations, plates (anisotropic), plates (nonhomogeneous), Kaczkowski (Z.), *7332*
- bending, contact problems, plates, Zelentsov (V.B.), *7351*
- thermal waves, thermoelasticity (transient), Ignaczak (J.), *7949*
- dust, initial value problems, stability, uniqueness, Jain (R.K.), Prabha (S.), *7961*
- existence theorems, hyperbolic equations, integro differential equations, uniqueness, Krivoshein (L.E.), Leung (K.V.), (et al.), *8121*
- differential equations (ordinary), mathematical methods, resonance, turning point problems, Lewis (G.N.), *8125*
- interpolation, splines, Mettke (H.), Pfeifer (E.), (et al.), *8126*
- differential equations (ordinary), splines, Papamichael (N.), Worsey (A.J.), *8129*
- algorithms, eigenvalue problems, newton method, sturm-liouville problem, Bailey (P.B.), *8130*
- differential equations (partial), finite difference methods, finite element techniques, generalized coordinates, Schulz (B.), Wachter (J.), *8135*
- cylindrical bodies, elasticity (nonlinear), saint venant principle, Horgan (C.O.), Knowles (J.K.), *8181*
- deformation (finite), elasticity (nonlinear), Levin (V.A.), Tarasev (G.S.), *8183*
- elasticity (three dimensional), variational methods, Tereshchenko (V.Ya.), *8190*
- elasticity (linear), rayleigh ritz method, Tereshchenko (V.Ya.), *8192*
- elasticity (linear), laplace transform, Miletic (J.), *8193*
- contact problems, plates (simply supported), Keer (L.M.), Mak (A.F.), *8239*
- design (optimum), distributed parameters, optimization, structural optimization, Haug (E.J.) eds., Cea (J.), *8440, book*
- boundary elements, thermoelasticity (transient), Tanaka (M.), Tanaka (K.), *8875*
- green function, integral methods, ship resistance, wavemaking resistance, Noblesse (F.), *9008*
- boundary layer, elliptic equations, perturbation theory, singular perturbations, Jiang (F.-R.), *9106*
- algorithms, computing techniques, discontinuities, Welsh (W.), Ojika (T.), *9122*
- algorithms, numerical methods, optimal control, Travassos (R.), Kaufman (H.), *9185*
- elasticity (linear), rock mechanics, Dymek (F.), *9368*
- boundary integral methods, existence theorems, helmholtz equation, scattering, Angell (T.S.), Kleinman (R.E.), *10019*
- computing techniques, singular perturbations, Roberts (S.M.), *10038*
- asymptotic behavior, differential equations (ordinary), Chin (R.C.Y.), *10039*
- elastic bodies, laplace equation, membranes, variational methods, Lefevere (A.-M.), *10149*
- elasticity (linear), plates (thick), Misicu (M.), *10160*
- bifurcation, functional analyis, imperfections, Hoffman (W.), Kupper (T.), *10169*
- complex variables, cracks, dislocations, energy release rate, kinking, Hayashi (K.), NematNasser (S.), *10289*
- boltzmann equation, internal flow, uniqueness, Burov (A.V.), *10422*
- green function, integral methods, magneto fluid dynamics, waves, Aleksandrova (A.A.), Khiznyak (N.A.), *10749*
- acoustic waves, moving media, subsonic flow, wave equations, Krasilshchikova (E.A.), *10798*
- porous media, potential flow, two dimensional flow, Orasanu (M.T.), *10833*
- approximations, asymptotic methods, Cimatti (G.), *10933*
- elliptic equations, singular perturbations, Zheng (Y.-S.), *10934*
- computing techniques, finite difference methods, Snell (C.), Vesey (D.G.), (et al.), *10938*
- aerodynamics, compressible flow, numerical methods, Zhu (Y.L.), Chen (B.M.), *11398*
- approximations, compressible flow, difference operator, differential operator, least squares, subsonic flow, Danilov (Yu.M.), *11433*
- existence theorems, gravity waves (finite depth), rotational flow, Yofkin (N.N.), *11615*
- finite element techniques, hyperbolic equations, initial value problems, stability (numerical), Winther (R.), *11694*
- cylindrical bodies, oscillating bodies, sound fields, Rubanov (I.L.), *11951*
- porous media, radiation, sound, Oie (S.), Takeuchi (R.), *11981*
- porous media, radiation, sound, Oie (S.), Takeuchi (R.), *11982*
- porous media, radiation, sound, Oie (S.), Takeuchi (R.), *11983*
- diffraction, ships, slender bodies, wave interactions, Liapis (N.), Faltinsen (O.M.), *12086*

bounded media, cylindrical bodies, magneto fluid dynamics, oscillatory flow, viscoelastic fluids, Varshneya (N.K.), *854*

- linearization, magneto fluid dynamics, rotating fluids, stratified flow, Prasada Rao (D.R.V.), Krishna (D.V.), *3891*
- cellular flow, convection, hydrodynamic stability, rotating fluids, Daniels (P.G.), *8710*
- boundary layer (thermal), convection, hydrodynamic stability, porous media, stagnation point, vortex flow, Hsu (C.T.), Cheng (P.), *8711*

bounded variables, difference differential equations, oscillations, semi infinite media, Philos (C.G.), Staikos (V.A.), *3100*

- computing techniques, elasticity, finite element methods, Kelly (D.W.), *3135*

Bournazel (C.), buckling, buried structures, pipes, pressurized pipes, soil structure interaction, *9293*

Bourne (J.R.), see Grossman (G.), *7869*

boussinesq equation, mixtures, oscillating bodies, two phase flow, Matsufuji (H.), Hasegawa (E.), *936*

- convection (free), nusselt number, unsteady flow, vortices, Oertel (H.), Kessler (R.), *1513*

- convection, convection (benard), Legros (J.C.), Platten (J.K.), (et al.), *1686*
- convection, liquid solid interface, melting, solidification, Povkh (I.L.), Zavgorodnii (P.F.), (et al.), *3819*
- dispersion relation, gravity waves, magneto fluid dynamics, propagation, El Sawi (M.), Eltayeb (I.A.), *3892*
- axisymmetric loading, finite element techniques, infinite medium, Medina (F.), *4189*
- hydraulics, reynolds stresses, turbulence model, turbulent flow, Rodi (W.), *4570, book*
- bifurcation, boundary value problems, convection, perturbation methods, Reiss (E.L.), Tavantzis (J.), *4974*
- buoyant flow, thermosyphons, Damerell (P.S.), Schoenhals (R.J.), *5552*
- heat transfer, oscillatory flow, plates, porous surfaces, Soundalgekar (V.M.), Hiremath (S.B.), *6622*
- convection (benard), rayleigh benard instability, rayleigh number, Platten (J.K.), Legros (J.C.), *6786*
- conduction, convection (free), heat transfer, open thermosyphons, rayleigh number, thermosyphons, Penot (F.), Peube (J.-L.), *6790*
- convection, diffusion, nonlinear analysis, Knobloch (E.), Proctor (M.R.E.), *8531*
- convection, hydrodynamic stability, rotating bodies, rotating fluids, Buhler (K.), Oertel (H.) Jr., *8719*
- convection (free), heat transfer, insulation, porous media, Brailovskaya (V.A.), Kogan (V.R.), (et al.), *8784*
- differential equations (ordinary), differential equations (partial), hydrology, porous media, similarity methods, Bhutani (O.P.), Sharma (N.L.), *8969*
- existence theorems, surface waves, uniqueness, Schonbek (M.E.), *9101*
- conservation laws, finite element techniques, fluid mechanics, Cliffe (K.A.), *9147*
- buoyancy, convection, mixing layers, thermal diffusion, Cushman-Roisin (B.), *9533*
- convection, hysteresis, thermal diffusion, Walden (R.W.), Ahlers (G.), *9534*
- differential equations (partial), korteweg de vries equation, nonlinear waves, scattering, solitary waves, Ablowitz (M.J.), Segur (H.), *10017*
- convection (benard), convection (free), heat addition, navier stokes equation, Frick (H.), Clever (R.M.), *10579*
- channels, finite amplitude, gravity waves (solitary), Toland (J.F.), *11587*

Bouvard (M.), groundwater, infiltration, leaks, tunnels, unsteady flow, Niquet (J.-J.), *10838*

Bovt (A.N.), compaction, explosions, impulsive loading, porous media, transient loading, underground, Kobets (V.I.), (et al.), *9838*

Bowen (A.J.), see Holman (R.A.), *10400*

Bowen (A.W.), aluminum alloys, crack growth, cyclic loading, fatigue, Forsyth (P.J.E.), *2426*

Bowen (J.R.), chemical reactions, combustion, explosions, ignition, kinetics, Manson (N.), (et al.), *4734, book*

Bowen (R.M.), boundary value problems, green function, initial value problems, soil consolidation, *4160*

Bowie (O.L.), edge cracks, elasticity, stress intensity factor, Freese (C.E.), *8391*

Bowker (P.), see Pratt (D.J.), *3068*

Bowman (J.S.) Jr., see Bihrle (W.) Jr., *11734*

Bowyer (J.M.), see Strand (L.D.), *5909*

Boxman (R.L.), see Shlien (D.J.), *3693*

Boyarevich (V.V.), discharges, magneto fluid dynamics, metallurgy, models, vortex flow, *5678*

Boychuk (L.M.), see Ponomarenko (V.S.), *2184*

- algorithms, design, nonlinear programming, *4303*

Boyd (C.), see Winter (K.G.), *8671*

Boyd (J.P.), approximations, asymptotic methods, complex variables, differential equations (ordinary), eigenvalue problems, sturm-liouville problems, *7158*

- dispersion, gravity waves (solitary), ocean waves, *11563*

Boyd (R.D.), convection (free), laminar flow, lasers, visualization, Vest (C.M.), *3831*

Boyer (D.L.), rossby waves, rotating fluids, stratified flow, two component flow, viscous flow, *11376*

Boyer (J.C.), elasticity (linear), finite element techniques, splines, Trompette (P.), *6171*

Boyum (G.), see Pedersen (K.), *5951*

Bozzo (E.), see Alpa (G.), *6454*

- see Alpa (G.), *7336*
- bracing, buildings (tall), matrix methods, multistory frames, structural analysis, Gambarotta (L.), *7611*

Bracco (F.V.), chemical kinetics, flames, models, two dimensional flow, O'Rourke (P.J.), *4737*

Brace (W.F.), permeability, porous media, rocks, *4024*

Brach (R.M.), dynamic interaction, impact, rigid bodies, *6051*

Bracken (A.J.), see Holt (J.N.), *9066*

Bradeanu (D.), boundary layer (thermal), computer programming, finite difference methods, *2641*

Bradford (M.A.), see Hancock (G.J.), *3331*

- beam columns, beams (thin section), buckling, Trahair (N.S.), *11119*

Bradley (M.S.), monitoring, ship performance, *5971*

Bradshaw (P.), see Pontikos (N.), *712*

- see Andreopoulos (J.), *1678*
- see Chandrsuda (C.), *5464*

Brady (B.H.G.), boundary integral methods, finite element methods (hybrid), stress analysis, Wassyng (A.), *8150*

Brady (J.F.), channel flow, flow reversal, laminar flow, moving surfaces, navier stokes equation, Acrivos (A.), *8566*

Braga (F.), cables, optimization, trusses, D'Asdia (P.), *9443*

Braginskiy (A.M.), boiling, channel flow, circulation, cooling, heat exchangers, thermal instability, Ivanov (L.B.), *5583*

Brailovskaya (V.A.), boussinesq equation, convection (free), heat transfer, insulation, porous media, Kogan (V.R.), (et al.), *8784*

brain, cavitation, head, impact, injuries, Lubock (P.), Goldsmith (W.), *6007*

- heat transfer (biological), high temperature, nervous system, Epstein (Y.), Keren (G.), (et al.), *7124*
- blood vessels, muscles, tissues, viscoelasticity, Misra (J.C.), Chakravarty (S.), *7646*

Braithwaite (W.M.), internal flow, pressure distribution, temperature, turbofan engines, Soeder (R.H.), *10730*

brakes, automobiles, experimental results, vehicles, El-Gindy (M.), Ilosvai (L.), *14*

- clutches, friction, friction drives, Chichinadze (A.V.), Braun (E.D.), (et al.), *1006*
- automobiles, friction (solid solid), high temperature, Ricco (M.), *1469*
- automobiles, dynamic stability, El-Gindy (M.), Ilosvai (L.), *4148*
- friction (sliding), heat transfer (direct contact), Newcomb (T.P.), *5974*
- automobiles, design, Newcomb (T.P.), *9469*
- automobiles, digital simulation, maneuverability, Mitchell (B.), Abrams (R.), (et al.), *10057*

Bramley (J.S.), boundary layer, eigenvalues, riccati equation, semi infinite media, Sloan (D.M.), *6065*

Brancaleoni (F.), aerodynamic loads, bridges (suspension), flutter, oscillating bodies, Brotton (D.M.), *4754*

Brand (A.), computing techniques, fatigue, gradient techniques, *8390*

Brand (E.W.), see Premchitt (J.), *9352*

Brand (G.F.), experimental methods, metals, plasma, rotating fluids, spectroscopy, James (B.W.), (et al.), *3903*

Brandeis (J.), boundary layer, computing techniques, navier stokes equation, recirculation, viscous flow, Rom (J.), *1548*

Brander (O.), see Nilsson (B.), *6926*

- see Nilsson (B.), *6927*

Brandes (K.), deformation, displacement, foundations, shells (cylindrical), tanks, *307*

Brandt (U.), diffusers, radial flow, separation, turbulent flow, Teipel (I.), *3675*

- compressible flow, diffusers, friction (skin), radial flow, Teipel (I.), *7731*

Bransby (P.L.), see Murfitt (P.G.), *6959*

Brar (G.S.), convection (free), friction (skin), magneto fluid dynamics, plates, similarity methods, *2685*

Braslavskii (A.D.), dynamic analysis, identification, linear systems, Shubladze (A.M.), *2094*

Brasseur (J.C.), circulation, flow measurement, visualization, vorticity, Chang (I.-D.), *2599*

Bratos (M.), gases, shock waves, two dimensional flow, variational methods, Herczynski (R.), *11444*

Bratt (J.F.), beams, dynamic response, shock absorbers, *1273*

Braun (E.D.), see Chichinadze (A.V.), *1006*

Braun (H.), composite materials, crack growth, finite element techniques, micromechanisms, thermal effects, Herrmann (K.), *2456*

Braun (M.), acoustics (physiological), experimental methods, scattering, tissues, Robinson (D.E.), *6012*

Braun (R.L.), see Chin (R.C.Y.), *8941*

Brautgam (H.), see Wedig (W.), *5205*

Bray (K.N.C.), see Libby (P.A.), *1740*

brazed joints, composite structures, honeycomb structures, sandwich construction, Hepler (A.K.), Arnquist (J.), (et al.), *3540*

- creep rupture, soldering, welded joints, Williams (J.A.), *6429*

Brazhenas (A.P.), see Daunis (M.A.), *6567*

Brazier-Smith (P.R.), dispersion, flexural waves, path integrals, Butler (D.), (et al.), *6322*

Brdys (M.), see Findeisen (W.), *4289*

breakers, shallow water, spectra, surface waves, Iwata (K.), *3015*

- ocean waves, probability theory, surface waves, Tayfun (M.A.), *4048*
- currents, gravity waves (internal), internal waves, oceanography, spectra, thermocline, Eriksen (C.C.), *4871*
- hurricanes, ocean waves, surface waves, tides, Taylor (R.B.), *5917*
- bores, coasts, density currents, oceanography, Stern (M.E.), *8975*
- beaches, surf, surface waves, Johns (B.), Jefferson (R.J.), *9928*
- beaches, surface waves, Halliwell (A.R.), Machen (P.C.), *12072*

breakwater, attenuation, floating bodies, mooring, wave loads, Yamamoto (T.), *526*

- models, submerged bodies, wave trains, Abdul Khader (M.H.), Rai (S.P.), *677*
- coasts, diffraction, integral methods, Mattioli (F.), *1591*
- diffraction, ocean waves, refraction, shallow water, Lui (P.L.-F.), Lozano (C.J.), (et al.), *1887*
- gravity waves (finite depth), gravity waves (surface), scattering, Lozano (C.J.), *2705*

- floating bodies, gravity waves, transmission, Stiassnie (M.), *11673*

Breakwell (J.V.), libration theory, periodic orbits, restricted three body problem, Brown (J.V.), *876*
- artificial satellites, geosynchronous orbits, stability theory, *9817*

Brebbia (C.A.), see Telles (J.C.F.), *1185*
- see Wrobel (L.C.), *2817*
- see Pina (H.L.G.), *4179*
- see Telles (J.C.F.), *8216*

Brebbia (C.A.) eds., dynamic analysis, loads, seismic loading, structural analysis, thermal effects, wave loads, Gould (P.L.), (et al.), *4536, book*

Breckenridge (F.R.), displacement gages, measurements (dynamic), surface waves, Greenspan (M.), *9340*

Bree (J.), entropy, mixtures, thermodynamic properties, thermodynamics (nonequilibrium), *2779*

Breev (V.V.), see Borisov (V.N.), *2664*

Breger (A.M.), control, design, distributed parameters, thermal sciences, Butkovskii (A.G.), (et al.), *139*

Brehm (E.), blunt bodies, film flow, rainfall, reynolds number (high), reynolds number (small), *9544*

Breidenthal (R.), chemical reactions, experimental methods, mixing layers, turbulence (structure), wakes, *7756*

Breinl (W.), automatic control, design, magnetic levitation, magnetic stabilization, transportation devices, vehicles, *10082*

Breitenberger (E.), elastic foundations, pendulums, stability theory, vibration (nonlinear), Mueller (R.D.), *7370*

Breitkopf (G.), experimental methods, heat transfer, thermocouples, Wittig (S.), (et al.), *1694*

Breitkopf (G.E.), blades, heat transfer, steam turbines, *9782*

Bremer (H.), damping, dynamic analysis, many body systems, structural response, *6278*

Bremhorst (K.), see Lam (C.K.G.), *2700*
- see Lam (C.K.G.), *4646*
- see Kreba (L.), *8725*

Brendel (B.), shells (cylindrical), shells (thin), structural stability, wind loads, Ramm (E.), (et al.), *5183*
- buckling, dynamic stability, nonlinear analysis, shells (cylindrical), Ramm (E.), *7360*

Brenig (L.), differential equations (ordinary), initial value problems, laplace transform, nonlinear systems, Fairen (V.), *7159*

Brennan (J.J.), see Prewo (K.M.), *281*

Brennen (C.E.), see Spelt (J.K.), *10570*

Brenner (H.), force, spherical bodies, stokes flow, torque, viscous flow, *9531*

Brepta (R.), conical bodies, dynamic stresses, shock, vibration (torsional), Tmka (J.), *7386*

Bresar (F.), boundary value problems, plates (anisotropic), plates (circular), theory, *3316*

Breth (H.), see Katzenbach (R.), *521*

Bretz (P.E.), crack propagation, fractography, macroscopic characterization, moisture, polymers, Hertzberg (R.W.), (et al.), *3434*

Brewer (J.W.), bilinear systems, biomathematics, mathematical models, population growth, *2205*
- see Hubbard (M.), *8770*

Brewer (M.A.), see Hyman (W.A.), *3066*

Brewer (W.D.), ablators, arcjets, insulating materials (thermal), joints, reentry, space shuttle, Pittman (C.M.), (et al.), *1723*

Brey (J.J.), thermodynamic properties, thermodynamics, transport properties, Cruz (J.L.), (et al.), *6750*

Brezhnev (A.L.), asymptotic methods, bodies of revolution, compressible flow, transonic flow, Chernov (I.A.), *2620*

Brezina (P.), see Ries (H.), *2571*

Brezis (H.), see Berestycki (H.), *4969*

Bridge (R.Q.), columns, cracks, eccentric loading, reinforced concrete, *7505*

Bridger (A.F.C.), gravity waves, rossby waves, rotating fluids, Stevens (D.E.), *8989*

bridges, elastic behavior, prestressed concrete, slabs, waffle slabs, Kennedy (J.B.), El-Sebakhy (I.S.), *2530*
- bridge replacement, highways, integer programming, mathematical models, operations research, Garcia-Diaz (A.), Liebman (J.S.), *3192*
- dynamic interaction, moving loads, railroads, Chu (K.H.), Garg (V.K.), (et al.), *3382*
- creep, deformation, prestressed concrete, repair, Takafuji (T.), Seki (S.), *3537*
- modeling, structural analysis, Dean (D.L.), Ramsay (R.T.), *3543*
- composite structures, design, slabs, Heins (C.P.), *3545*
- layered media, piles, soil structure interaction, Takemiya (H.), Yamada (Y.), *4036*
- gravel, interaction, railroads, Muller (G.), Jovanovic (D.), (et al.), *5259*
- dynamic analysis, floating structures, stochastic processes, wave loads, Langen (I.), Sigbjornsson (R.), *5356*
- curved members, decking, orthotropic materials, structural analysis, Dey (S.S.), Samuel (A.T.), *5357*
- foundations, matrix methods, piles, reinforced concrete, structural response, Onu (G.), *7607*
- loads, probabilistic design, random loading, Buckland (P.G.), Navin (F.P.D.), (et al.), *8454*
- deflections, wind bracing, wind loads, Beguin (G.H.), *9453*
- cylindrical bodies, piers, scour, Jain (S.C.), *9518*
- slabs, structural analysis, Bakht (B.), Jaeger (L.G.), (et al.), *10364*
- infrasonics, oscillating bodies, sound generation, Imaichi (K.), Tsujimoto (Y.), (et al.), *10790*

bridges (arch), design (optimum), Lightfoot (E.), Hutchinson (G.L.), *2538*
- reinforced concrete, shakedown structures, Ronca (P.), Cohn (M.Z.), *5359*

bridges (box girder), cable stayed bridges, dynamic response, wind loads, Smith (I.J.), *519*
- bending, torsion, Kambe (S.-I.), *520*
- beams (box), finite element methods, Mikkola (M.J.), Paavola (J.), *1220*
- bearing capacity, imperfections, ultimate strength, Djubek (J.), Karnikova (I.), (et al.), *1446*
- design criteria, Wolchuk (R.), *1447*
- simply supported structures, structural analysis, Agrawal (S.B.), Tamhankar (M.G.), *2531*
- design (optimum), Heins (C.P.), Hua (L.-J.), *2532*
- design criteria, shear lag, Evans (H.R.), Taherian (A.R.), *5151*

bridges (highway), finite element techniques, linear theory, plates (stiffened), Maeda (Y.), Sera (M.), *1136*
- dynamic analysis, vehicles, Gupta (R.K.), Traill-Nash (R.W.), *2349*
- dynamic response, vibration (forced), Gangarao (H.V.S.), Haslebacher (C.A.), *3383*
- dynamic loads, vehicles, Gupta (R.K.), *4438*

bridges (railroad), experimental mechanics, railroads, vibration (forced), Okada (K.), *6311*
- bridges (truss), dynamic behavior, impact, structural response, Wiriyachai (A.), Chu (K.-H.), (et al.), *9452*

bridges (suspension), design (minimum weight), optimization, prestressed structures, shape factors, Sofronie (R.), *2533*
- buildings (tall), heat exchangers, hydraulic machinery, hydraulic structures, nuclear reactors, ship structures, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- aerodynamic loads, aeroelasticity (dynamic), dynamic stability, Petre (A.), Sofronie (R.), *3910*
- aerodynamics, gust loads, stochastics, wind loads, Sigbjornsson (R.), Hjorth-Hansen (E.), *3911*
- aerodynamic loads, flutter, oscillating bodies, Brancaleoni (F.), Brotton (D.M.), *4754*
- deflections, prestressed structures, Sofronie (R.), *5358*
- modal analysis, piers, seismic loading, substructuring, Balendra (T.), *6525*
- design (optimum), prestressed structures, Sofronie (R.), *9455*

bridges (truss), bridges (railroad), dynamic behavior, impact, structural response, Wiriyachai (A.), Chu (K.-H.), (et al.), *9452*

Bridgwater (J.), filtration, particle size, testing equipment, Cooke (M.H.), (et al.), *6998*

Bridwell (R.J.), see Anderson (C.A.), *965*

Briggs (A.), cracks, fracture mechanics, spectroscopy, stress corrosion, torsion, Airey (R.), (et al.), *9391*

Briggs (W.L.), circulation, ocean air interaction, oceanography, vorticity, *5921*

Brighton (P.W.M.), see Smith (F.T.), *10423*

Briley (W.R.), see Buggeln (R.C.), *621*
- see Kreskovsky (J.P.), *10439*

Brill (D.), elastic waves, resonance, scattering, shear waves, spherical bodies, Gaunaurd (G.), (et al.), *3947*

Brill (J.P.), see Mukherjee (H.), *1558*
- see Schmidt (Z.), *6969*
- see Schmidt (Z.), *11499*

Brimkulov (U.N.), estimation, meteorology, optimization, Krug (G.K.), (et al.), *4081*

Brinckmann (P.), biological joints, biomechanics, hips, stress analysis, Frobin (W.), (et al.), *6004*

Brind (R.J.), see Achenbach (J.D.), *8333*
- see Achenbach (J.D.), *10290*

Brink (K.H.), bottom irregularities, ocean, ocean waves, propagation, *6610*

Brinkworth (B.J.), see Hawlader (M.N.A.), *3843*

Brinson (H.F.), composite materials, creep rupture, laminates, plasticity, polymers, Griffith (W.I.), (et al.), *1356*

Brinza (V.N.), explosions, powders, propagation, Babaitsev (I.V.), (et al.), *10714*

Briskin (E.S.), cavities, damping, dynamic response, friable media, vibration (viscoelastic), *8286*

Brissaud (M.), acoustic waves, anisotropic media, calibration, transducers (ultrasonic), Kleimann (H.), *11163*

Britov (G.S.), dynamic analysis, model reduction, redundancy, time invariant systems, Mironovskiy (L.A.), *2087*

brittle fracture, composite materials, fracture toughness, laminates, plates (holed), Nepershin (R.I.), Klimenov (V.V.), (et al.), *1213*
- fracture, grain boundaries, metallurgy, molybdenum, Kumar (A.), Eyre (B.L.), *1355*
- crack growth, j-integral, Burns (S.J.), *1367*
- fracture criteria, fracture mechanics, multiaxial fatigue, Awaji (H.), *1368*
- crack initiation, energy methods, fracture toughness, inhomogeneities, Panckevicius (G.), *1369*

- crack growth, j-integral, Lin (I.-H.), Hirth (J.P.), *1372*
- crack resistance, material testing, x ray techniques, Georgiev (M.N.), Mezhova (N.Ya.), (et al.), *1415*
- brittle materials, crack growth, fracture energy, graphite, Barinov (S.M.), Grevtsev (S.N.), (et al.), *2497*
- brittle materials, stability theory, Volkov (S.D.), Dubrovina (G.I.), *3455*
- biaxial loading, fracture, stochastic processes, weibull statistics, Matsuo (Y.), *5295*
- dimensional analysis, impact, thermal effects, Sointsev (Yu.P.), Zamyatnin (M.M.), (et al.), *6368*
- cold working, failure, steel, Rybin (V.V.), Morozov (A.M.), (et al.), *6424*
- grain boundaries, steel, Baranov (S.M.), Sarrak (V.I.), (et al.), *6425*
- crystals, ductile fracture, grain boundaries, metallurgy, molybdenum alloys, Denisyuk (V.A.), Drachinskii (A.S.), (et al.), *6432*
- kinetics, plasticity, Stepanov (W.A.), Shpeizman (V.V.), *6442*
- beams, failure, probability, weibull statistics, Kittl (P.), Camilo (G.M.), *6443*
- elliptical cracks, thermal loading, Znachkovskii (O.Ya.), Rakovskii (V.A.), (et al.), *7491*
- crack propagation, fracture, material testing, Nikolaevskii (V.N.), *7530*
- caustics, crack tip geometry, fracture mechanics, photoelasticity, surfaces, Theocaris (P.S.), *7556*
- crack propagation, microcracks, Kartashov (E.M.), Bartenev (G.M.), *9400*
- aluminum alloys, crack growth, fracture toughness, sheet metal, stress intensity factor, Yablonskii (I.S.), *9432*
- acoustic emission, brittle materials, cracks, inclusions, surface waves, Rose (L.R.F.), *9436*
- acoustic measurements, ceramics, life expectancy, probability, risk, Richardson (J.M.), Evans (A.G.), *9437*
- cracks, holes, plates (weakened), singular integral equations, stress intensity factor, Mirsalimov (V.M.), *10291*

brittle materials, blast effects, boreholes, crack propagation, numerical analysis, Stecher (F.P.), Fourney (W.L.), *424*
- mixed mode fracture, orthotropic materials, sheet metal, Lemant (F.), Pineau (A.), *454*
- crack initiation, fracture mechanics, mixed mode fracture, Tirosh (J.), Catz (E.), *456*
- compression, finite element methods, specimen design, tests, Kvitka (A.L.), Dyachkov (I.I.), *492*
- brittle fracture, crack growth, fracture energy, graphite, Barinov (S.M.), Grevtsev (S.N.), (et al.), *2497*
- alloys, ductility, fracture, transition, Schulson (E.M.), *3264*
- brittle fracture, stability theory, Volkov (S.D.), Dubrovina (G.I.), *3455*
- ice, mechanical properties, tests, Timco (G.W.), *3490*
- composite materials, compression, specimen design, tests, Kvitka (A.L.), Dyachkov (I.I.), *3491*
- abrasion, ductility, friction (sliding), hardness, wear, Beckmann (G.), Westermier (G.), *4106*
- composite materials, cyclic loading, experimental mechanics, shells (spherical), Amelyanovich (K.K.), Podgornyi (L.N.), *4547*
- experimental mechanics, pipes, rupture, Baum (M.R.), Elston (M.J.H.), *4548*
- anisotropic media, plasticity, slip line methods, Levitas (V.I.), *6177*
- damage (cumulative), materials properties, Huy Duong Bui, Ky Dang Van, (et al.), *7517*
- failure, fracture toughness, notch tests, stress intensity factor, Shih (T.T.), *7519*
- compression, concrete, tests, ultimate strength, Jayatilaka (A. De S.), Nanayakkara (V.K.N.), *7563*
- carbides, crack resistance, fracture toughness, variable loading, Novikov (N.V.), *7570*
- crack propagation, fracture toughness, notch tests, stress intensity factor, Munz (D.), Bubsey (R.T.), (et al.), *7571*
- erosion, particle size, wear, Marshall (D.B.), Evans (A.G.), (et al.), *8052*
- cracking, fracture criteria, strength, Bascoul (A.), Maso (J.C.), *8399*
- crack propagation, damping, dynamic fracture, edge cracks, Brock (L.M.), *8407*
- failure, material testing, stochastic processes, Aoki (S.), Sakata (M.), *8422*
- acoustic emission, brittle fracture, cracks, inclusions, surface waves, Rose (L.R.F.), *9436*
- finite element techniques, materials properties, Erdei (C.K.), *10134*
- crack initiation, cracks, failure, porous media, powders, Barinov (S.M.), Krasulin (Yu.L.), *10308*

Britto (A.M.), see Valsangkar (A.J.), *3567*

Brochet (J.), internal flow, shock waves, three dimensional flow, transonic flow, *6662*

Brock (L.M.), elastic waves, half space, internal sources, *1293*
- dislocations, elastic waves, half space, *8335*
- half space, screw dislocations, viscoelastic materials, *8338*
- brittle materials, crack propagation, damping, dynamic fracture, edge cracks, *8407*

Brockenbrough (R.L.), beam columns, buried structures, connections, discontinuities, underground, Frost (R.W.), (et al.), *1435*

Brockett (R.W.), multivariable systems, nyquist theory, pole placement, root loci, Byrnes (C.I.), *11041*

Brockett (T.E.), blades, design, lifting surfaces, mathematical models, propellers, turbomachinery, *6738*

Brocklehurst (A.), aerodynamic interference, design, helicopters, tails, Taylor (P.), *5496*

Brodetskaya (T.S.), automatic control, queue theory, *3173*

Brodetskii (G.L.), design, digital control, reliability analysis, *3178*

Brody (H.), impact, networks, strings, *2374*
- impact, networks, strings, *2375*

Brodyanskii (V.M.), cryogenics, exergy analysis, low temperature, thermodynamic properties, thermodynamics, Semenov (A.M.), *8679*

Broek (H.W.), propagation, random media, underwater acoustics, Lawlor (J.E.), *11902*

Broese Van Groenou (A.), ceramics, compaction, powders, *9379*

Bromberg (L.), containment, nuclear fusion, plasma (toroidal), thermonuclear energy, tokamak, Cohn (D.R.), (et al.), *8831*

Bromilow (I.G.), finite difference methods, simulation, vortex sheets, vortices, Clements (R.R.), *8542*

Brommundt (E.), dynamic analysis, nonlinear analysis, vibration (self excited), *6276*

Broms (B.B.), disturbance, experimental methods, sampling, soils, *6373*

Bronshtein (I.I.), computer programming, computing techniques, multiprocessor systems, optimization, Geninson (B.A.), (et al.), *2150*

Brook (N.), point load testing, rock mechanics, rocks, size effects, *2478*

Brook (R.), see Davenport (R.T.), *4484*

Brooks (J.D.), see Scheiman (J.), *9616*

Brooks (T.F.), noise (aerodynamic), noise measurements, trailing edge, Hodgson (T.H.), *4768*

Brosh (A.), see Degani (D.), *1546*

Brosowski (B.) eds., differential equations (partial), fluid mechanics, mathematical methods, mathematical models, perturbation theory, surveys, Martensen (E.), *2035, book*

Brossard (J.P.), safety, shock, ski bindings, snow, Pascal (R.), (et al.), *6360*

Broszeit (E.), see Habig (K.-H.), *7084*

Brotchie (J.F.), damping, optimization, structural design, vibration, *1287*

Brotton (D.M.), see Brancaleoni (F.), *4754*

Broucke (R.), circumnavigation, lagrangian solution, libration theory, periodic orbits, three body problem, Anderson (J.D.), (et al.), *874*
- convergence, kepler equation, newton method, numerical methods, orbit mechanics, *880*
- see Szebehely (V.), *1785*
- circumnavigation, coordinate systems, dynamic analysis, kepler orbits, separation of variables, *8839*

Broussard (J.R.), feedforward control, model reference systems, modeling, O'Brien (M.J.), *2081*
- see Stengel (B.F.), *2195*

Brousse (P.), design (minimum weight), frames, kinematics, limit design, optimization, *5345*

Brovko (G.L.), elastoplasticity, uniqueness, work hardening, *5108*
- boundary value problems, elastoplasticity, functional analyis, *5109*

Brovman (M.Ya.), creep, high temperature, materials properties, steel, *4488*
- compression, deformation (plastic), high temperature, plasticity, testing equipment, *4517*

Brown (B.M.), see Mein (R.G.), *5913*

Brown (C.B.), see Aggour (M.S.), *7043*

Brown (D.H.), gas turbines, injection, power generation, steam, Cohn (A.), *2749*

Brown (F.W.), see Drago (R.J.), *7414*

Brown (H.L.), see Reuter (W.G.), *7471*

Brown (J.H.), electric spark discharge, low density flows, velocity measurement, wind, Good (R.E.), *8662*

Brown (J.V.), see Breakwell (J.V.), *876*

Brown (K.J.), bifurcation, elliptic equations, existence theorems, Ibrahim (M.M.A.), (et al.), *4151*

Brown (K.W.), blades, finite element techniques, impact, jet engines, solid solid interface, Krahula (J.L.), *7211*

Brown (M.W.), biaxial loading, crack growth, crack initiation, fatigue, life expectancy, Miller (K.J.), *450*
- biaxial loading, high temperature, life expectancy, low cycle fatigue, Miller (K.L.), *1351*

Brown (P.T.), see Wiesner (T.J.), *3409*

Brown (R.A.), drops, rotational flow, shape, stability, Scriven (L.E.), *10827*

Brown (R.H.), see Luong (L.H.S.), *8209*

Brown (R.L.), dynamic analysis, plasticity, shear, snow, tracked vehicles, vehicles, *5366*

Brown (R.S.), acoustics, energy spectrum, rockets, vortex shedding, wave energy, Dunlap (R.), (et al.), *4769*

Brown (S.N.), decay, hydrodynamic stability, perturbations, shear flow, Stewartson (K.), *2682*
- airfoil theory, laminar flow, oscillating bodies, supersonic flow, trailing edge, Cheng (H.K.), *9651*

Brown (T.D.), bones, damage, stress analysis, stress concentration, Way (M.E.), (et al.), *1035*

Browne (A.L.) eds., contact problems, friction (rolling), tires, wheels, Tsai (N.T.), *1454, book*

brownian motion, diffusion, particle dynamics, shear flow, Foister (R.T.), Van De Ven (T.G.M.), *1731*
- diffusion, mass transfer, Hardt (S.L.), *1953*
- equilibrium, fluids, statistical mechanics, Tokuyama (M.), Oppenheim (I.), *2842*
- emulsions, flocculation, particle size, suspensions, Reddy (S.R.), Fogler (H.S.), *3593*
- membranes (permeable), molecular diffusion, Ramshaw (J.D.), *3643*
- colloids, polar fluids, shear flow, suspensions, Takamura (K.), Van De Ven (T.G.M.), (et al.), *6583*
- charged particles, diffusion, Prem (A.), Pilat (M.J.), *7001*

Browning (D.G.), see Meilen (R.H.), *5719*

Browning (L.H.), combustion products, flames, mathematical models, methanol, quenching, spark ignition engines, Pefley (R.K.), *840*

Bruch (J.C.) Jr., irrigation, seepage, soils, *7009*

Bruckner (J.M.H.), see Wauer (J.C.), *6729*

Bruet (B.), gradient techniques, multivariable systems, nonlinear characteristics, optimization, scale effects, *4944*

Bruinsma (J.), see Van Heteren (J.), *8981*

Brulin (O.) eds., biomechanics, composite materials, continuum theory, discrete systems, mixtures, porous media, Hsieh (R.K.T.), *8090, book*

Brull (M.A.), see Unger (A.), *9324*

Bruller (O.S.), creep, dynamic viscoelasticity, polymers, stress strain relationships, Kleinemeier (B.), *1191*

Brun (L.), one dimensional waves, thermal waves, thermoelasticity (transient), Molinari (A.), *924*

Brun (R.), boundary layer (thermal), computing techniques, reflection, shock waves, unsteady state, Chauvin (C.), (et al.), *2723*

Brunello (G.), see Terron (L.R.), *8728*

Bruner, see Ko (F.), *6200*

Brunet (M.), see Vialaton (G.), *5298*
- see Billardon (R.), *8370*

Brunk (G.), cosserat solids, elasticity (nonlinear), micromechanics, *3*
- dynamic analysis, kinematics, mathematical methods, *9*

Brunn (P.), dispersed flow, shear flow, suspensions, walls, *4008*
- motion, particles, viscoelastic fluids, *8894*

Brunn (P.O.), absorption, bacterial cells, cell behavior, membranes (permeable), *9065*

Brunner (H.), see Mckee (S.), *4184*

Brunner (J.K.), algorithms, constraints, optimization, penalty function, *7179*

Brunnschweiler (A.), boltzmann equation, diffusion, evolution equations, kinetic theory, statistical mechanics, *7164*

Brunovsky (P.), optimization, synthesis, time optimal systems, *171*
- constraints, linear systems, optimal control, synthesis, *4291*

Brunson (B.A.), attenuation, sand, shear waves, Johnson (R.K.), *7430*

Brunton (J.H.), see Preece (C.M.), *7091*

Bruse (L.), dynamic analysis, numerical methods, structural analysis, Nigro (L.), *6318*

Bruschin (J.), cavitation inception, hydraulic structures, jets, vapor pressure, *2588*

Brush (D.O.), buckling, prebuckling behavior, shells (cylindrical), structural stability, *2308*

Brusset (T.R.), crack growth, holes, radial loading, stress intensity factor, *1364*
- corners, crack initiation, cracks, plates (reinforced), reliability, Chiu (S.T.), (et al.), *3443*

Brust (F.W.), computing techniques, residual stresses, welded joints, Rybicki (E.F.), *8367*

Brutsaert (W.), aquifers, porous media, Corapcioglu (M.Y.), *5907*

Bruyatsku (E.V.), buoyancy, jets, plumes, turbulence, *9616*

Bryanston-Cross (P.J.), axial turbines, cascades, holography, interferometry, nozzles, Lang (T.), (et al.), *5505*

Bryant (E.L.), see Rind (E.), *3510*

Bryant (J.), contact transformation, dynamics, group theory, hamiltonian equations, n body problems, *6873*

Bryden (H.L.), circulation, currents, oceanography, vorticity, *5918*

Brykina (I.G.), boundary layer, friction (skin), porous surfaces, supersonic flow, three dimensional flow, Gershbein (E.A.), (et al.), *4606*
- boundary layer, laminar flow, supersonic flow, swept wings, Gershbein (E.A.), (et al.), *6637*

Bryukalo (L.A.), buckling (nonlinear), moving loads, shells (cylindrical), shells (orthotropic), Gulyaev (V.I.), *4399*

Bryukhanova (L.S.), see Andreeva (I.A.), *6410*

Bryzgalin (G.I.), composite materials, design, optimization, *2246*
- composite materials, design (optimum), optimization, plates, *11323*

Bschorr (O.), artificial satellites, control, guidance systems, maneuverability, tethered satellites, *7930*

bubble dynamics, cavitation flow, laminar flow, ogives, separation, water tunnels, Arakeri (V.H.), Carroll (J.A.), (et al.), *563*
- buoyant flow, flow measurement, pipes, river beds, Sargent (D.M.), *564*
- cavitation flow, damage, leading edge, modeling, propellers (marine), Stinebring (D.R.), Holl (J.W.), (et al.), *708*
- noise, nonhomogeneous media, sound generation, viscosity, Mccomb (W.D.), Ayyash (S.), *889*
- radiation, sound generation, two phase flow, Kozyaev (E.F.), Naugolnykh (K.A.), *906*
- liquid gas mixture, measurements, optical techniques, two phase flow, Kosmowski (I.), Wunderlich (B.), (et al.), *942*
- cavitation, permeability, stabilization, Yount (D.E.), *943*
- boiling, heat transfer, two phase flow, vaporization, Voloshko (A.A.), *945*
- boiling, emulsions, nucleation, visualization, Mori (Y.H.), Sano (H.), (et al.), *1693*
- ducts, dust, stochastic processes, two phase flow, De Socio (L.M.), Gaffuri (G.), (et al.), *1840*
- liquid liquid systems, nucleation, Avedisian (C.T.), Glassman (I.), *1862*
- absorption, two component flow, two phase flow, Wild (G.), Schlunder (N.), (et al.), *1864*
- heat transfer, pool boiling, Burow (P.), Beer (H.), *1865*
- drops, liquid vapor interface, Mitrovic (J.), Stephan (K.), *1866*
- laminar flow, leading edge, separated flow, stalling, Van Den Berg (B.), *2635*
- plumes, two phase flow, Chesters (A.K.), Van Doorn (M.), (et al.), *2988*
- shock tubes, shock waves, Kalva (S.P.), Zvirin (Y.), *2991*
- experimental methods, fluidized beds, Tamarin (A.I.), Teplitskii (Yu.S.), (et al.), *2999*
- cylindrical bodies, impulse, unsteady flow, velocity profiles, visualization, Nagata (H.), Matsui (T.), (et al.), *3633*
- hydrogen, velocity measurement, visualization, wakes, Wilkinson (D.L.), Willoughby (M.A.), *3751*
- hydrogen, velocity measurement, visualization, Bejan (A.), Yewell (R.B.), *3758*
- rotating disks, swirl flow, Wang (J.H.), Yang (W.-J.), *4019*
- analysis, liquid gas mixture, nozzles, Siryi (V.S.), Prikhodko (N.A.), *4627*
- diffusion, saturation, stability, Isay (W.H.), *4827*
- liquids, Cha (Y.S.), Henry (R.E.), *4828*
- motion, viscoelastic fluids, Tiefenbruck (G.F.), Leal (L.G.), *4829*
- cavitation flow, cavitation inception, scale effects, Billet (M.L.), Holl (J.W.), *5390*
- experimental results, reattachment, separated flow, separation, turbulence, Hillier (R.), Cherry (N.J.), *5470*
- asymptotic behavior, chemically reactive flow, liquid gas mixture, modulated systems, waves, Bagdoev (A.G.), Oganyan (G.G.), *5488*
- acoustics, sound propagation, Gaunaurd (G.C.), Uberall (H.), *5742*
- heat transfer, mass transfer, unsteady flow, Shagapov (V.Sh.), *5818*
- conduction (heat), sodium, Miyazaki (K.), *5820*
- acoustic measurements, ocean bed, saturation, sedimentation, Anderson (A.L.), Hampton (L.D.), *6899*
- acoustics, nonlinear characteristics, Gasenko (V.G.), Nakoryakov (V.E.), (et al.), *6917*
- liquid gas mixture, measurements (dynamic), two phase flow, Heijnen (J.J.), Vant Riet (K.), (et al.), *6972*
- aeration, two phase flow, Matsumoto (J.), Nakamura (M.), *6974*
- adiabatic processes, two phase flow, Tokar (I.Ya.), Leshchinskiy (G.A.), (et al.), *6979*
- contamination, drag coefficient, two phase flow, Ishii (T.), Pei (D.C.T.), *6982*
- axisymmetric flow, shear flow, Miksis (M.J.), *6987*
- concentration, inclusions, oscillations, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *6988*
- asymptotic behavior, fluidized beds, prediction, Bar-Cohen (A.), Hughes (R.W.), *6989*
- evaporation, photography, Lerner (Y.), Sonn (A.), (et al.), *6991*
- turbulent flow, two phase flow, Thomas (R.M.), *6992*
- impulsive loading, pressure, Ida (T.), Sugiya (T.), *6993*
- cavitation, collapse, compressional waves, Nishiyama (T.), Akaizawa (M.), *6994*
- blood, oscillatory flow, pressure change, Tsujino (T.), Shima (A.), *7119*
- non newtonian flow, transition, Kawase (Y.), Ulbrecht (J.J.), *7964*
- fluidized beds, prediction, two phase flow, Bar-Cohen (A.), Glicksman (L.R.), (et al.), *7965*
- contact problems, oscillations, Keller (J.B.), *7966*
- measurements, two phase flow, velocity measurement, Krizan (P.), Pilhofer (T.), *7971*
- boiling, film boiling, heat transfer, nucleate boiling, Shekriladza (I.G.), *8691*
- axisymmetric flow, drops, Miksis (M.), Vanden-Broeck (J.-M.), (et al.), *8905*
- shape, wakes, Bhaga (D.), Weber (M.E.), *8906*
- deformation, drops, Vanden-Broeck (J.-M.), Keller (J.B.), *8907*
- aeration, entrainment, Volkart (P.), *8908*
- electrolysis, liquids, Verhaart (H.F.A.), De Jonge (R.M.), (et al.), *8909*
- cavitation, fluids, sound generation, Barabanova (G.Ya.), Ilin (V.P.), (et al.), *9853*
- entrainment, two phase flow, water, Salih (A.M.A.), *9878*
- immiscible fluids, nucleation, two phase flow, Han (J.-C.), Yang (W.-J.), *9883*
- damping, dilute solutions, polymers, Mccomb (W.D.), Ayyash (S.), *9884*
- micromeritics, turbulent flow, Gavrilenko (V.G.), Martyanov (A.I.), *9885*
- coalescence, drainage, drops, film flow, plates, Lin (C.-Y.), Slattery (J.C.), *10405*
- creeping flow, non newtonian flow, spherical bodies, viscoelasticity (dynamic), Tiefenbruck (G.), Leal (L.G.), *10412*
- bubbly flow, compressional waves, nozzles, subsonic flow, supersonic flow, Nakagawa (H.), Mori (Y.), (et al.), *10491*
- diffusion, freezing, liquid solid interface, solidification, two phase flow, Petrie (D.J.), Linehan (J.H.), (et al.), *10598*

- heat transfer, liquid vapor mixture, mass transfer, two phase flow, Nigmatulin (B.I.), Kroshilin (A.Ye.), (et al.), *10650*
- fluidized beds, mass transfer, Buevich (Yu.A.), Deryabin (A.N.), *10653*
- diffusion, solubility, Polyanin (A.D.), Sergeev (Yu.A.), *10676*
- liquid vapor mixture, oscillations, two phase flow, Foody (B.E.), Huber (P.W.), *10821*
- creeping flow, drops, frequency response, unsteady flow, Stewart (M.B.), Morrison (F.A.) Jr., *11362*
- air, cavitation inception, diffusion, laminar flow, separation, Parkin (B.R.), *11382*
- bodies of revolution, cavitation inception, spherical bodies, Parkin (B.R.), *11383*
- compressible flow, hydrodynamic stability, Rath (H.J.), *11530*
- gravity, magneto fluid dynamics, mixtures, models, Golosov (V.V.), Naletova (V.A.), (et al.), *11819*
- experimental results, interfaces, magneto fluid dynamics, stability theory, Tsebers (A.O.), Maiorov (M.M.), *11823*
- acoustics, cavitation, Apfel (R.E.), *11908*
- averaging, irrotational flow, two phase flow, Berdichevskii (A.L.), *12025*
- hydrodynamics, mixtures, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12027*
- two phase flow, waves, Gasenko (V.G.), Nakoryakov (V.E.), (et al.), *12030*
- heat transfer, oscillations, two phase flow, Nigmatulin (R.I.), Khabeev (N.S.), *12031*
- binary flow, boiling, Cooper (M.G.), Stone (C.R.), *12035*
- fluidized beds, particle dynamics, potential flow, tubes, unsteady flow, Adams (R.L.), *12036*
- surface tension, thermal effects, two phase flow, Meyyappan (M.), Wilcox (W.R.), (et al.), *12038*
- prediction, two phase flow, Nilmani (M.), Maxwell (T.T.), (et al.), *12041*
- drag, two phase flow, unsteady flow, Dymenko (S.K.), Kuchkin (V.N.), *12042*
- collapse, walls, Shima (A.), Sato (Y.), *12043*
- interaction, particles, two phase flow, Kremer (E.B.), Nagaev (R.F.), *12045*
- drops, initial value problems, oscillations, Prosperetti (A.), *12046*
- boiling, heat transfer, Kusuda (H.), Monde (M.), (et al.), *12047*
- collapse, walls, Sato (Y.), Shima (A.), *12048*
- two component flow, vibration, Pavlovskii (V.S.), Pelykh (N.A.), *12049*

bubbly flow, impulse, steam, water hammer, Gruel (R.L.), Huber (P.W.), (et al.), *1596*
- stability (numerical), two phase flow, virtual mass, Lahey (R.T.) Jr., Cheng (L.Y.), (et al.), *1844*
- gases, membranes (permeable), Ramchandran (N.), Didwania (A.K.), (et al.), *1876*
- boiling, channel flow, convection (forced), critical heat flux, Hebel (W.), Detavernier (W.), (et al.), *2794*
- bearings (spherical), lubrication (hydrostatic), Khalil (M.F.), Rhodes (E.), *5990*
- particulate flow, powders, Simone (S.), Harriott (P.), *7012*
- fluidized beds, powders, Abrahamsen (A.R.), Geldart (D.), *7014*
- buoyant flow, condensation, evaporation, immiscible fluids, two phase flow, Moalem-Maron (D.), Sokolov (M.), (et al.), *8696*
- bubble dynamics, compressional waves, nozzles, subsonic flow, supersonic flow, Nakagawa (H.), Mori (Y.), (et al.), *10491*
- convection (forced), heat transfer, pipe flow, two phase flow, Sekoguchi (K.), Nakazatomi (M.), (et al.), *10566*
- convection, drops, mass transfer, Polyanin (A.D.), Sergeev (Yu.A.), *10657*
- cavitation flow, compressible flow, wedges, Tetsuo (N.), Khan (O.F.), *11420*
- cavities, hydrodynamic stability, surface tension, Petrov (A.G.), *11532*
- cavitation inception, choked flow, sodium, water, Kamiyama (S.), Yamasaki (T.), *11753*
- dynamic effects, liquid fuels, liquid vapor mixture, longitudinal stability, rockets, Kinelev (V.G.), Shkapov (P.M.), *11801*
- nozzles, pressure distribution, Thang (N.T.), Davis (M.R.), *12029*
- anemometers, laser doppler velocimeters, two phase flow, Martin (W.W.), Adbelmessih (A.H.), (et al.), *12040*

Bublievskii (A.F.), approximations, arcs (magnetically constrained), forced systems, heat transfer, models, *1776*

Bublitz (P.), pressure distribution, separated flow, vortex shedding, wings, *4682*

Bubnov (B.M.), coriolis forces, geostrophic flow, hydrodynamic stability, *11528*

Bubnov (M.A.), see Marchuk (G.I.), *8025*

Bubnov (V.A.), error, pitot tube, three dimensional flow, vortex flow, Gabdullin (I.Z.), (et al.), *5401*

Bubsey (R.T.), see Munz (D.), *7571*
- calibration, fracture toughness, notch tests, specimen design, stress intensity factor, Munz (D.), (et al.), *9430*

Bucci (R.J.), see Kaufman (J.G.), *1349*

Buck (O.), see Tittmann (B.R.), *6417*
- aluminum alloys, crack initiation, fatigue, life expectancy, microcracks, nondestructive tests, Morris (W.L.), (et al.), *6419*

Bucker (H.P.), ducts, scattering, underwater acoustics, *6904*
- half space, interface phenomena, layered media, liquids, sound propagation, *6918*

Buckingham (A.C.), ballistics (interior), detonation, heat transfer, particle dynamics, propagation, turbulent flow, *8855*

Buckingham (M.J.), acoustics, arrays, ocean, shallow water, sound propagation, *1802*

Buckius (R.O.), see Krazinski (J.L.), *7880*

Buckland (P.G.), bridges, loads, probabilistic design, random loading, Navin (F.P.D.), (et al.), *8454*

Buckley (D.H.), see Miyoshi (K.), *3492*
- see Salik (J.), *3504*
- see Miyoshi (K.), *4002*
- see Miyoshi (K.), *4891*
- adhesion, chemical reactions, friction, lubricants, lubrication, wear, *5972, book*

buckling, composite structures, laminates, plates, Sharma (S.), Iyengar (N.G.R.), (et al.), *287*
- cooling towers, design, shells (hyperbolic), vibration, Form (J.), Krings (W.), (et al.), *321*
- catastrophe theory, elastic stability, elasticity, shells, Hui (D.), Hansen (J.S.), *329*
- contact problems, rails, rods, Vielsack (P.), *333*
- buckling (local), flexure, torsion, Wang (S.T.), Pao (H.Y.), *334*
- beam columns, Parnes (R.), *337*
- bifurcation, rods, Vielsack (P.), *338*
- curved bars, Panayotounakos (D.E.), Theocaris (P.S.), *339*
- rings, Hassan (S.D.), El-Ghabaty (S.S.), *340*
- combined loading, lattices, trusses, Holzer (S.M.), Plaut (R.H.), (et al.), *341*
- beams, frames, hinged bodies. postbuckling behavior, Pignataro (M.), Rizzi (N.), (et al.), *343*
- shells (cylindrical), Nazarov (V.A.), *348*
- holes, shells (cylindrical), shells (thin), Toda (S.), *349*
- shells (cylindrical), Ponomarev (K.K.), *353*
- plates (sandwich), Larsson (S.E.), Bengtsson (H.), (et al.), *1238*
- framed structures, lattices, structural stability, Anderson (M.S.), *1250*
- shells (nonlinear), shells (spherical), structural stability, Lange (C.G.), Kriegsmann (G.A.), *1252*
- large displacement, lateral stability, pipelines, Angrilli (F.), Bergamaschi (S.), *1255*
- ductility, force limiting devices, trusses, Hanaor (A.), Schmidt (L.C.), *1448*
- divergence, flutter, follower forces, structural stability, Kounadis (A.N.), *1783*
- frames, structural stability, sway, Kounadis (A.N.), Economou (A.P.), *2285*
- beam columns, beams (variable cross section), structural stability, Komkov (V.), *2286*
- beams (cantilever), beams (composite), buckling, holes, Coull (A.), Alvarez (M.C.), *2292*
- beams (cantilever), beams (composite), buckling, holes, Coull (A.), Alvarez (M.C.), *2292*
- arches, hinged bodies, pressure, Schmidt (R.), *2297*
- frames, structural stability, Kounadis (A.N.), *2299*
- edge effects, plates, structural stability, Cimetiere (A.), *2303*
- shells (orthotropic), shells (sandwich), structural stability, Khoroshun (L.P.), Koshevoi (I.K.), *2306*
- prebuckling behavior, shells (cylindrical), structural stability, Brush (D.O.), *2308*
- faults, plates, rocks, tectonics, Golecki (J.J.), *2311*
- bearing capacity, finite element methods, thin walled structures, ultimate strength, Pettersen (E.), *2506*
- compression, imperfections, mode interaction, postbuckling behavior, shells (cylindrical), shells (stiffened), Byskov (E.), Hansen (J.C.), *3323*
- beam columns, end effects, imperfections, Chen (W.F.), *3324*
- beams, columns, elastic foundations, Williams (F.W.), *3326*
- beams (cantilever), lateral stability, shear loading, Reissner (E.), *3330*
- beam columns, beams (cantilever), shear loading, Zalka (K.), *3333*
- panels (flat), plates (stiffened), Elsharkawi (K.), Walker (A.C.), *3335*
- numerical methods, shear loading, shells (anisotropic), Cohen (G.A.), *3336*
- shells (nonlinear), shells (spherical), Shilkrut (D.), *3338*
- hysteresis, multistory frames, Jain (A.K.), Goel (S.C.), (et al.), *3339*
- columns, design (optimum), elastoplasticity, optimization, Amari (M.), Okumura (A.), *3521*
- dynamic stability, hinged bodies, moving loads, portal frames, Zaslavsky (A.), *3541*
- buried structures, nondestructive tests, pipes, underground, Valsangkar (A.J.), Britto (A.M.), (et al.), *3567*
- postbuckling behavior, shells (cylindrical), Babenko (V.I.), *4392*
- beam columns, elastic foundations, Teodorescu (P.P.), *4394*
- boundary conditions, compression, elliptical bodies, plates, Sato (K.), *4396*
- arches, axial loading, bending, energy methods, Sladkov (S.I.), *5149*
- arches, imperfections, Oran (C.), *5178*
- plates (reinforced), Suquet (P.), *5181*
- plates (rectangular), Protte (W.), *5182*
- compression, plates (annular), plates (orthotropic), Ramaiah (G.K.), *5184*
- structural stability, time dependence, Amiro (I.Ya.), *5185*
- frames, impulsive loading, snap-through, Kounadis (A.N.), *5187*
- rocks, slopes, Cavers (D.S.), *5267*
- beams (curved), beams (elastic), columns, postbuckling behavior, James (R.D.), *6243*

- beam columns, buckling (torsional), torsion, Cuk (P.E.), Trahair (N.S.), *6246*
- electromagnetic loading, electromechanical components, transformer windings, Kojima (H.), Miyata (H.), (et al.), *6249*
- bifurcation, shells (cylindrical), shells (sandwich), Hegedus (I.), *6257*
- cold working, shells (cylindrical), shells (stiffened), stiffened structures, welding, Bushnell (D.), *6262*
- shells (cylindrical), shells (stiffened), torsion, Yen (S.-W.), *6263*
- edge effects, plates (annular), saws, stability theory, vibration (forced), Srinivasan (V.), Ramamurti (V.), *6296*
- shells (cylindrical), shells (stiffened), vibration (forced), Singer (J.), *6302*
- columns, framed structures, sway, Lay (M.G.), *6530*
- plates (folded), roofs, space frames, structural stability, Subramanian (N.), Ganapathy Chettiar (C.), *6532*
- bifurcation, plates (annular), thermal instability, vibration, Tani (J.), *7358*
- dynamic stability, nonlinear analysis, shells (cylindrical), Brendel (B.), Ramm (E.), *7360*
- composite materials, explosive welding, fibers, metallic composites, Kornev (V.M.), Yakovlev (I.V.), *7363*
- cracks, fracture, plates, stability, tension, Dyshel (M.Sh.), *7550*
- seismic loading, tanks, Niwa (A.), Clough (R.W.), *8015*
- beams (prestressed), flexural loading, variational methods, Wauer (J.), *8229*
- bars, stability theory, vibration, Panovko (Ya.G.), Gubanova (I.I.), *8257, book*
- random error, stochastic systems, structural stability, Scheurkogel (A.J.), Elishakoff (I.), (et al.), *8260*
- beams (continuous), elastic foundations, finite element techniques, framed structures, shafts, Bagci (C.), *8261*
- combined loading, elasticity (linear), rings, Schmidt (R.), *8262*
- plates (rectangular), plates (simply supported), variational methods, Baker (G.), Pavlovic (M.N.), *8265*
- dimpling, shells (shallow), shells (spherical), Wan (F.Y.M.), *8269*
- imperfections, shells (cylindrical), shells (stiffened), Hui (D.), Tennyson (R.C.), (et al.), *8271*
- critical load, imperfections, shells (cylindrical), shells (stiffened), Ellinas (C.P.), Croll (J.G.A.), *8272*
- plates (rectangular), rayleigh ritz method, vibration (free), Kaldas (M.M.), Dickinson (S.M.), *8307*
- columns, cooling towers, Kovacs (B.), *8459*
- collapse, experimental mechanics, explosive loading, pipes, Kinelovskii (S.A.), *8466*
- deformation, pressure vessels, strain, thin walled structures, Stanley (P.), Campbell (T.D.), *8468*
- frames, postbuckling behavior, Pignataro (M.), Di Carlo (A.), (et al.), *9281*
- imperfection sensitivity, postbuckling behavior, shells (shallow), Srubshchik (L.S.), *9284*
- follower forces, nonconservative systems, plates (rectangular), simply supported structures, Leipholz (H.H.E.), Waddington (D.), *9289*
- design criteria, shells, Bushnell (D.), *9290*
- bending, shells (cylindrical), shells (stiffened), Kan (S.N.), Kaplan (Yu. I.), (et al.), *9292*
- buried structures, pipes, pressurized pipes, soil structure interaction, Bournazel (C.), *9293*
- divergence, flutter, follower forces, frames, stiffness, Kounadis (A.N.), Avraam (T.P.), *9804*
- bifurcation, prestressed structures, rods, Vielsack (P.), *10170*
- beams (thin section), columns, Hancock (G.J.), *10171*
- frames, structural stability, Williams (F.W.), *10173*
- dynamic stability, follower forces, lyapunov's functions, plates, Leipholz (H.H.E.), *10175*
- axisymmetric loading, imperfections, shells (cylindrical), Croll (J.G.A.), Batista (R.C.), *10177*
- shells (cylindrical), shells (stiffened), Gavrilenko (G.D.), Sitnik (A.S.), *10178*
- beams (thin section), biaxial loading, shells (stiffened), Ashour (H.A.), Sobel (L.H.), *10180*
- rods, viscoelastic materials, Gurtin (M.E.), Mizel (V.J.), (et al.), *10182*
- elastoviscoplasticity, half space, surface effect, Horii (H.), Nemat-Nasser (S.), *10184*
- elastoplasticity, large displacement, pressurized components, shells, Galletly (G.D.), *10185*
- cantilevered structures, structural analysis, vibration (free), Rosman (R.), *10224*
- dynamic response, nonlinear analysis, snap-through, structural analysis, Kamat (M.P.), Hayduk (R.J.), *10362*
- beam columns, beams (thin section), Bradford (M.A.), Trahair (N.S.), *11119*
- asymptotic methods, elasticity (nonlinear), plates, Rudev (A.N.), *11121*
- axial loading, holes, shells (cylindrical), Toda (S.), *11123*
- dynamic stability, impact, plates (rectangular), Ari-Gur (J.), Singer (J.), (et al.), *11125*
- dynamic analysis, frequencies, Meziere (Y.), *11126*
- acoustic loading, shells (axisymmetric), Kornev (V.M.), Stepanenko (M.V.), *11643*

buckling (experimental), reinforced openings, shells (spherical), Gudramovich (V.S), Diskovskii (I.A.), *351*

- collapse, shells (ellipsoidal), shells (torispherical), structural stability, Galletly (G.D.), *2309*
- beam columns, postbuckling behavior, Di Carlo (A.), Pignataro (M.), (et al.), *3321*
- buckling (plastic), elastoplasticity, shells (cylindrical), shells (plastic), Croll (J.G.A.), *3337*
- shells (shallow), shells (spherical), Yamada (S.), Uchiyama (K.), (et al.), *5171*
- experimental mechanics, pressure vessels, shells (toroidal), thin walled structures, Stanley (P.), Campbell (T.D.), *7622*
- beams, lateral stability, statistical design, welded joints, Fukumoto (Y.), Itoh (Y.), *9285*
- buckling (nonlinear), elastic bodies, plates (rectangular), Fok Wing Chau, Yuen Ming Fai, *9288*

buckling (large amplitude), imperfections, plastic behavior, shells (spherical), Kao (R.), *6260*

buckling (local), buckling, flexure, torsion, Wang (S.T.), Pao (H.Y.), *334*

- beams (thin section), structural stability, Studnicka (J.), *2290*
- delamination, laminates, plates (orthotropic), Chai (H.), Babcock (C.D.), (et al.), *2312*
- cold working, cold-formed steel, collapse, failure, multistory frames, steel, Zamecnik (F.J.), *5349*
- plates (rectangular), plates (sandwich), Wrzecioniarz (P.A.), *7364*
- experimental mechanics, pipes, propagation, Kyriakides (S.), Babcock (C.D.), *8455*
- buckling (plastic), plastic flow, shear spinning, spinning bodies, tubes, Gur (M.), Tirosh (J.), *9295*
- plates (rectangular), thin walled structures, Murray (N.W.), Khoo (P.S.), *10186*

buckling (nonlinear), axial loading, bearing capacity, shells (cylindrical), shells (orthotropic), Steinhardt (O.), Pfeiffer (M.), *318*

- moving loads, shells (cylindrical), shells (orthotropic), Bryukalo (L.A.), Gulyaev (V.I.), *4399*
- shells (nonlinear), vibration (nonlinear), Novikov (V.V.), *5186*
- aluminum alloys, collapse, nonlinear materials, nonlinear theory, plates, Little (G.H.), *6250*
- dynamic behavior, imperfections, shells (spherical), Kao (R.), *6266*
- frames, limit analysis, postbuckling behavior, Vlachinos (A.S.), Kounadis (A.N.), *9287*
- buckling (experimental), elastic bodies, plates (rectangular), Fok Wing Chau, Yuen Ming Fai, *9288*
- columns, elastoplasticity, imperfection sensitivity, trusses, Byskov (E.), *10167*
- arches, beams (curved), rings, Batoz (J.-L.), *11120*

buckling (plastic), bifurcation, plates (orthotropic), wrinkling, Triantafyllidis (N.), Needleman (A.), *350*

- pressure vessels, shells (ellipsoidal), Bushnell (D.), *2310*
- beam columns, structural optimization, Amari (M.), Okumura (A.), *3325*
- buckling (experimental), elastoplasticity, shells (cylindrical), shells (plastic), Croll (J.G.A.), *3337*
- beam columns, dynamic stability, plastic behavior, Lepik (U.), *3340*
- beam columns, matrix methods, Oliveto (G.), *4400*
- beam columns, beams (variable cross section), buckling (torsional), flanges, frames, Lee (G.C.), Hsu (T.L.), *5174*
- bending, elastoplasticity, pressurized pipes, tubes, Fabian (O.), *6255*
- ductile fracture, dynamic effects, imperfections, rings, Rajendran (A.M.), Fyfe (I.M.), *9286*
- buckling (local), plastic flow, shear spinning, spinning bodies, tubes, Gur (M.), Tirosh (J.), *9295*

buckling (shear), plates (annular), plates (orthotropic), Durban (D.), Stavsky (Y.), *4395*

buckling (thermal), failure, shells (stiffened), thermoelasticity, Reznikov (B.S.), *352*

buckling (torsional), beam columns, lateral stability, Hancock (G.J.), Bradford (M.A.), (et al.), *3331*

- beams (cantilever), beams (thin section), lateral stability, Zalka (K.), *3332*
- beam columns, beams (thin section), beams (variable cross section), postbuckling behavior, Szymczak (C.), *4391*
- beam columns, beams (variable cross section), buckling (plastic), flanges, frames, Lee (G.C.), Hsu (T.L.), *5174*
- beam columns, buckling, torsion, Cuk (P.E.), Trahair (N.S.), *6246*
- beam columns, beams (flexural), Chen (S.-F.), *6247*
- collapse, plates (stiffened), thin walled structures, Nordsve (N.T.), Moan (T.), *6261*
- postbuckling behavior, pressurized pipes, shells (cylindrical), Kodama (S.), Otomo (K.), (et al.), *8258*

buckling (variable section), beam columns, beams (variable cross section), finite difference methods, Iremonger (M.J.), *5175*

Buckmaster (J.), see Mikolaitis (D.), *9755*

Bucknall (C.B.), cyclic loading, fatigue, plastics, Stevens (W.W.), *1202*

Buculei (M.), plates, variational methods, vibration (free), *373*

- dynamic properties, kinematics, vibration (free), Marghitu (D.), (et al.), *3081*
- bars, dynamic analysis, elastic bodies, hamiltonian equations, Bagnaru (D.), *6052*

Bucur (S.C.), see Constantinescu (V.N.), *10419*

Budanov (B.V.), friction (sliding), sliding, stiffness, vibration, Kudinov (V.A.), (et al.), *4892*

Budenkov (G.A.), bonded joints, dispersion, flaw detection, interference, layered media, (et al.), *6497*

Budgayci (N.), electroelasticity, electromechanical components, piezoelectrics, Bogy (D.B.), *3239*
Budrik (V.V.), see Belyakov (V.P.), *750*
Budtov (V.P.), micromechanisms, polymers, viscosity, Romanovskii (G.K.), *6578*
Buevich (Yu.A.), fluidized beds, granular media, jets, two phase flow, Kolesnikova (N.A.), (et al.), *935*
- collapse, granular media, infiltration, packed beds, Ellengorn (S.M.), *8923*
- fluidized beds, stability theory, vibration (flow induced), Ryzhkov (A.F.), (et al.), *8936*
- bubble dynamics, fluidized beds, mass transfer, Deryabin (A.N.), *10653*

Buevich (Yu.A.), fluidized beds, mathematical models, mixed flow, Tsyrulnikov (I.M.), *7010*
Bufler (H.), beams, large displacement, nonlinear analysis, *5152*
Bugeat (L.P.), eigenvalues, frequencies, modal analysis, vibration, Lallement (G.), *8323*
Buggeln (R.C.), ducts (curved), laminar flow, navier stokes equation, turbulent flow, Briley (W.R.), (et al.), *621*
Bugliarello (G.), buoyancy, hele-shaw flows, laminar flow, optical techniques, particles, trajectories, Yanizeski (G.M.), *12016*
Buglov (E.G.), see Reznichenko (V.A.), *4511*
Buhler (K.), boussinesq equation, convection, hydrodynamic stability, rotating bodies, rotating fluids, Oertel (H.) Jr., *8719*
Bui (H.D.), crack propagation, dynamic fracture, elastodynamics, shear loading, Ehrlacher (A.), *470*
Bui-Quoc (T.), creep rupture, damage (cumulative), nonlinear characteristics, Biron (A.), *9392*
Buikov (M.V.), boundary layer (atmospheric), clouds, heat transfer (atmospheric), meteorology (physical), Khvorostyanov (V.I.), *12077*
buildings, earthquake effects, fatigue, floors, multistory frames, Wilson (J.C.), *970*
- clay, damage, nonhomogeneous soils, swell, Slavin (M.E.), *1321*
- inelasticity, nonlinear analysis, seismic loading, structural response, Cheng (F.Y.), *1449*
- earthquake effects, prestressed concrete, seismic waves, Thompson (K.J.), Park (R.), *1883*
- turbulence (geophysical), wakes, Steely (S.L.) Jr., Frost (W.), *3707*
- seismic loading, torsion, Kan (C.L.), Peter (Y.S.), (et al.), *4848*
- cushioning materials, foundations, stress analysis, structural support, thermoplasticity, Klepikov (S.N.), Khorunzhii (V.I.), *5361*
- aerodynamic loads, geometrical properties, pressure distribution, unsteady flow, Sockel (H.), Taucher (R.), *5698*
- frames, reinforced concrete, seismic loading, Emori (K.), Schnobrich (W.), *5890*
- earthquake engineering, safety, seismic loading, Aizenberg (Ya.M.), Neiman (A.I.), (et al.), *5894, book*
- earthquake engineering, Whitman (R.V.), Heger (F.J.), (et al.), *5896*
- dynamic analysis, structural analysis, three dimensional formulation, Humar (J.L.), Khandoker (J.U.), *6531*
- aeroelasticity, design, vibration (forced), wind tunnels, Templin (J.T.), Cooper (K.R.), *6871*
- buildings (tall), pressure distribution, probability theory, wind, Holmes (J.D.), *7069*
- design, structural analysis, wind loads, Simiu (E.), Filliben (J.J.), *7795*
- field tests, multistory frames, pressure distribution, wind loads, wind tunnels, Lam (R.P.), Lam (L.C.H.), *7908*
- foundations, joints, piles, rock mechanics, shear, Dight (P.M.), Chiu (H.K.), *9485*
- pressure distribution, unsteady flow, wind loads, wind tunnels (environmental), Holmes (J.D.), Best (R.J.), *9663*
- coupled buildings, seismic loading, torsion, vibration, Tsicnias (T.G.), Hutchinson (G.L.), *10850*

buildings (tall), modal control, structural design, wind loads, Chang (J.C.H.), Soong (T.T.), *222*
- dynamic analysis, frequency response, structural response, vibration (free), Ellis (B.R.), *2347*
- finite difference methods, tokamak, walls, Liauw (T.-C.), Luk (W.-K.), *2539*
- bridges (suspension), heat exchangers, hydraulic machinery, hydraulic structures, nuclear reactors, ship structures, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- frames, shear walls, variational methods, Arvidsson (K.), *3549*
- oscillations, structural stability, vibration, vibration (flow induced), wind loads, Soong (T.T.), Skinner (G.T.), *4328*
- combined loading, multistory frames, Anderson (D.), *4539*
- seismic loading, stability, Ahmadi (G.), Mostaghel (N.), *4849*
- boundary layer (atmospheric), wind, wind tunnels, Dye (R.C.F.), *7063*
- boundary layer (atmospheric), wind, Cermak (J.E.), *7068*
- buildings, pressure distribution, probability theory, wind, Holmes (J.D.), *7069*
- dynamic response, experimental mechanics, vibration (nonlinear), Masri (S.F.), Bekey (G.A.), (et al.), *7367*
- bracing, matrix methods, multistory frames, structural analysis, Bozzo (E.), Gambarotta (L.), *7611*

Buisine (D.), blades, incompressible flow, modeling, three dimensional flow, turbomachinery, *8659*
Bukatov (A.E.), elastic bodies, floating bodies, fluid-structure interaction, gravity waves (finite depth), plates, *7770*
Bukatyi (V.I.), aerosols, carbon, combustion, particles, Sagalakov (A.M.), (et al.), *9769*
Bukchin (B.G.), harmonic waves, love waves, nonhomogeneous media, Levshin (A.L.), *6342*
Bukhalev (V.A.), design, markov processes, stochastic control, *2125*
Bukharkin (E.N.), contact problems, evaporation, heat exchangers, liquid vapor interface, mathematical models, *10617*
Bukharkina (A.P.), algorithms, control, guidance, orbit determination, orbit mechanics, planetary entry, Golubev (Yu.F.), *2158*
Bukhtilova (M.A.), liquids, mixtures, solutions (material), thermal diffusion, Gorogush (V.M.), (et al.), *10554*
Bukreev (V.I.), fluid boundaries, froude number, gravity waves (internal), hydrofoils, wave generation, *4659*
Bulakh (B.M.), acceleration, compressible flow, supersonic flow, wedges, *1521*
Bulanov (G.S.), edge effects, plates (circular), plates (thick), singularities, Shaldyrvan (V.A.), *4381*
Buldakov (V.F.), combustion, models, numerical analysis, two component flow, Romanov (O.Ya.), (et al.), *1752*
Bulgarelli (U.), algorithms, finite difference methods, free boundary, navier stokes equation, Casulli (V.), (et al.), *5408*
Bull (M.K.), hydrodynamic pressure, pipe flow, sound generation, turbulent flow, vibration (flow induced), Norton (M.P.), *1807*
Bulyga (K.G.), see Lisitsyn (B.M.), *921*
Bulygin (A.V.), critical load, shells (toroidal), vibration, *11122*
Buna (B.), see Augusztinovicz (F.), *3953*
Bundy (F.P.), cryogenics, diamond, high pressure, testing equipment, thermophysical properties, Dunn (K.J.), *2500*
Bungey (J.H.), anchors, bolts, concrete, pull-out tests, strength, *4506*
Bunimovich (A.I.), blunt bodies, compressible flow, drag, hypersonic flow, optimization, rarefied gases, shape factors, Dubinskii (A.V.), *11405*
Bunimovich (L.A.), gravity waves (internal), ocean waves, rotational flow, *11622*
Bunkin (F.V.), see Boiko (V.I.), *5808*
buoyancy, hydrodynamic stability, mathematical models, microgravity, surface tension, Castillo (J.L.), Velarde (M.G.), *638*
- couette flow, hydrodynamic stability, stability curve, Kolesov (V.V.), *1576*
- free jets, thermal plumes, Gersten (K.), Schilawa (S.), (et al.), *2661*
- couette flow, pressure gradient, unsteady flow, velocity profiles, Andreichenko (K.P.), Smarun (A.B.), *3668*
- couette flow, hydrodynamic stability, Kolesov (V.V.), *3696*
- mixtures, oscillating bodies, particles, two phase flow, Matsufuji (H.), Hasegawa (E.), *6960*
- boundary layer (turbulent), entrainment, stratified flow, Kitaigorodskii (S.A.), *7068*
- cavities, prediction, shear, turbulent flow, Ideriah (F.J.K.), *7738*
- convection, eigenvalues, hydrodynamic stability, liquids, surface tension, Rosenblat (S.), Homsy (G.M.), (et al.), *8603*
- jets, plumes, turbulence, Bruyatsku (E.V.), *8616*
- convection, injection, plane flow, Grishin (A.M.), Gruzin (A.D.), (et al.), *8685*
- density, diffusion, interface phenomena, mass transfer, Griffiths (R.W.), Ruddick (B.R.), *8781*
- boussinesq equation, convection, mixing layers, thermal diffusion, Cushman-Roisin (B.), *9533*
- density, plumes, water, Mollendorf (J.C.), Johnson (R.S.), (et al.), *9599*
- hydrodynamic stability, richardson number, shear flow, stratified flow, turbulent flow, Kranenburg (C.), *11535*
- ocean, stratification, turbulence (geophysical), turbulent mixing, Gibson (C.H.), *11548*
- ocean, stratification, turbulence (geophysical), turbulence model, Fu (L.L.), Flierl (G.R.), *11549*
- spectra, stratified flow, turbulence, Ogino (F.), Komori (S.), (et al.), *11550*
- hele-shaw flows, laminar flow, optical techniques, particles, trajectories, Bugliarello (G.), Yanizeski (G.M.), *12016*

buoyant flow, bubble dynamics, flow measurement, pipes, river beds, Sargent (D.M.), *564*
- jets, plumes, thermal plumes, Ogino (F.), Takeuchi (H.), (et al.), *751*
- convection (free), laminar flow, stokes flow, transient effects, Pop (I.), Soundalgekar (V.M.), *752*
- convection (free), heat transfer, nusselt number, turbulent flow, Thomas (L.C.), Wood (M.L.), *754*
- cellular flow, convection (benard), surface tension, thermal instability, Lebon (G.), Cloot (A.), *757*
- prediction, turbulent flow, wall jets, Ljuboja (M.), Rodi (W.), *1571*
- boundary layer (thermal), closed conduit flow, convection (free), plane flow, Sparrow (E.M.), Prakash (C.), *1681*
- convection (free), heat transfer, stratified flow, thermal instability, Chashechkin (Yu.D.), Tupitsyn (V.S.), *1684*
- plumes, prandtl number, Yih (C.-S.), Wu (F.), *2671*
- convection, plumes, Afzal (N.), *2674*
- flow reversal, jets, Mcdougall (T.J.), *3689*
- plumes, temperature, Shlien (D.J.), Boxman (R.L.), *3693*
- curved surfaces, duct flow, laminar flow, recirculation, Chilukuri (R.), Humphrey (J.A.C.), *3785*

- convection, heat transfer, pipe flow, supercritical flow, turbulent flow, Kakarala (C.R.), Thomas (L.C.), *3790*
- cryogenics, geysering, pipe flow, Shugan (I.V.), Bosykh (L.A.), *4703*
- cellular motions, closed conduit flow, convection, Melikhov (O.I.), Shcherbak (S.B.), *5539*
- boussinesq equation, thermosyphons, Damerell (P.S.), Schoenhals (R.J.), *5552*
- convection (benard), convection (free), radiant interchange, thermal instability, Getling (A.V.), *5555*
- entrainment, surface jets, Murota (A.), Nakatsuji (K.), *6673*
- convection (free), laminar flow, plates (vertical), Anderson (R.), Bejan (A.), *6778*
- bubbly flow, condensation, evaporation, immiscible fluids, two phase flow, Moalem-Maron (D.), Sokolov (M.), (et al.), *8696*
- convection (free), mixing, mixing chambers, thermal instability, unsteady flow, Opanasenko (A.N.), Selivanov (V.M.), (et al.), *8704*
- cavities, cellular flow, convection, thermal plumes, Berdnikov (V.S.), Kirdyashkin (A.G.), *8727*
- conductivity, convection (free), diffusion, heat addition, heat transfer (combined modes), radiant interchange, Epstein (M.), Cheung (F.B.), (et al.), *8751*
- convection (free), hydrodynamic stability, thermal instability, transition flow, Gebhart (B.), Mahajan (R.L.), *9701*
- adsorption, convection (free), heat transfer (combined modes), radiant interchange, solar radiation, Fathalah (K.A.), Elsayed (M.M.), *9729*
- asymptotic methods, boundary layer, convection (free), stokes flow, wells, De Socio (L.M.), Gaffuri (G.), (et al.), *10568*
- cavities, channel flow, convection, heat transfer, laminar flow, Humphrey (J.A.C.), Jacobs (E.W.), *10585*

buoys, damping, oscillating bodies, wave loads, Cavaleri (L.), Mollo-Christensen (E.), *1607*
- mathieu equation, oscillating bodies, surface waves, vibration (parametric), Ogihara (K.), *1609*
- dynamic analysis, finite difference methods, force, sudden stop, Grossi (R.O.), Ercoli (L.), *5480*
- cables, mooring, submerged bodies, Mariano (J.J.), *8047*
- dynamic stability, gravity waves (breaking), scale models, Nath (J.H.), Chester (S.T.), (et al.), *11695*

Buratti (A.), damping, spinning bodies, stability theory, Fusco (G.), *10777*

Buravoi (S.E.), conductivity, experimental methods, thermal measurements, thermophysical properties, Kurepin (V.V.), (et al.), *1661*

Burcher (R.K.), hulls, lateral stability, rolling motion, ship design, waves, *1922*

Burde (G.I.), cavities, channel flow, liquid liquid interface, viscoplasticity, Ilyasov (E.P.), (et al.), *9582*
- cavities, channel flow, non newtonian flow, viscoelastic fluids, Ilyasov (E.P.), (et al.), *11510*

Burdess (J.S.), see Hewit (J.R.), *9482*

Burdyuk (V.Ya.), constraints, functional analyis, graph theory, networks, optimization, Reva (V.N.), *2032*

Burenin (A.A.), half space, impact, similarity methods, Lapygin (V.V.), *1310*

Buresti (G.), boundary roughness, cylindrical bodies, roughness, surface flow, *604*

Burgan (J.R.), see Munier (A.), *2004*

Burger (C.P.), see Hanus (J.B.), *1389*
- see Gomide (H.A.), *3483*

Burgers (P.), see Abou-Sayed (I.S.), *3470*

burgers equation, eddies, turbulence model, Love (M.D.) 47034, *658*
- evolution equations, korteweg de vries equation, nonlinear analysis, Fokas (A.S.), *2002*
- computing techniques, differential equations (ordinary), differential equations (partial), finite element techniques, Caldwell (J.), Wanless (P.), (et al.), *5037*
- regularization, uniqueness, Larkin (N.A.), *6074*
- diffusion, finite element techniques, initial value problems, Varoglu (E.), Finn (W.D.L.), *6119*
- bifurcation, nonlinear analysis, stability theory, Olmstead (W.E.), Davis (S.H.), *7666*
- conservation laws, hyperbolic equations, random search, Harten (A.), Lax (P.D.), *8132*
- acoustic waves, asymptotic methods, shock waves, Parker (D.F.), *9644*
- group theory, korteweg de vries equation, nonlinear analysis, Zakharov (N.S.), Korobeinikov (V.P.), *10021*
- acoustic waves, acoustics, nonlinear waves, sound propagation, Enflo (B.O.), *10794*
- acoustics, nonhomogeneous media, sound propagation, Parker (D.F.), *11921*

Burgess (I.W.), clay, piles, stability, *5256*

Burghardt (M.D.), see Paolino (M.A.), *10544*

Burghes (D.N.), automatic control (optimal), dynamic analysis, optimal control, Graham (A.), *6124, book*

Buriko (Yu.Ya.), combustion, jets, turbulent mixing, Lebedev (A.B.), *5631*

Burkina (R.S.), see Bobrova (N.R.), *2861*
- chemical reactions, explosions, ignition, ignition sensitivity, Vilyunov (V.H.), *6612*
- analogies, asymptotic behavior, drag, moving surfaces, plates, Vilyunov (V.I.), *10425*

Burlakov (A.V.), deformation (plastic), elastoplasticity, inverse problems, shells (plastic), Lvov (G.I.), *3307*

Burman (B.C.), see Trollope (D.H.), *11330*

Burmann (W.), see Thielen (H.), *10487*

burmester configuration, four bar linkage, kinematics, mechanisms, Watanabe (K.), *6554*
- computer aided design, four bar linkage, linkages, vector methods, Wolford (J.C.), *8481*

Burmin (V.Yu.), hodograph methods, seismic waves, velocity profiles, waveguides, *963*

burners, flames, porous surfaces, Bystrova (T.V.), Librovich (V.B.), *2862*
- combustion, flames (diffusion), swirl, Hellat (J.), Gunther (R.), *6836*
- drops, evaporation, heat transfer, liquid liquid interface, Iida (Y.), Takashima (T.), *8772*
- flames, stabilization, Matkowsky (B.J.), Olagunju (D.O.), *10701*
- energy methods, flow irregularities, sound fields, Magiawala (K.R.), Culick (F.E.C.), *10793*
- acoustics, excitation, oscillations, Larionov (V.M.), *11800*

burning rate, ballistics (interior), deflagration, detonation, propellants, Goliger (J.), Lucotte (J.-P.), *2928*
- combustion, diffusion, liquid vapor interface, Sukhov (G.S.), Yarin (L.P.), *5629*
- combustion, flammability, ignition, textiles, Reeves (W.A.), Hammons (M.A.), (et al.), *6834*
- combustion (unsteady), depressurization, propellants, Suhas (H.K.), Bose (T.K.), *9762*
- carbon, combustion, oxidation, particles, Matalon (M.), *9771*
- convection (forced), heat transfer, mass transfer, solids, Joulain (P.), *10663*
- combustion, solid propellants, wires, Kubota (N.), Ichida (M.), (et al.), *11787*
- combustion, solid fuels, Seetharamacharyulu (D.), Pai Verneker (V.R.), (et al.), *11789*
- chemical kinetics, deflagration, models, solid propellants, Ben-Reuven (M.), Caveny (L.H.), *11790*
- flame propagation, inert gases, oxidizers, porous media, Lebedev (A.D.), Sokolov (A.S.), *11791*

burning velocity, excitation, flame propagation, radiation, Clements (R.M.), Smith (R.D.), (et al.), *2860*
- chemical kinetics, flames (laminar), methane, Rallis (C.J.), Garforth (A.M.), *8791*
- chemical reactions, combustion, heat transfer, particles, Strunin (V.A.), Dyakov (A.P.), (et al.), *10703*

Burns (C.M.), see Welygan (D.G.), *8491*

Burns (J.A.), see Banks (H.T.), *11060*

Burns (M.L.), bones, spine, stress strain relationships, viscoelastic materials, Kaleps (I.), *9049*

Burns (S.J.), brittle fracture, crack growth, j-integral, *1367*
- see Early (P.W.), *2439*

Burnside (B.M.), steam, steam tables, thermodynamic properties, *718*

Burny (F.), see Hinsenkamp (M.), *6002*

Burov (A.V.), boltzmann equation, boundary value problems, internal flow, uniqueness, *10422*

Burov (J.), see Thanh (V.), *3970*

Burow (P.), bubble dynamics, heat transfer, pool boiling, Beer (H.), *1865*

Burridge (R.), inverse problems, mathematical methods, scattering, time domain techniques, wave equations, *1088*
- macroscopic characterization, micromechanics, porous media, *5851*

Burrin (R.H.), see Tanna (H.K.), *4771*

Burrows (C.R.), see Stanway (R.), *8318*

Burstein (A.H.), see Laborde (J.M.), *7104*

Burton (R.A.), contact problems, deformation, friction (sliding), roughness, surface profiles, thermal effects, *9041*
- see Wu (Y.-T.), *12092*

Burton (T.D.), dynamic response, rails, stability derivatives, wheels, *4147*

Buryshkin (M.L.), flexure, holes, inclusions, plates (perforated), strips, *1182*

Busalaev (I.V.), hydrology, stochastic processes, *1896*

Busch-Vishniac (I.J.), dynamic analysis, impedance methods, plates (orthotropic), vibration (free), *11127*

Bush (A.F.), holes, residual stresses, shafts, stress relieving, welding, Kromer (F.J.), *6467*

Bush (H.G.), antennas, space vehicle structures, trusses, Heard (W.L.) Jr., *1461*
- see Heard (W.L.) Jr., *6546*

Bushard (L.B.), dynamic behavior, finite element techniques, guyan reduction, thermal sciences, *9150*

Bushe (N.A.), bearings (liquid lubricated), lubricants (liquid), machine design, reliability design, Zakharov (S.M.), *1020*

Bushenkov (V.A.), algorithms, attainability sets, control, linear systems, Lotov (A.V.), *9157*

Bushnell (D.), buckling (plastic), pressure vessels, shells (ellipsoidal), *2310*
- electromagnetic waves, reflection, shells (sandwich), shells (spherical), *4370*
- axial loading, failure, joints, shells (cylindrical), Holmes (A.M.C.), (et al.), *6259*
- buckling, cold working, shells (cylindrical), shells (stiffened), stiffened structures, welding, *6262*
- buckling, design criteria, shells, *9290*

Busse (F.), see Geiger (G.), *6787*

Busse (L.), dynamic effects, turbomachinery, vibration (forced), Heiberger (D.), *7405*
Bussolari (S.R.), see Dewey (C.F.) Jr., *3065*
Butakov (A.A.), chemical reactors, exothermic reactions, theory, Maksimov (E.I.), (et al.), *828*
Butkovskii (A.G.), see Breger (A.M.), *139*
• control, distributed parameters, mobile control, optimal control, Pustylnikova (E.I.), *4261*
Butler (D.), see Brazier-Smith (P.R.), *6322*
Butler (G.), see Koop (C.G.), *11575*
Butler (J.P.), fredholm equations, optimization, regularization, smoothing of data, Reeds (J.A.), (et al.), *9116*
Butov (V.G.), condensation, particles, pulsatile flow, stochastics, two phase flow, Vasenin (I.M.), (et al.), *8898*
Butt (J.A.), disabled ships, dynamic analysis, safety, ship performance, ship towing, Lawrie (S.T.), (et al.), *12085*
butt welding, bending, fatigue, welded joints, welding, Lawnicki (J.J.), Cutler (V.C.), *7638*
Butterfield (R.), see Banerjee (P.K.), *8948*
Buyakas (V.I.), antennas, artificial satellites, control, surface profiles, Chekulaev (Yu.V.), *2193*
Buyanovskii (I.A.), see Matveeskii (R.M.), *9036, book*
Buyukozturk (O.), modeling, reinforced concrete, shear transfer, Connor (J.J.), (et al.), *534*
• see Fardis (M.N.), *1441*
Bychkov (Yu.A.), bifurcation, condensation, interface phenomena, liquid vapor interface, Iordanskii (S.V.), *7871*
Bye (J.A.T.), circulation, currents, heat transfer, ocean air interaction, oceanography, Veronis (G.), *5922*
Bykov (N.N.), axial flow, gas turbines, hydrogen, Chekalov (M.A.), *10525*
Bykov (O.P.), artificial satellites, orbit mechanics, photography, *6878*
Bykov (S.I.), see Gritsev (V.M.), *5573*
Bykov (V.M.), initial value problems, internal flow, spherical bodies, stokes flow, *5403*
Bykovtsev (A.S.), earthquakes, faults, generation, modeling, Chernov (G.P.), *4851*
Byrd (D.E.), see Dow (J.O.), *1131*
Byrd (G.), see Ludwig (F.L.), *3031*
Byrkin (A.P.), channel flow, duct flow, laminar flow, shock waves, wakes, Shchennikov (V.V.), *8568*
Byrne (D.), capillary waves, experimental methods, experimental results, propagation, Earnshaw (J.C.), *11594*
Byrne (K.P.), see Wood (L.A.), *8341*
Byrnes (C.I.), see Brockett (R.W.), *11041*
Byrnes (D.V.), see D'Amario (L.A.), *5707*
Byskov (E.), buckling, compression, imperfections, mode interaction, postbuckling behavior, shells (cylindrical), shells (stiffened), Hansen (J.C.), *3323*
• buckling (nonlinear), columns, elastoplasticity, imperfection sensitivity, trusses, *10167*
Bystrova (T.V.), burners, flames, porous surfaces, Librovich (V.B.), *2862*
Byutner (E.K.), see Ariel (N.Z.), *983*

C

Cabanel (D.), see Lamalle (J.), *9465*

Cabannes (H.), dynamic analysis, strings, vibration, *2326*
- dynamic analysis, friction (sliding), strings, vibration (forced), *7379*
- dynamic analysis, strings, vibration (free), vibration (nonlinear), wave engines, *8290*

Cabelli (A.), ducts (curved), modes, sound propagation, Shepherd (I.C.), *7935*
- see Shepherd (I.C.), *11934*

cable stayed bridges, bridges (box girder), dynamic response, wind loads, Smith (I.J.), *519*
- nonlinear analysis, structural analysis, Morabito (G.), Labini (F.S.), *3546*
- geometric nonlinearities, variational methods, Cafarella (F.), *6523*
- dynamic response, experimental mechanics, structural response, Augusti (G.), Chiarugi (A.), (et al.), *6524*
- structural analysis, towers, Sofronie (R.), *9454*

cable supported structures, roofs, second order analysis, Valente (G.), *524*
- design, roofs, Clarke (D.), *4537*
- curved surfaces, finite element techniques, nonlinear structures, Jayaraman (H.B.), Knudson (W.C.), *9144*

cables, networks, Sinclair (G.B.), Hodder (S.B.), *292*
- ropes, strength, wires, Matanzo (F.) Jr., Metcalf (J.T.) Jr., *536*
- aerodynamics, dynamic analysis, nonlinear analysis, towing cables, Karlsen (L.K.), *1215*
- flexible walls, nonlinear analysis, numerical analysis, offshore structures, pipes, Peyrot (A.H.), *1216*
- dynamic response, power generation, shock, transmission lines, vibration, Dubey (R.N.), Sahay (C.), *1272*
- cable nets, dynamic analysis, networks, Batchelor (B. De V.), Gambhir (M.L.), *2257*
- dynamic analysis, nonlinear analysis, offshore structures, Peyrot (A.H.), *3283*
- finite difference methods, vibration (free), Luongo (A.), Rega (G.), *3350*
- dynamic response, vibration (forced), Geschwindner (L.F.) Jr., West (H.H.), *4409*
- bending, design, resistance, Shashaty (A.J.), *4552*
- artificial satellites, flexible bodies, space vehicle structures, tethered systems, Weber (R.), Wehrli (R.), *4758*
- dynamic response, vibration (free), Rosenthal (F.), *6285*
- matrix methods, vibration (free), Sergev (S.S.), Iwan (W.D.), *6286*
- dynamic response, finite difference methods, vibration (free), Rega (G.), Luongo (A.), *6287*
- dynamic response, electric power, towers, vibration (forced), wind loads, Matheson (M.J.), Holmes (J.D.), *6872*
- dynamic response, experimental mechanics, networks, Argyris (J.H.), Aicher (W.), (et al.), *7380*
- elastoplasticity, waves, Adylov (K.A.), *7428*
- annular flow, cooling, electrical components, joints, thermal effects, Abdel Aziz (M.M.), Riege (H.), *7845*
- buoys, mooring, submerged bodies, Mariano (J.J.), *8047*
- crossflow, fluid-structure interaction, towing cables, vibration (forced), vortex shedding, Alexander (C.M.), *8291*
- ocean bed, torsion, underwater structures, Shashaty (A.J.), *9256*
- optimization, trusses, Braga (F.), D'Asdia (P.), *9443*
- cylindrical bodies, submerged bodies, suppression, vibration (flow induced), vortex shedding, Every (M.J.), King (R.), (et al.), *10488*
- offshore structures, vibration (flow induced), vortex shedding, Griffin (O.M.), Pattison (J.H.), (et al.), *11628*

Cacko (J.), computing techniques, statistical theory, stochastics, *8123*
- see Bily (M.), *9300*

Cady (K.B.), see Khatib-Rahbar (M.), *2873*

Cafarella (F.), cable stayed bridges, geometric nonlinearities, variational methods, *6523*

Caffarelli (L.A.), see Alt (H.W.), *4977*
- elastoplasticity, mathematical methods, torsion, unloading, Friedman (A.), *7165*

Caflisch (R.E.), propagation, quenching, wiener-hopf technique, Keller (J.B.), *6873*

Caglayan (A.K.), estimation, jump conditions, linear systems, observers, *1144*

Cailletaud (G.), material testing, rupture, simulation, thermal fatigue, Culie (J.-P.), (et al.), *3998*
- aluminum alloys, damage, electric resistance, material testing, steel, Policella (H.), (et al.), *7504*

Caillot (G.), see Casacci (S.), *10207*

Cakmak (A.S.), see Polhemus (N.W.), *3012*

Cakrt (J.), see Balejova (M.), *9576*

Calarese (W.), experimental results, slender bodies, vortex flow, vortex shedding, *9600*

Calderale (P.M.), materials properties, pistons, thermal effects, thermoelasticity (transient), Garro (A.), (et al.), *4743*

Caldwell (D.R.), see Newberger (P.A.), *644*

Caldwell (J.), burgers equation, computing techniques, differential equations (ordinary), differential equations (partial), finite element techniques, Wanless (P.), (et al.), *5037*

calibration, hot wire, Ho (K.K.), Ko (N.W.M.), *710*
- heat transfer, hot wire, rarefied gases, Gottesdiener (L.), *711*
- accelerometers, dynamic testing, frequency response, Yu (Z.-M.), Li (W.-L.), (et al.), *1269*
- dynamic response, shock, transducers, vibration, Bouche (R.R.), *1289, book*
- acoustic measurements, acoustics, transducers, Rudnick (I.), *1828*
- electrostatic gyro, estimation, gyroscopes, kalman filters, mathematical models, navigation, strapdown systems, Blanchard (R.L.), *2162*
- balance system, wind tunnels, Dubois (M.), *2772*
- nozzles, pressure measurement, swirl flow, velocity measurement, Murakami (M.), Kito (O.), *3755*
- electromagnetic loading, flow measurement, geometrical properties, magnetic stabilization, Smigielski (J.), *4683*
- acoustic measurements, scattering, underwater acoustics, Dragonette (L.R.), Numrich (S.K.), (et al.), *4801*
- algorithms, hot wire, numerical methods, Huffman (G.D.), *5506*
- boundary layer, friction (skin), preston tubes, shear, Nitsche (W.), *5507*
- direction, flow measurement, velocity measurement, Huffman (G.D.), Rabe (D.C.), (et al.), *5510*
- geometrical properties, hot wire, Van Thinh (N.), *5511*
- nozzles, supersonic flow, wind tunnels, Weinert (W.), *6743*
- flow measurement, hot wire, low velocity flows, velocity measurement, Christman (P.J.), Podzimek (J.), *7812*
- impulse, sound fields, transducers (pressure), ultrasonics, Jones (S.M.), Carson (P.L.), (et al.), *7946*
- design, discharges, flow measurement, meters, venturi tubes, Inoue (M.), Yano (H.), (et al.), *8665*
- data analysis, flow measurement, pitot tube, three dimensional flow, velocity measurement, Nishimura (H.), *9673*
- data acquisition, force, measurements (dynamic), tension, transducers (load), Dalke (D.D.), *9426*
- fracture toughness, notch tests, specimen design, stress intensity factor, Bubsey (R.T.), Munz (D.), (et al.), *9430*
- design, flow measurement, vortex shedding, Glockner (G.), Fock (K.), *9673*
- data reduction, flow measurement, Sievert (G.), *9674*
- disks, oscillating bodies, viscometry, Kestin (J.), Shankland (I.R.), *9675*
- force, measurements, thermoelasticity (transient), transducers (load), Pontius (P.E.), Mitchell (R.A.), *10313*
- crack growth, finite element methods, fracture toughness, specimen design, stress intensity factor, Beech (J.F.), Ingraffea (A.R.), *10337*
- electromagnetic loading, flow measurement, meters, velocity profiles, Tsangaris (S.), Leiter (E.), *10535*
- acoustic waves, anisotropic media, transducers (ultrasonic), Brissaud (M.), Kleimann (H.), *11163*
- flow measurement, liquid metals, magneto fluid dynamics, meteorology, Kirshtein (G.Kh.), Kvasnevskii (I.P.), *11833*
- transducers, underwater acoustics, velocity measurement, Ivanov (V.E.), Kirshov (V.A.), *12011*

Caligaris (O.), banach space, control, functional analyis, functional equations, nonconvex control, Oliva (P.), *7242*

Calil (S.F.), biaxial loading, fibers, multiaxial fatigue, rotating bodies, Goswami (B.C.), (et al.), *2255*

Calisal (S.), see Sabuncu (T.), *9630*

Calise (A.J.), aerodynamics, algorithms, boundary layer, boundary value problems, singular perturbations, *2120*

Calisbresi (M.L.), see Chiesa (M.L.), *8342*

Calladine (C.R.), elasticity (nonhomogeneous), half space, stress concentration, winkler foundation, Greenwood (J.A.), *257*

Callinan (R.J.), see Jones (R.), *473*
- see Jones (R.), *2980*

calorimeters, adiabatic processes, conduction (heat), thermal diffusion, Mcnabb (A.), *770*
- conduction (heat), conductivity, thermal measurements, Zhdanov (K.R.), Matizen (E.V.), (et al.), *2784*
- differential thermal analysis, thermal instability, thermal measurements, thermodynamic processes, Vertogradskii (V.A.), Egorova (L.S.), *5533*

calorimetry, conduction (heat), inverse problems, plasma, Bespalov (A.M.), Gorshkov (M.I.), (et al.), *3773*

Caltagirone (J.-P.), see Mojtabi (A.), *9696*
- see Horne (R.N.), *11369*

Caltagirone (J.P.), see Saatdjian (E.), *8721*

Calvert (W.J.), axial compressors, blades, boundary layer, geometrical properties, subsonic flow, viscid inviscid flow, Herbert (M.V.), *3745*

Calvini (P.), plates (rectangular), rotating bodies, *326*

Calzia (J.), deflagration, detonation (two phase), detonative ignition, explosives, thermal explosions, *884*

Camarda (C.J.), compression, panels, sandwich construction, *3539*

Camarero (R.), see Younis (M.E.), *9588*

Cambon (C.), shear flow, turbulence, turbulence (anisotropic), turbulence model, Jeandel (D.), (et al.), *9604*

Camenschi (G.), bingham number, drawing, dynamic analysis, reynolds number, strips, Sandru (N.), *5279*

Cameron (A.), bearings, friction, lubrication, machine design, wear, Ettles (C.M.Mc.), *7078, book*

Cameron (R.F.), numerical methods, viscoelastic materials, volterra equations, Mckee (S.), *6176*

Cames-Pintaux (A.M.), conduction (heat), contact problems, thermal contact resistance, Padet (J.P.), *766*

Camiletti (S.E.), see Zamir (M.), *9575*

Camilo (G.M.), see Kittl (P.), *6443*

Camisetti (C.), dynamic response, finite element methods, ship structures, vibration (forced), Macco (A.), (et al.), *5229*

Campbell (D.), see Bishop (A.), *10931*

Campbell (E.M.), containment, diagnostics, inertia, measurements (dynamic), nuclear fusion, Lane (S.M.), (et al.), *5684*

Campbell (G.S.), airfoils, fredholm equations, irrotational flow, least squares, singularities, sources, *4587*

Campbell (J.) Jr., see Lee (J.C.), *11740*

Campbell (T.D.), see Stanley (P.), *7622*

- see Stanley (P.), *8468*

Campo (A.), computer programming, conduction (heat), numerical methods, transforms, *1702*

Campoy (G.), see Pina (E.), *5158*

cams, gear trains, linkages, machine design, mechanisms, transmissions, Kozhevnikov (S.N.) ed., *2549, book*

- computer aided design, mechanisms, Borun (F.L.), *2554*
- sliding, wear, Dyson (A.), *3040*
- design criteria, modal analysis, vibration, Wiederrich (J.L.), *6555*
- linkages, mechanisms, synthesis, Singh (Y.P.), Kohli (D.), *6561*
- design, dynamics, linkages, mechanisms, Kwong (C.W.), Wiederrich (J.L.), (et al.), *7627*
- design, mechanisms, Turnbull (S.R.), *8470*
- design, kinematics, robotics, synthesis, Tsai (Y.C.), Soni (A.H.), *8479*
- dynamic stability, oscillators, resonance, Cronin (D.L.), Labouff (G.A.), *9468*
- mechanisms, orifices, pneumatic components, Lequoc (S.), Cheng (R.M.H.), *9483*
- design, kinematics, optimization, Berzak (N.), *10371*

canals, discharges, flumes, head, weirs, Bos (M.G.), Reinink (Y.), *3601*

- helmholtz resonator, lakes, oscillations, Miles (J.W.), *3610*
- couette flow, ships, wakes, Kulczyk (J.), *8048*
- frequency response, gates, mathematical models, unsteady flow, Corriga (G.), Sanna (S.), (et al.), *8509*
- seepage, soil mechanics, Orasanu (M.T.), *9890*
- finite element methods, linear theory, ship motion, three dimensional flow, Bai (K.J.), *12087*

Cancelli (C.), see Bistagnino (C.), *10444*

Candel (S.), algorithms, computing techniques, transforms, *10042*

Cane (M.A.), currents, ocean air interaction, oceanography, *4861*

Canevet (G.), nonhomogeneous media, sound propagation, waveguides, *3948*

Canfield (T.R.), see Wu (C.H.), *4369*

Cannarozzi (A.A.), limit analysis, linear programming, plasticity, yield criteria, *6501*

Cantoni (A.), acoustics, arrays, sound fields, Godara (L.C.), *3964*

Cantwell (B.J.), boundary layer, coherent structure, jets, pipe flow, turbulence (structure), *2688*

- axisymmetric flow, jets, transition, *4631*

Capecchi (D.), earthquake resistant structures, frames, multiple degree of freedom, stiffness, Rega (G.), (et al.), *7040*

Capelo (A.), heart, muscles, stress strain relationships, tissues, Comincioli (V.), (et al.), *8070*

capillary flow, extrusion, viscoelastic fluids, Prokunin (A.N.), Sevruk (V.D.), *545*

- electro fluid dynamics, laminar flow, oscillatory flow, Sears (A.R.), Groves (J.N.), *553*
- adhesives, bonded joints, Siekman (J.G.), *1481*
- filters, stokes flow, Gusinskii (G.M.), Kremer (E.B.), (et al.), *1868*
- convection, crystals, melting, radiant interchange, Schwabe (D.), Scharmann (A.), *2807*
- diffusion, drying, evaporation, porous media, Molnar (K.), *3845*
- blood flow, microcirculation, platelet concentration, shear flow, Beck (M.R.) Jr., Eckstein (E.C.), *4919*
- boiling, cryogenics, gasification, porous surfaces, Orlov (V.K.), Savelev (V.N.), *5543*
- inhomogeneities, magneto fluid dynamics, mass transfer, porous media, Panasyuk (A.L.), Panchenko (M.S.), (et al.), *5677*
- experimental methods, ultrasonics, Dezhkunov (N.V.), Prokhorenko (P.P.), *6588*
- viscometry, viscous flow, yield condition, Golovanchikov (A.G.), Tyabin (N.V.), *6589*
- contact angle, moving surfaces, viscous flow, Benney (D.J.), Timson (W.J.), *6618*
- drag reduction, eddies, friction factor, Dschagarowa (E.), Bochossjan (T.), *6657*
- blood flow, microcirculation, Skalak (R.), Chien (S.), *8075*
- laplace equation, meniscus, Finn (R.), *8520*
- closed conduit flow, convection (free), heat transfer, porous media, thermal instability, vortex flow, Catton (I.) eds., Smith (R.N.), *9682, book*
- boiling, porous surfaces, Afanasev (B.A.), Smirnov (G.F.), *9687*
- boiling, convection (forced), critical heat flux, Koba (A.L.), Kozhelupenko (Yu.D.), (et al.), *10574*
- heat pipes, viscous effects, wick, Shibayama (S.), Morooka (S.), *10628*
- adhesion, mass transfer, rarefied gases, Levdanskii (V.V.), Martynenko (O.G.), *11451*
- hydrodynamic stability, jets, liquids, Filyand (L.V.), *11531*
- channel flow, evaporation, heat pipes, Suslov (A.D.), Ustinov (V.Ya.), *11772*

capillary waves, evolution equations, gravity waves, nonlinear analysis, plasma, soliton solutions, Ma (Y.-C.), *1094*

- acceleration waves, axial flow, jets, Ingebo (R.D.), *3694*
- meniscus, surface tension, Chiroiu (V.), *3710*
- atomization, cavitation, ultrasonics, Mir (J.M.), *4015*
- gravity waves (finite depth), propagation, Scott (J.C.), *6698*
- gravity waves, interface waves, liquid gas mixture, Pramanik (A.K.), *7763*
- gravity waves (surface), harmonic waves, phase velocity, wilton ripples, Reeder (J.), Shinbrot (M.), *9623*
- currents, gravity waves (surface), hydrodynamic stability, Voronovich (A.G.), Lobanov (E.V.), (et al.), *11590*
- finite amplitude, gravity waves (surface), surface tension, Hogan (S.J.), *11593*
- experimental methods, experimental results, propagation, Byrne (D.), Eamshaw (J.C.), *11594*
- bifurcation, finite amplitude, gravity waves (surface), Chen (B.), Saffman (P.G.), *11595*

Capodanno (P.), complex variables, cylindrical bodies, inviscid fluid, plates, porous surfaces, *8521*

Capon (A.), charcoal cloth, materials processing, mechanical properties, textiles, Maggs (F.A.P.), (et al.), *2254*

Capone (E.), friction (sliding), friction (solid fluid), lubrication (boundary), lubrication (elastohydrodynamic), testing equipment, Capone (G.), (et al.), *9034*

Capone (F.J.), aerodynamic performance, nozzles, propulsion, swept wings, *3885*

Capone (G.), see Capone (E.), *9034*

Cappallo (R.J.), dissipation, friction (solid solid), moon, planetary satellites, stochastics, tides, Counselman (C.C.) III, (et al.), *3913*

Cappozzo (A.), biomechanics, frequency domain techniques, gait, kinematics, *1033*

Capriz (G.), continuum mechanics, cosserat solids, micropolar media, Podio-Guidugli (P.), *1969*

Capurso (M.), beams (thin section), structural analysis, wind loads, *8264*

Cara (M.), analysis, half space, layered media, rayleigh waves, seismic waves, Minster (J.B.), (et al.), *7020*

Caramanlian (C.), bending elements, curved elements, finite element techniques, plates, shape functions, triangular elements, *4198*

carbides, friction, high temperature, surfaces, Miyoshi (K.), Buckley (D.H.), *4002*

- creep, dislocations, electron microscopy, high temperature, precipitation, steel, Orlova (A.), Milicka (K.), (et al.), *6472*
- brittle materials, crack resistance, fracture toughness, variable loading, Novikov (N.V.), *7570*
- coatings, friction (sliding), gases, high pressure, lubricants (gas), wear, Skinner (J.), *9948*

carbon dioxide, reflection, shock waves, shock waves (oblique), Ando (S.), *1615*

- crossflow, helium, jets, Borisov (V.N.), Breev (V.V.), (et al.), *2664*
- heat transfer (combined modes), high temperature, injection, regenerators, Asif (S.A.), Khandwawala (A.I.), *7868*

Cardew (P.T.), filtration, mixing, powders, *4836*

cardiovascular system, biocontrol, hyperventilation, tests, Bonde-Petersen (F.), Norsk (P.), (et al.), *229*

- analog simulation, respiratory system, simulation, Balasubramanian (R.), *230*
- blood flow, blood vessels, transition flow, Walburn (F.J.), Stein (P.D.), *1956*

Cardo (A.), damping, nonlinear theory, rolling motion, ship motion, Francescutto (A.), (et al.), *10877*

Cardou (A.), conformal mapping, gear teeth, numerical methods, stress intensity factor, Tordion (G.V.), *9472*

Carey (G.F.), computing techniques, differential equations (partial), iterative methods, newton method, nonlinear methods, Krishnan (R.), *2036*

- see Sepehrnoori (K.), *5000*
- airfoils, compressible flow, numerical methods, subsonic flow, Pan (T.T.), *10420*

Carignan (F.J.), friction (sliding), high speed, wear, Rabinowicz (E.), *1926*

Caristi (G.), damping, differential equations (ordinary), nonlinear mechanics, Invernizzi (S.), *24*

Carlsen (C.A.), see Skaar (K.T.), *5970*

Carlson (K.W.), see Williams (J.A.), *10279*

Carlson (L.), see Chung (P.M.), *5644*

Carlson (R.L.), creep, deformation, embrittlement, fracture mechanics, microstructures, steel, Lo (H.C.), *11316*

Carlucci (L.N.), damping, dynamic response, tubes, two phase flow, virtual mass, *391*

Carlvik (I.), drilling, dynamic properties, rods, vibration (forced), *2340*

Carman (R.W.), dynamic response, railroads, springs, vehicles, Kieres (K.C.), *532*

Carmi (S.), see Ghassemzadeh (M.R.), *5385*

- couette flow, hydrodynamic stability, numerical methods, oscillations, Tustaniwskyj (J.I.), *8606*

Carmichael (D.G.), design, lyapunov's functions, structural analysis, structural design, *1153*

- design (optimum), pareto optima, trusses, *1427*
- design (optimum), modeling, structural optimization, *6502*

Carmignani (C.), elastoviscoplasticity, fracture mechanics, j-integral, shells (cylindrical), work hardening, yield condition, Vitale (E.), *8151*

Carnavos (T.C.), augmentation, extended surfaces, fins, tube bundles, turbulent flow, *8758*

Carnegie (W.D.), see Pasricha (M.S.), *6303*

Carnes (T.N.), acoustic waves, arrays, interference, microphones, transducers, Reynolds (D.D.), (et al.), *11927*

Carnoy (E.G.), finite element methods, shells (nonlinear), shells (thin), structural stability, *5169*

Carome (E.F.), acoustic measurements, optical techniques, transducers, waveguides, Koo (K.P), *3980*

Carpenter (K.), combustion products, diesel engines, exhaust gases, particle fluid flow, Johnson (J.H.), *1764*

Carpenter (P.W.), nozzles, swirl flow, thrust, *5446*

Carpenter (W.C.), bonded joints, finite element methods, interface phenomena, lap joints, stress analysis, *9489*

Carr (A.J.), see Moss (P.J.), *2281*

Carrier (G.), absorption, emissions, hydrocarbons, internal combustion engines, oil films, Fendell (F.), (et al.), *7873*

Carriere (J.-F.), see Dussaud (M.), *9902*

Carroll (H.B.) Jr., see Evans (R.D.), *8925*

Carroll (J.A.), see Arakeri (V.H.), *563*

- see Holl (J.W.), *6604*

Carroll (R.L.), see Nuyan (S.), *4321*

Carson (P.L.), see Jones (S.M.), *7946*

Carstens (M.R.), concentration, discharges, friction (skin), pressure drop, slurries, Addie (G.), *10398*

Carstensen (E.L.), see Muir (T.G.), *890*

- acoustic waves, biomedical frequencies, nonlinear waves, ultrasonics, Law (W.K.), (et al.), *891*

Carstensen (J.T.), compression, cycles, dies, powder metallurgy, tableting, Toure (P.), *2404*

Carter (D.R.), bones, fracture, prosthetic devices, stress analysis, Vasu (R.), *6005*

- bones, fracture, prosthetic devices, strain measurement, Vasu (R.), (et al.), *6006*

Carter (G.C.), acoustics, estimation, sound propagation, source motion, Abraham (P.B.), *3945*

Carter (J.E.), compressible flow, separated flow, separation, shock waves, transonic flow, *8547*

Carter (J.P.), cavities, clay, pore pressure, stress analysis, Randolph (M.F.), (et al.), *6383*

- deformation (finite), elastoplasticity, soil consolidation, Booker (J.R.), (et al.), *6386*

cartilage, bones, human body, ultrasonics, Rushfeldt (P.D.), Mann (R.W.), *4907*

- human body, joints, lubrication (hydrodynamic), squeeze films, viscoelasticity, Manohar (K.), Nigam (K.M.), *9958*

Caruthers (J.M.), creep, thermoviscoelasticity, viscoelastic materials, Cohen (R.E.), *1190*

Casacci (S.), dynamic analysis, fluid-structure interaction, gates, plates (rectangular), vibration, Caillot (G.), *10207*

Casas-Vasquez (J.), see Rubi (J.M.), *1974*

cascades, compressible flow, finite difference methods, thermodynamic processes, two dimensional flow, Thyagaraja (A.), *590*

- axial compressors, secondary flow, Thiruvengadam (J.), *705*
- fluid mechanics, potential flow, turbomachinery, Keck (H.), *2077*
- blades, friction, pressure distribution, trailing edge, Ribaut (M.), Niessner (H.), *2654*
- aerodynamic performance, endwall profiling, pressure distribution, turbines, Kopper (F.C.), Milano (R.), (et al.), *2655*
- axial turbines, crossflow, three dimensional flow, Langston (L.S.), *2751*
- axial compressors, blades, transonic flow, viscous flow, Sator (F.G.), *2756*
- bending, flutter, supersonic flow, torsion, Bendiksen (O.), Friedmann (P.), *2908*
- aerodynamic coefficients, aerodynamic loads, blades, oscillating bodies, Hanamura (Y.), Tanaka (H.), (et al.), *2909*
- aerodynamic performance, numerical analysis, pressure distribution, Meauze (G.), *3677*
- finite difference methods, transonic flow, Kozel (K.), Petrovsky (I.), *3678*
- axial turbines, blades, transonic flow, visualization, Holliger (K.), *3740*
- aerodynamic performance, drag, nozzles, optimization, relaxation drag, slender bodies, Schilling (H.), *4625*
- axial turbines, blades, boundary layer, Fielding (L.), *4675*
- airfoil characteristics, blades, turbines, two dimensional flow, Pimsner (V.), Baran (N.), *4740*
- contamination, deposition, gas turbines, inlets, nozzles, Nealy (D.A.), Timmerman (W.H.), (et al.), *4744*
- compressible flow, three dimensional flow, transonic flow, turbomachinery, Spurr (A.), *5412*
- galerkin method, two dimensional flow, unsteady flow, Daiguji (H.), Shirahata (H.), *5448*
- axial turbines, blades, heat transfer, turbulence (freestream), Bayley (F.J.), Priddy (W.J.), *5504*
- axial turbines, holography, interferometry, nozzles, Bryanston-Cross (P.J.), Lang (T.), (et al.), *5505*
- numerical methods, transonic flow, unsteady flow, Gnesin (V.I.), *6663*
- spectra, turbulence, turbulence model, Giedzer (Ye.B.), Makarov (A.L.), *6682*
- axial turbines, mathematical models, rotors, separated flow, Ablamskii (V.A.), *6733*
- blades, finite difference methods, unsteady flow, Mitchell (N.A.), *7729*
- finite difference methods, transonic flow, Daiguji (H.), Nozaki (A.), *7730*
- annular flow, boundary layer, swirl flow, vortex flow, wakes, Tan (C.S.), *7807*
- finite element techniques, transonic flow, Akay (H.U.), Ecer (A.), *8589*
- blades, finite element techniques, transonic flow, Deconinck (H.), Hirsch (C.), *8590*
- secondary flow, visualization, Kobayashi (H.), Mizutani (M.), *8592*
- finite difference methods, incompressible flow, separated flow, viscous flow, Luu (T.S.), Ta Phuoc Loc, *8593*
- axial turbines, blades, combustion products, erosion, particles, synthetic fuels, Wenglarz (R.A.), Menguturk (M.), *8807*
- aerodynamic interference, blades, damping, oscillating bodies, separated flow, turbomachinery, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- developing flow, nozzles, velocity profiles, Cherepenin (N.D.), *9579*
- annuli, numerical analysis, secondary flow, Glynn (D.R.), Marsh (H.), *9587*
- blades, finite volume method, numerical methods, time domain techniques, Younis (M.E.), Camarero (R.), *9588*
- aerodynamic interference, centrifugal compressors, diffusers, rotors, Fisher (E.H.), Inoue (M.), *9670*
- airfoils, transonic flow, two dimensional flow, Messiter (A.F.), Adamson (T.C.) Jr., *10448*
- boundary layer (turbulent), integral methods, rotors, turbomachinery, Lakshminarayana (B.), Govindan (T.R.), *10449*
- compressible flow, finite element techniques, rotating disks, Shirahata (H.), Daiguji (H.), *10451*
- aerodynamic interference, axial compressors, axial turbines, wakes, Mitchell (N.A.), *10524*
- axial flow, choked flow, subsonic flow, three dimensional flow, turbomachinery, Horlock (J.H.), *10526*
- axial compressors, blades, flutter, testing equipment, Jutras (R.R.), Stallone (M.J.), (et al.), *10764*
- compressible flow, finite element techniques, transonic flow, Ecer (A.), Akay (H.U.), *11393*
- compressible flow, finite element techniques, transonic flow, Akay (H.U.), Ecer (A.), *11404*
- aerodynamic coefficients, axial compressors, three dimensional flow, velocity profiles, Starke (J.), *11739*
- aerodynamic performance, axial compressors, geometrical properties, three dimensional flow, Stark (U.), Hoheisel (H.), *11741*
- centrifugal compressors, compressible flow, three dimensional flow, vortices, Murata (S.), Miyake (Y.), (et al.), *11744*
- axial turbines, blades, geometrical properties, swirl flow, Aronov (B.M.), Kerzhenkov (A.G.), *11747*
- axial turbines, cooling, gas turbines, heat transfer, Gorelov (G.M.), Fishbein (V.D.), (et al.), *11748*

Casciati (F.), elastoplasticity, frames, geometric nonlinearities, random loading, reliability analysis, Faravelli (L.), *3527*

- linear programming, loads, reliability analysis, structural design, Faravelli (L.), *6517*

Case (W.), see Arnold (T.W.), *7366*

Casey (J.), plastic behavior, variational methods, work hardening, yield condition, Naghdi (P.M.), *3266*

- constitutive equations, continuum mechanics, elasticity (nonlinear), kinematics, Naghdi (P.M.), *6158*

Casling (E.M.), high speed flow, hulls, planing surfaces, yawing, *3034*

Cass (C.A.), see Frost (R.B.), *1948*

cast steel, charpy tests, ductility, fracture control, microstructures, steel, Fortner (E.) eds., Praeger (M.), *6476, book*

- composite materials, fibers, high temperature, materials properties, Skrovanek (S.D.), Herron (R.H.), *6954*

Castellani (A.), see Benedetti (D.), *3379*

Casti (J.), linear systems, optimal control, singular control, *2116*

Castillo (E.A.), see Abdel Monsim (M.E.), *8365*

Castillo (J.L.), buoyancy, hydrodynamic stability, mathematical models, microgravity, surface tension, Velarde (M.G.), *638*

casting, cooling, freezing, rupture, shells, stefan problem, Oki (S.), *440*

- cavities, finite difference methods, finite element techniques, fluid injection, injection molding, Hieber (C.A.), Shen (S.F.), *549*
- conduction (unsteady), heat transfer, thermal stresses, Morgan (K.), Lewis (R.W.), (et al.), *2402*
- solidification, thermal properties, vacuum technology, Fukusako (T.), Kubo (K.), (et al.), *2403*
- automobiles, computer aided design, tools, Welbourn (D.B.), Cox (G.M.A.), *3426*
- flaw detection, radiography, welded joints, x ray techniques, Closier (M.J.), *5318*
- numerical methods, solidification, Pratt (T.K.), Landis (F.), (et al.), *6801*
- computer aided design, dies, thermal effects, Siauw (T.H.), *7461*
- deformation (plastic), forging, random media, void closure, Stahlberg (U.), Keife (H.), (et al.), *7462*

- ingots, isotopes, multiphase media, solidification, Deryabina (G.N.), Ripp (A.G.), *9434*
- channel flow, film flow, non newtonian flow, plates (parallel), polymers, squeeze films, Kazankov (Yu.V.), Pervushin (V.E.), *9709*
- polymers, rheomolding, vibration (electromechanical), vibration (forced), Ibar (J.P.), Solomat (S.A.), *10266*

Castro (I.P.), blunt bodies, flow measurement, separation, shear layer, wind tunnels (environmental), *6642*

Castro (R.), see Gabov (S.A.), *3712*

Casulli (V.), see Bulgarelli (U.), *5408*

catalyzed ignition, combustion, reactors, tubes, Harrison (B.K.), Ernst (W.R.), *1743*
- combustors, models, transient effects, Tien (J.S.), *1754*
- dynamics, kinetics, Kapila (A.K.), *2859*
- emissions, gas turbines, scale models, Anderson (S.J.), Friedman (M.A.), (et al.), *7885*
- combustion waves, convection (free), ignition, Pribytkova (K.V.), Khudyaev (S.I.), (et al.), *8705*
- thermal excitation, Linan (A.), Williams (F.A.), *8787*
- combustion, combustion (catalytic), granular media, mathematical models, packed beds, reactive systems, Kiselev (O.V.), Matros (Yu.Sh.), *9753*
- boundary layer, plates, Trevino (C.), Fernandez-Pello (A.C.), *11781*

catastrophe theory, buckling, elastic stability, elasticity, shells, Hui (D.), Hansen (J.S.), *329*
- biomathematics, mathematical models, nervous system, zeeman's equations, Stewart (I.), Woodcock (A.E.R.), *2206*
- discrete systems, structural stability, Niwa (Y.), Watanabe (E.), (et al.), *4388*
- bifurcation, fluid mechanics, singularities, topological techniques, Stewart (I.), *7172*

Catchpole (E.A.), see Anderson (D.H.), *9777*

Cathignol (D.J.), blood flow, experimental methods, flow measurement, noise (random), Fourcade (C.), (et al.), *1043*

Caton (J.A.), convection (forced), engines, heat transfer, jets, pipe flow, swirl flow, Heywood (J.B.), *735*

Catton (I.) eds., capillary flow, closed conduit flow, convection (free), heat transfer, porous media, thermal instability, vortex flow, Smith (R.N.), *9682, book*

Catz (E.), see Tirosh (J.), *456*

cauchy problem, banach space, differential equations (partial), evolution equations, quasilinearization, Altman (M.), *33*
- galerkin method, hyperbolic equations, kolmogorov equation, noise (random), Girya (T.V.), *42*
- existence theorems, hyperbolic equations, inhomogeneities, uniqueness, Ying (L.-A.), Wang (C.-H.), *1089*
- nonlinear systems, parabolic equations, wave equations, Menzala (G.P.), *1090*
- hyperbolic equations, isentropic processes, shock, wave equations, Hoff (D.), *2011*
- boundary layer, compressible flow, computing techniques, plates, reynolds equation, Yakhot (A.), Ben-Dor (G.), (et al.), *3657*
- characteristic methods, crystals, hyperbolic equations, refraction, Uhlmann (G.A.), *4978*
- boundary value problems, optimal control, parabolic equations, Reid (D.W.), Teo (K.L.), *5049*
- nonlinear waves, wave equations, Menzala (G.P.), Strauss (W.A.), *7171*
- navier stokes equation, three dimensional formulation, time dependence, Bell (J.B.), *8111*
- compressible flow, numerical methods, unsteady flow, Katelkin (A.S.), Mikhailov (V.V.), *11412*

Caughey (D.A.), see Chen (L.-T.), *2614*
- compressible flow, euler equations, finite difference methods, potential flow, transonic flow, *5420*

Caughey (T.K.), see Ma (F.), *1097*
- see Ma (F.), *2018*

Caulk (D.A.), see Barone (M.R.), *4161*

caustics, crack arrest, photography, stress intensity factor, Theocaris (P.S.), Milios (J.), *472*
- bimodulus materials, composite materials, crack opening displacement, interface cracks, stress intensity factor, Theocaris (P.S.), Stassinakis (C.A.), *474*
- analysis, elasticity, plane strain, plane stress, Theocaris (P.S.), Ioakimidis (N.), (et al.), *1397*
- compressible flow, conduction (unsteady), shock waves, supersonic flow, Fung (K.-Y.), *1612*
- crack arrest, crack propagation, dynamic loads, plates, Theocaris (P.S.), Milios (J.), *2451*
- acoustic waves, ocean, sound propagation, Kinney (W.A.), Pierce (A.D.), *3943*
- currents, gravity waves, nonlinear analysis, Chin (W.C.), *4656*
- bending, edge cracks, stress intensity factor, Farahmand (B.), Raftopoulos (D.D.), *5297*
- diffraction, gravity waves (surface), refraction, Williams (R.G.), Darbyshire (J.), (et al.), *5481*
- cracks, fracture mechanics, stress intensity factor, Rossmanith (H.P.), *6462*
- brittle fracture, crack tip geometry, fracture mechanics, photoelasticity, surfaces, Theocaris (P.S.), *7556*
- notch sensitivity, stress intensity factor, Prassianakis (J.N.), Theocaris (P.S.), *8393*
- crack growth, crack propagation, elastodynamics, stress intensity factor, Theocaris (P.S.), Papadopoulos (G.A.), *9416*
- ocean, sound propagation, Worcester (P.F.), *11897*
- sound propagation, underwater acoustics, White (D.), *11911*
- acoustics, wave equations, Stickler (D.C.), Ahluwalia (D.S.), (et al.), *12003*

Cavaleri (L.), buoys, damping, oscillating bodies, wave loads, Mollo-Christensen (E.), *1607*

Cavanagh (E.), acoustics, transducers, wave absorbers, Cook (B.D.), *1809*

Cavanagh (P.R.), biodynamics, gait, human body, pressure, Lafortune (M.A.), *9068*

Cavanagh (R.C.), ocean bed, sound propagation, underwater acoustics, Renner (W.W.), *5746*

Cavaseno (V.) eds., cooling towers, energy conservation, heat addition, heat exchangers, heat transfer, Staff Of Chemical Engineering, *1712, book*

Cavendish (J.C.), chemical reactions, composite materials, differential equations (partial), diffusion, galerkin method, Oh (S.H.), *4731*

Caveny (L.H.), acoustic measurements, combustion (oscillatory), combustors, doppler effect, Collins (E.L.), (et al.), *3868*
- ignition, rockets, solid propellants, space shuttle, thrust, transient effects, Kuo (K.K.), (et al.), *10723*
- see Ben-Reuven (M.), *11790*

Cavers (D.S.), buckling, rocks, slopes, *5267*

Cavin (R.K.) III, see Howze (J.W.), *2083*

cavitation, bubble dynamics, permeability, stabilization, Yount (D.E.), *943*
- jets, polymers, two phase flow, Hoyt (J.W.), Taylor (J.J.), *946*
- abrasion, erosion, impact, wear, Preece (C.M.) ed., *3038, book*
- closed conduit flow, piping systems, slurries, transient effects, Chaudhry (M.H.) eds., Yevjevich (V.), *3596, book*
- atomization, capillary waves, ultrasonics, Mir (J.M.), *4015*
- geometrical properties, hydraulic turbines, surge, vortex tubes, Dorfler (P.), *5498*
- axial pumps, noise, reynolds number (high), vibration (flow induced), Vladaianu (D.), Marinescu (V.), *5501*
- hydrofoils, inviscid fluid, supercavitating hydrofoils, supercritical flow, Rowe (A.), Kueny (J.-L.), *5968*
- damage (cumulative), erosion, prediction, Hammitt (F.G.), De (M.K.), *5978*
- brain, head, impact, injuries, Lubock (P.), Goldsmith (W.), *6007*
- fluid-structure interaction, piping systems, Kot (C.A.), Hsieh (B.J.), (et al.), *6603*
- air, axisymmetric flow, separation, water tunnels, Holl (J.W.), Carroll (J.A.), *6604*
- bubble dynamics, collapse, compressional waves, Nishiyama (T.), Akaizawa (M.), *6994*
- compressional waves, soils, Kotlyarevskiĭ (V.A.), Maiorova (E.G.), (et al.), *7440*
- erosion, rotating disks, testing equipment, wear, Nikulin (V.A.), Konovalov (V.M.), (et al.), *7573*
- flow reversal, mathematical models, pumps, unsteady flow, Ershov (N.S.), Kuchkin (V.N.), *7791*
- corrosion, erosion, surface effect, vibration, Hoss (S.), Hirth (F.W.), (et al.), *7810*
- hulls, propellers (marine), rudders, towing tanks, water tunnels, Rutgersson (O.), *8044*
- containment, cooling, damage, nuclear reactors, Jones (A.V.), *8517*
- models, noise measurements, propellers (marine), vortices, Latorre (R.), *8518*
- modeling, turbomachinery, vortices, Billet (M.L.), *8660*
- diesel engines, erosion, injectors, unsteady flow, visualization, Bastenhof (D.), *8661*
- coatings, corrosion fatigue, erosion, Okada (T.), Awazu (K.), (et al.), *9023*
- bearings (journal), lubrication (hydrodynamic), numerical methods, reynolds equation, Meyer (G.H.), *9045*
- channel flow, erosion, variable area flow, venturi tubes, vibration, He (J.-G.), Hammitt (F.G.), *9516*
- fluid-structure interaction, numerical methods, underwater structures, Dimaggio (F.L.), Sandler (I.S.), (et al.), *9628*
- bubble dynamics, fluids, sound generation, Barabanova (G.Ya.), Ilin (V.P.), (et al.), *9853*
- bearings (journal), lubrication (hydrodynamic), seals, squeeze films, Pan (C.H.T.), Ibrahim (R.A.), *9959*
- cryogenics, ogives, thermodynamic properties, variable area flow, venturi, Billet (M.L.), Holl (J.W.), (et al.), *10396*
- airfoil theory, cavitation number, contact problems, membranes (inflatable), surface tension, weber number, Vanden-Broeck (J.M.), *10402*
- cavitation inception, hydraulic machinery, hydraulic structures, scale effects, surface effect, Arndt (R.E.A.), *10531*
- hull propeller interaction, propellers (marine), wakes, water tunnels, Rutgersson (O.), *10880*
- algorithms, bearings (hydrodynamic), lubrication (hydrodynamic), Elrod (H.G.), *10891*
- fluid-structure interaction, hydroelasticity, unsteady flow, Galiev (Sh.U.), *11680*
- acoustics, bubble dynamics, Apfel (R.E.), *11908*

- dynamic stresses, pressure, Overton (G.D.N.), Trevena (D.H.), *12034*
- dilute solutions, equilibrium, two component flow, two phase flow, Cha (Y.S.), *12039*

cavitation flow, bubble dynamics, laminar flow, ogives, separation, water tunnels, Arakeri (V.H.), Carroll (J.A.), (et al.), *563*
- bubble dynamics, damage, leading edge, modeling, propellers (marine), Stinebring (D.R.), Holl (J.W.), (et al.), *708*
- free boundary, singularities, wedges, Sotina (N.B.), Fominykh (V.V.), *1503*
- discharges, gates, hydroelectric power, tunnels, vibration (flow induced), Giezendanner (W.), Henry (P.), *2582*
- jets, separated flow, Gurevich (M.I.), *2657, book*
- bubble dynamics, cavitation inception, scale effects, Billet (M.L.), Holl (J.W.), *5390*
- aeration, separation, weirs, Berman (Ya.R.), *6605*
- free boundary, plates, surface tension, Vanden-Broeck (J.-M.), *8515*
- axisymmetric flow, bodies of revolution, sound generation, turbulence, ultrasonics, Murai (H.), Ihara (A.), *10532*
- bubbly flow, compressible flow, wedges, Tetsuo (N.), Khan (O.F.), *11420*

cavitation inception, holography, optical techniques, scattered light, Billet (M.L.), Gates (E.M.), *1638*
- orifices, reynolds number, vorticity, Yamaguchi (A.), Suzuki (T.), *2586*
- orifices, unsteady flow, vaporization, Yamaguchi (A.), *2587*
- hydraulic structures, jets, vapor pressure, Bruschin (J.), *2588*
- blades, models, propellers (marine), Kuiper (G.), *3749, book*
- bubble dynamics, cavitation flow, scale effects, Billet (M.L.), Holl (J.W.), *5390*
- bodies of revolution, laminar flow, separation, water tunnels, Pan (S.-S.), Yand (Z.-M.), (et al.), *8514*
- bodies of revolution, separation, transition, water tunnels, Huang (T.T.), *8516*
- bodies of revolution, reynolds number, turbulence (freestream), water tunnels, Murai (H.), Ihara (A.), *10397*
- noise, pumps, scale effects, Mcnulty (P.J.), Pearsall (I.S.), *10530*
- cavitation, hydraulic machinery, hydraulic structures, scale effects, surface effect, Arndt (R.E.A.), *10531*
- air, bubble dynamics, diffusion, laminar flow, separation, Parkin (B.R.), *11382*
- bodies of revolution, bubble dynamics, spherical bodies, Parkin (B.R.), *11383*
- bubbly flow, choked flow, sodium, water, Kamiyama (S.), Yamasaki (T.), *11753*

cavities, casting, finite difference methods, finite element techniques, fluid injection, injection molding, Hieber (C.A.), Shen (S.F.), *549*
- finite difference methods, internal flow, navier stokes equation, Glotz (G.), Schonauer (W.), (et al.), *570*
- convection (benard), heat addition, rayleigh benard instability, rayleigh number, Olson (J.M.), Rosenberger (F.), *578*
- dynamic response, sh waves, stress concentration, Wall (D.J.N.), Varadan (V.V.), (et al.), *1306*
- integro differential equations, oblateness, penny shaped crack, stress analysis, stress intensity factor, Hirai (H.), Satake (M.), *1365*
- cylindrical bodies, diffusion, mass transportation, porous media, Gipson (G.S.), Thoms (R.L.), *1729*
- diffusion, infinite medium, mathematical methods, spherical bodies, Akkas (N.), Bauld (N.R.) Jr., *2010*
- cylindrical bodies, stress analysis, Kawakami (T.), Nakahara (I.), (et al.), *2212*
- elastic waves, half space, scattering, Bostrom (A.), Kristensson (G.), *2368*
- finite element methods (hybrid), heat transfer, two dimensional flow, Chen (C.-J.), Naseri-Neshat (H.), (et al.), *2605*
- pressure measurement, vortex flow, Rockwell (D.), Knisely (C.), *2683*
- absorption, ducts, porous media, silencers, sound propagation, Yoshida (H.), *2934*
- acoustic waves, eigenvalues, resonance, tube bundles, Planchard (J.), *2948*
- creep, fracture mechanics, grain boundaries, metals, Greenwood (G.W.), *3253*
- creep, creep rupture, diffusion, Pharr (G.M.), Nix (W.D.), *3452*
- axisymmetric flow, bodies of revolution, irrotational flow, unsteady flow, Nesteruk (I.G.), *3630*
- discretizations, finite difference methods, navier stokes equation, networks, Amit (R.), Hall (C.A.), (et al.), *3636*
- bodies of revolution, motion, Yakimov (Yu.L.), *3690*
- convection, laminar flow, Shiralkar (G.S.), Tien (C.L.), *3783*
- biaxial loading, compression, creep, modeling, tension, torsion, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- cellular flow, closed conduit flow, convection (free), critical flow, Simpkins (P.G.), Dudderar (T.D.), *4709*
- flow irregularities, structures, vibration, Milan (D.), *4772*
- absorption, acoustic properties, noise abatement, resonance, Velizhanina (K.A.), Oborotov (V.A.), *4783*
- closed conduit flow, convection (free), oseen technique, prandtl number, Graebel (W.P.), *5550*
- acoustic waves, acoustics (architectural), modes, panels, transmission, Guy (R.W.), *5774*
- blades, hardening, turbines, Kravchenko (B.A.), Trofimov (N.G.), (et al.), *5801*
- air water entry, fredholm equations, inviscid fluid, wedges, Kuznetsov (A.V.), *5967*
- viscoelastic materials, wave generation, Pal (P.C.), *6340*
- clay, pore pressure, stress analysis, Carter (J.P.), Randolph (M.F.), (et al.), *6383*
- rocks, rupture, stress analysis, Dunin (S.Z.), Sirotkin (V.K.), (et al.), *6400*
- channel flow, convection, thermal instability, Unger (J.), *6784*
- closed conduit flow, convection (free), laser doppler velocimeters, visualization, Linthorst (S.J.M.), Schinkel (W.M.M.), (et al.), *6792*
- boundary value problems, creep, half space, inclusions, Anderson (C.A.), *7276*
- dynamic stresses, elastic foundations, inclusions, punch problems, Kozhabekov (Zh.T.), *7409*
- elastic bodies, shells (spherical), transient effects, transient loading, Duffey (T.A.), Johnson (J.N.), *7420*
- elastic waves, scattering, spectral analysis, Sancar (S.), Pao (Y.-H.), *7432*
- elastic waves, scattering, spectral analysis, Sancar (S.), Sachse (W.), *7433*
- creep rupture, fracture mechanics, grain boundaries, Beere (W.), *7496*
- buoyancy, prediction, shear, turbulent flow, Ideriah (F.J.K.), *7738*
- bodies (liquid filled), boussinesq fluid, convection (free), moving media, perturbation methods, Zarubin (A.G.), Ngo Zui Kan, *7838*
- convection (free), laminar flow, unsteady flow, variable thermal properties, Le Quere (P.), Humphrey (J.A.C.), (et al.), *7843*
- convection (free), cooling, heat transfer, laminar flow, transient effects, water, Robillard (L.), Vasseur (P.), *7844*
- bars, conduction (heat), cylindrical bodies, shape factors, Naghdi (A.K.), *7847*
- dynamic analysis, gyrodynamics, spherical bodies, spinning bodies, Nunn (R.H.), Bloomer (J.W.) II, *8098*
- infinite medium, stress concentration, Wheeler (L.T.), Kunin (I.A.), *8188*
- elastoviscoplasticity, excavation, tunnels, Nonaka (T.), *8199*
- damping, dynamic response, friable media, vibration (viscoelastic), Briskin (E.S.), *8286*
- crack propagation, creep rupture, numerical analysis, steel, Michel (D.J.), *8374*
- finite difference methods, navier stokes equation, reynolds number (small), two dimensional flow, Gupta (M.M.), *8543*
- finite element methods, laminar flow, recirculation, Pepper (D.W.), Cooper (R.E.), *8584*
- binary flow, convection (free), inclined cavity, liquids, thermal diffusion, Pinyagin (A.Yu.), Pshenichnikov (A.F.), *8706*
- buoyant flow, cellular flow, convection, thermal plumes, Berdnikov (V.S.), Kirdyashkin (A.G.), *8727*
- convection, heat transfer, interferometry, thermal measurements, visualization, Sernas (V.), Lee (E.I.), *8769*
- elastic waves, explosions, geomechanics, Vasilyev (Yu.I.), Molotova (L.V.), (et al.), *8955*
- cylindrical waves, elastic waves, interaction, Ulyanov (V.D.), *9349*
- cracks, creep, fatigue, metals, micromechanics, surveys, Gittus (J.) ed., *9380, book*
- channel flow, liquid liquid interface, viscoplasticity, Burde (G.I.), Ilyasov (E.P.), (et al.), *9582*
- convection (forced), heat transfer, porous media, viscous effects, Blythe (P.A.), Simpkins (P.G.), *9898*
- compressible flow, heating, jets, pressure change, resonance, supersonic flow, Kuptsov (V.M.), Filippov (K.N.), *10417*
- reattachment, separated flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10434*
- structure, turbulent flow, Curtet (R.), Normandin-Berne (M.), *10458*
- shock waves, similarity methods, Lazarus (R.B.), *10493*
- buoyant flow, channel flow, convection, heat transfer, laminar flow, Humphrey (J.A.C.), Jacobs (E.W.), *10585*
- compressible flow, convection, supersonic flow, Shchukin (V.K.), Gortyshov (Yu.F.), (et al.), *11401*
- channel flow, non newtonian flow, viscoelastic fluids, Burde (G.I.), Ilyasov (E.P.), (et al.), *11510*
- bubbly flow, hydrodynamic stability, surface tension, Petrov (A.G.), *11532*
- acoustic waves, elastic bodies, porous media, propagation, Junger (M.C.), *11922*

Cavounidis (S.), clay, elastoplasticity, embankments, finite element methods, *1324*

Cawley (P.), creep, measurements (dynamic), vibration, Adams (R.D.), (et al.), *451*

Cea (J.), see Haug (E.J.) eds., *8440, book*

Cebeci (T.), blasius flow, boundary layer, hydrodynamic stability, three dimensional flow, Stewartson (K.), *632*
- iterative methods, navier stokes equation, numerical analysis, reynolds number (high), two dimensional flow, Hirsh (R.S.), (et al.), *3130*

Cebulla (D.), experimental methods, fluidized beds, nozzles, *7015*

Cederkvist (J.), see Pedersen (P.), *9136*

Cederquist (J.), analog computation, differential equations (partial), elliptic equations, optical techniques, parabolic equations, Lee (S.H.), *2079*

Cedolin (L.), see Bazant (Z.P.), *479*
- cooling towers, dynamic analysis, finite element methods, frequency response, vibration (free), Mang (H.A.), (et al.), *2348*

Cefola (P.J.), see Friedlander (A.L.), *7911*

Cekirge (H.M.), boundary value problems, fire control, fire spread, forest fires, *5642*

Celentano (G.), see Balestrino (A.), *6125*

celestial mechanics, astronautics, design, mission analysis, optimization, orbits, space vehicles, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*

Celik (T.), see Majid (K.I.), *3534*

cell behavior, blood, experimental methods, membranes, plastic behavior, Waugh (R.E.), La Celle (P.L.), *1949*
- arteries, dynamic response, muscles, shear stress, Dewey (C.F.) Jr., Bussolari (S.R.), (et al.), *3065*
- biomechanics, materials properties, membranes (permeable), Martynov (L.A.), *6015*
- biomathematics, dynamic analysis, fluid mechanics, mathematical models, Aldis (G.), Tognetti (K.), (et al.), *8178*
- absorption, bacterial cells, membranes (permeable), Brunn (P.O.), *9065*

Cella (A.), finite element techniques, nonlinear mechanics, shock waves, time dependence, wave equations, Lucchesi (M.), (et al.), *1130*
Celle (C.C.), anisotropy, hardening, porous media, rocks, Cheatham (J.B.), *5265*
cellular flow, buoyant flow, convection (benard), surface tension, thermal instability, Lebon (G.), Cloot (A.), *757*
- benard-rayleigh problem, convection (benard), thermal excitation, Wauer (J.), *758*
- experimental results, jets, nozzles, underexpanded jets, Borisov (Yu.Ya.), Podolskii (S.L.), *1569*
- closed conduit flow, convection (free), nusselt number, Iyican (L.), Witte (L.C.), (et al.), *1682*
- convection (free), mass transportation, Sigrist (L.), Dossenbach (O.), (et al.), *1736*
- convection (free), slots, Ruth (D.W.), *2789*
- channel flow, convection (free), numerical methods, thermodynamics (nonequilibrium), Luijkx (J.M.), Platten (J.K.), *2800*
- cavities, closed conduit flow, convection (free), critical flow, Simpkins (P.G.), Dudderar (T.D.), *4709*
- closed conduit flow, convection (free), Normand (C.), *6781*
- conduction (heat), heat transfer, internal flow, Eftekhar (J.), Darkazalli (G.), (et al.), *7848*
- bounded media, convection, hydrodynamic stability, rotating fluids, Daniels (P.G.), *8710*
- buoyant flow, cavities, convection, thermal plumes, Berdnikov (V.S.), Kirdyashkin (A.G.), *8727*

cellular motions, buoyant flow, closed conduit flow, convection, Melikhov (O.I.), Shcherbak (S.B.), *5539*
- binary flow, plane flow, thermal instability, thermal waves, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *5554*
- convection (benard), thermal excitation, thermal instability, Eagles (P.M.), *5556*
- monte carlo analysis, rayleigh benard instability, thermal excitation, transient effects, transition flow, Jhaveri (B.), Homsy (G.M.), *8709*
- circulation, counterflow, duct flow, Kimura (S.), Bejan (A.), *9703*

cements, compression, strength, Granju (J.L.), Maso (J.C.), *4532*
- beams, composite materials, fracture mechanics, material testing, Visalvanich (K.), Naaman (A.E.), *6439*
- compression, strength, Granju (J.L.), Maso (J.C.), *6520*
- copper, interface cracks, stochastics, weibull statistics, Kittl (P.), Galleguillos (E.), *8225*

Cempel (C.), see Andrzejewski (M.), *1805*
- acoustic measurements, bearings (ball), diagnostics, spectral analysis, vibration, vibroacoustics, *2480*

Cena (V.), see Mustacchi (C.), *3830*
Cenedese (A.), grids, laser doppler velocimeters, turbulence, turbulence (structure), Iannetta (S.), (et al.), *8619*
Cenkner (A.A.) Jr., gas-trips, laser doppler velocimeters, mixing, nozzles, supersonic flow, velocity profiles, *11511*

centrifugal compressors, aerodynamics, superchargers, turbomachinery, Kyrtatos (N.), Watson (N.), *703*
- design criteria, swirl flow, visualization, volute casings, Yadav (R.), Yahya (S.M.), *704*
- diffusers, rotating stall, unsteady flow, Abdelhamid (A.N.), *1633*
- abrasion, blades, dust, Ris (V.F.), *2755*
- diffusers, oscillatory flow, rotating stall, Abdelhamid (A.N.), Bertrand (J.), *3744*
- plates (circular), Grigorenko (Ya.M.), Mitlin (B.I.), (et al.), *4382*
- aerodynamic performance, compressible flow, geometrical properties, reynolds number, Wachter (J.), Wohrl (B.), *5499*
- diffusers, entrance region, laser doppler velocimeters, optical analysis, rotors, Krain (H.), *6735*
- blockage, boundary layer, pressure distribution, rotors, Pampreen (R.C.), *7803*
- dynamic stability, rotors, unsteady flow, Vance (J.M.), Laudadio (F.J.), *8655*
- stalling, surge, turbomachinery, Wachter (J.), Kohn (E.), (et al.), *8658*
- aerodynamic interference, cascades, diffusers, rotors, Fisher (E.H.), Inoue (M.), *9670*
- diffusers, inlet flow, laser doppler velocimeters, velocity profiles, Flueckiger (G.), Melling (A.), *10528*
- cascades, compressible flow, three dimensional flow, vortices, Murata (S.), Miyake (Y.), (et al.), *11744*
- compressible flow, inviscid fluid, streamlines, three dimensional flow, Bosman (C.), *11750*

centrifugal fans, blades, noise, noise measurements, Leist (H.), *5780*
- noise abatement, resonance, Koopmann (G.H.), Neise (W.), *8866*
- heat transfer, mass transfer, Kremnev (V.O.), *10647*
- fans, noise abatement, Neise (W.), *10801*
- fans, noise abatement, Neise (W.), Barsikow (B.), *10802*

centrifugal pumps, experimental methods, geometrical properties, rotors, thrust, Okamura (T.), *3743*
- design, optimization, volutes, Kowalik (M.), Zarzer (E.), (et al.), *7804*
- annular flow, design, radial loading, Borovskii (B.I.), *11751*

centrifugal turbines, blades, orthotropic materials, rotating disks, thermal loading, Paul (A.K.), *1243*
centrifugation, gases, thin wing theory, turbomachinery, Sakurai (T.), *702*
- centrifuge tests, clay, foundations, gravity platform, scale models, Andersen (K.H.), Selnes (P.B.), (et al.), *1313*
- centifuge tests, embankments, scale models, stability, Malushitsky (Yu.N.), *1329, book*
- adiabatic processes, helium, liquid vapor mixture, two phase flow, Zhukovskiy (A.V.), *4014*
- atomization, liquids, Klyachko (L.A.), *4017*
- atomization, films, Nafikov (I.M.), Zinnatullin (N.Kh.), *4826*
- jets, layered media, magneto plasma dynamics, rotating fluids, Levin (V.B.), *10741*

Cepolina Molfino (R.), see Acaccia (G.M.), *2921*
Ceradini (G.), dynamic testing, elastoplasticity, shakedown structures, vibration, *4513*
ceramics, fracture mechanics, glass, life expectancy, random loading, Jakus (K.), Ritter (J.E.) Jr., *2458*
- endurance limit, material testing, refractories, thermal fatigue, Lamon (J.), *3435*
- creep, glass, high temperature, mechanical properties, Northover (J.P.), Groves (G.W.), *4520*
- scale effects, thermal shock, thermoelasticity (transient), Glandus (J.C.), Boch (P.), *5803*
- bones, piezoelectrics, Johnson (M.W.), Williams (W.S.), (et al.), *6008*
- bending (viscoelastic), creep, micromechanisms, Cohrt (H.), Grathwohl (G.), (et al.), *6175*
- fracture, glass, high temperature, notch tests, Northover (J.P.), Groves (G.W.), *6440*
- electromechanical components, piezoelectric devices, transducers, Aronov (B.S.), *6465*
- approximation methods, empirical methods, quartz, thermal expansion, Rusovic (N.), Godecke (T.), *6757*
- piezoelectric devices, shells (of revolution), vibration (forced), Gololobov (V.I.), *7400*
- crystals, flaws, grinding, polycrystalline materials, strength, Rice (R.W.), Mecholsky (J.J.), (et al.), *7469*
- crack initiation, defects, nondestructive tests, stochastic systems, Evans (A.G.), Meyer (M.E.), (et al.), *7470*
- fatigue, micromechanics, Evans (A.G.), *8376*
- fracture criteria, fracture mechanics, griffith cracks, Nobile (L.), *8392*
- compaction, powders, Broese Van Groenou (A.), *9379*
- cracks, flaw detection, gas turbines, photoacoustic microscopy, surface flaws, Inglehart (L.J.), Thomas (R.L.), (et al.), *9435*
- acoustic measurements, brittle fracture, life expectancy, probability, risk, Richardson (J.M.), Evans (A.G.), *9437*
- electromechanical components, piezoelectric devices, vibration (free), Aronov (B.S.), *11131*

Ceranoglu (A.N.), acoustic emission, elastic waves, plates, Pao (Y.-H.), *11174*
Cerasoli (C.P.), see Orlanski (I.), *11588*
Cermak (J.E.), boundary layer (atmospheric), buildings (tall), wind, *7068*
cermets, composite materials, composite structures, fatigue, fracture, materials properties, metallic composites, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
Cerowski (Z.), elastic waves, electric effects, piezoelectric devices, surface waves, Opilski (A.), *1298*
Cess (R.D.), see Sparrow (E.M.), *3826, book*
- see Kolesnikov (P.M.), *5582*

Cezairliyan (A.) ed., thermal properties, thermodynamic properties, thermophysical properties, transport properties, *3770, book*
Cha (Y.S.), bubble dynamics, liquids, Henry (R.E.), *4828*
- cavitation, dilute solutions, equilibrium, two component flow, two phase flow, *12039*

Chaboche (J.-L.), damage, fatigue, hardening, interaction, steel, Kaczmarek (H.), (et al.), *7482*
Chaddock (J.B.), see Sud (I.), *5497*
Chadha (C.C.), see Tyagi (G.C.D.), *371*
Chadwick (F.J.), machining (electrochemical), residual stresses, strain measurement, surfaces, *5321*
Chadwick (P.), see Borejko (P.), *395*
Chae (Y.S.), see Au (W.-C.), *5252*
Chaffin (D.E.), see Reid (J.G.), *7249*
Chai (C.P.), see Haung (K.Z.), *1657*
Chai (H.), buckling (local), delamination, laminates, plates (orthotropic), Babcock (C.D.), (et al.), *2312*
Chai Hong Yoo, beams (thin section), structural stability, thin walled structures, *6248*

chains, diffusion, drops, mass transfer, saturation, Polianin (A.D.), *1738*
- chain links, damping, dynamic analysis, matrix methods, Eiber (A.), Schiehlen (W.), *1983*
- kinematics, networks, theory, Davies (T.H.), *5373*

Chakkalakal (D.A.), see Johnson (M.W.), *9051*
Chakrabarti (A.), convection (forced), porous media, rotating bodies, Gupta (A.S.), *4840*
- boundary value problems, laplace equation, mellin transform, singular integral equations, transforms, wedges, *4979*

Chakrabarti (S.K.), experimental results, gravity waves, gravity waves (cnoidal), nonlinear waves, wave generation, *678*
- crossflow, drag coefficient, tube bundles, virtual mass, *3716*
- see Naftzger (R.A.), *8039*
- drag, floating structures, ocean waves, ship motion, *8040*

Chakraborty (B.B.), dispersion relation, models, oscillations, rayleigh taylor instability, stabilization, *8825*
Chakravartty (I.C.), see Rahman (M.), *10393*
Chakravarty (A.J.M.), asymptotic behavior, drag, orbit decay, planetary atmospheres, *4760*
Chakravarty (S.), see Misra (J.C.), *7646*
Chakravorty (J.G.), cylindrical bodies, elasticity (nonhomogeneous), nonhomogeneous media, torsion, *4340*
Chalikov (D.V.), see Makin (V.K.), *1902*
- numerical methods, turbulence (geophysical), wind-wave interaction, *4657*

Chalk (P.L.), loads, random loading, stochastic processes, Corotis (R.B.), *1432*
Chalko (T.), displacement, holography, interferometry, real time solution, receptance measurement, *2477*
Chalmers (D.W.), draft, hydrostatics, matrix methods, ships, trim, *3033*
Chalyi (A.V.), see Fakhretdinov (I.A.), *5611*
Chambarel (A.), liquid metals, magneto fluid dynamics, measurements (dynamic), unsteady effects, velocity profiles, Ricou (R.), (et al.), *8827*
Chambers (A.J.), see Antonia (R.A.), *1583*
- see Antonia (R.A.), *5450*
- see Antonia (R.A.), *9617*
- see Antonia (R.A.), *9939*

Chambers (L.G.), acoustic waves, half space, impulse, reflection, *6930*
Chan (A.K.F.), arcjets, gaseous fuels, generators, plasma jets, Hilliard (J.C.), (et al.), *2905*
Chan (A.M.C.), see Banerjee (S.), *940*
- hydraulics, rewetting, tubes, unsteady flow, Banerjee (S.), *10825*

Chan (C.Y.), see Alexiades (V.), *10593*
Chan (D.P.), creep, fuel elements, nonlinear materials, nuclear reactors, Jackson (R.J.), *4346*
Chan (H.C.), joints, limit analysis, rocks, wedges, Einstein (H.), *9372*
Chan (M.Y.T.), see Cheung (M.S.), *8253*
Chan (P.C.-H.), annuli, drops, shear flow, Leal (L.G.), *2986*
Chan (P.C.T.), see Chow (W.L.), *10438*
Chan (S.H.), see Cheung (F.B.), *8743*
Chan (S.T.), dispersion, finite element methods, natural gas, simulation, Gresho (P.M.), (et al.), *8902*
Chan (V.W.C.), see Torrance (K.E.), *9724*
Chan (W.-Y.T.), interaction, mathematical models, series, stochastic processes, Wallis (K.F.), *1100*
Chan (Y.Y.), aerodynamic interference, blockage, transonic flow, wind tunnels, *714*
Chand (J.), convection (free), cylindrical bodies, heat transfer, laminar flow, rayleigh number, Vir (D.), *1679*
Chand (P.), see Prasad (N.K.), *1841*
Chand (S.), beams, bellows, design, mechanical design, plates, Garg (S.B.L.), *7523*
Chander (S.), anisotropic media, elastic bodies, love waves, nonhomogeneous media, Gogna (M.L.), *7423*
Chandna (O.P.), magneto fluid dynamics, rotational flow, streamlines, theory, two dimensional flow, Toews (H.), (et al.), *2875*
- compressible flow, magneto fluid dynamics, plates (skew), stream function, theory, Barron (R.M.), *8814*

Chandra (P.), see Radhakrishnamacharya (G.), *4119*
Chandra (S.), see Kenny (R.A.), *3445*
Chandran (K.B.), see Yearwood (T.L.), *6023*
- biomechanics, ducts (curved), flow reversal, pressure gradient, pulsatile flow, vortex flow, Yearwood (T.L.), *11485*

Chandrsuda (C.), mixing layers, reattachment, steps, turbulence, turbulence (structure), Bradshaw (P.), *5464*
Chang (C.B.), ballistics, estimation, least squares, trajectories, *130*
Chang (C.S.), modeling, railroads, soil mechanics, Adegoke (C.W.), (et al.), *422*
Chang (C.T.), see Zienkiewicz (O.C.), *6387*
Chang (D.C.), see Ford (J.S.), *509*
- see Ford (J.S.), *1439*
- see Ford (J.S.), *8450*

Chang (G.-L.), see Hung (T.-K.), *4906*
- see Hung (T.-K.), *7105*

Chang (H.H.), channel flow, discharges, energy transport, minimization, sediment transport, *556*
- channel flow, discharges, free boundary, sediment transport, *1492*

Chang (I.-D.), see Cheng (P.), *1680*
- see Brasseur (J.C.), *2599*

Chang (I.-S.), compressible flow, nozzles, particle fluid flow, rockets, *624*
Chang (J.-J.), see Lee (J.-J.), *974*
Chang (J.C.), drawing, gravity, hydrodynamic stability, inertia, surface tension, Denn (M.M.), (et al.), *7741*
Chang (J.C.H.), buildings (tall), modal control, structural design, wind loads, Soong (T.T.), *222*
Chang (K.J.), crack propagation, cracks, fracture criteria, strain energy, *1363*
- biaxial loading, crack branching, elliptical cracks, failure, *3456*

Chang (L.M.), boundary layer, compressible flow, laminar flow, unsteady state, Chen (C.-J.), *10430*
Chang (M.), excitation, inhomogeneities, perturbations, plasma, waves, *4751*
Chang (P.H.), conservation laws, existence theorems, hyperbolic equations, shock waves, *9639*
Chang (R.), elliptical cracks, flaws, fracture mechanics, transfer functions, *6460*
- flaws, fracture mechanics, multiple cracks, nondestructive tests, *10285*

Chang (S.C.), see Ragheb (H.S.), *5544*
Chang (T.), see Hsiao (L.), *2618*
Chang (T.T.S.), earth, magneto plasma dynamics, nonlinear waves, plasma, shock waves, *5682*
Chang (T.Y.), finite element methods (hybrid), finite strain, large displacement, shells (anisotropic), shells (sandwich), Sawamiphaksi (K.), *3311*
Chang (Y.P.), see Huang (S.C.), *8733*
Chang (Y.W.), crystals, ductile fracture, forming, fracture mechanics, lattices, Asaro (R.J.), *6433*
Chang-Ho Son, see Moon-Uhn Kim, *573*
Chankong (V.), algorithms, dynamic programming, multiobjective methods, numerical methods, Haimes (Y.Y.), (et al.), *11083*
channel flow, cosserat fluids, hamel flow, micropolar media, polar fluids, Kaloni (P.N.), Kamel (M.T.), *550*
- bottom irregularities, dimensional analysis, intakes, modeling, Venkataraman (P.), *555*
- discharges, energy transport, minimization, sediment transport, Chang (H.H.), *556*
- bottom irregularities, free boundary, friction (skin), sediment transport, Engel (P.), Lau (Y.L.), *557*
- flumes, free boundary, inviscid fluid, surface profiles, velocity profiles, Davis (R.W.), Deutsch (S.), *560*
- leaks, two dimensional flow, wavy walls, Hasegawa (E.), Fukuoka (N.), *609*
- laminar flow, porous walls, unsteady flow, Bhattacharyya (P.), *620*
- heat addition, laminar flow, Bar-Cohen (A.), *737*
- boiling, critical heat flux, roughness, surface effect, Styrikovich (M.A.), Leontev (A.I.), (et al.), *742*
- convection, emissivity, heat transfer (combined modes), radiation, Sparrow (E.M.), Shah (S.), (et al.), *782*
- discharges, free boundary, sediment transport, Chang (H.H.), *1492*
- reservoirs, stratification, supercritical flow, variational methods, Benjamin (T.B.), *1495*
- finite difference methods, free boundary, one dimensional flow, open channels, unsteady flow, Maczuga (T.), *1501*
- numerical analysis, pressure distribution, separation, Ghia (U.), Ghia (K.N.), (et al.), *1554*
- free boundary, one dimensional flow, stratified flow, Gardner (G.C.), *2581*
- free boundary, froude number, sediment transport, Barr (D.I.H.), Alam (M.K.), (et al.), *2592*
- boundary layer, reynolds number, sediment transport, transition flow, Ramaprian (B.R.), Mueller (A.), *2632*
- gravity waves (surface), propagation, rivers, saint venants equation, tides, Chatterjee (A.K.), *2707*
- boiling, bubbly flow, convection (forced), critical heat flux, Hebel (W.), Detavernier (W.), (et al.), *2794*
- cellular flow, convection (free), numerical methods, thermodynamics (nonequilibrium), Luijkx (J.M.), Platten (J.K.), *2900*
- convection, nusselt number, solar collectors, Mouton (H.), Couanon (J.C.), (et al.), *2908*
- cooling, heat exchangers, heat transfer, laminar flow, Nikitenko (N.I.), Tsybulenko (E.V.), (et al.), *2929*
- combustion, hydrogen, shock waves, supersonic flow, Zimont (V.L.), Levin (V.M.), (et al.), *2965*
- bottom irregularities, free boundary, slots, Nasser (M.S.), Venkataraman (P.), (et al.), *3599*
- free boundary, sediment transport, velocity profiles, Itakura (T.), Kishi (T.), *3606*
- discharges, finite difference methods, sediment transport, Pezzoli (G.), *3608*
- pumps, unsteady flow, variational methods, Atanov (G.A.), Voronin (S.T.), *3665*
- developing flow, hydrodynamic stability, orr sommerfeld equation, perturbations, two dimensional flow, Gupta (S.C.), Garg (V.K.), *3696*
- developing flow, hydrodynamic stability, reynolds number (critical), stability theory, Gupta (S.C.), Garg (V.K.), *3700*
- heat transfer, micropolar media, unsteady flow, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *3805*

- convection, porous walls, viscoelastic fluids, Mohapatra (P.), Devi (P.), *3806*
- conduction (heat), heat addition, heat exchangers, rockets, Sultanian (B.K.), Sastri (V.M.K.), *3813*
- averaging, magnetic fluids, magneto fluid dynamics, reynolds number, Lavrentev (I.V.), *3895*
- permeability, porous media, Kubik (J.), *4027*
- biomechanics, channels, darcy flow, river beds, roughness, vegetation, Kouwen (N.), Li (R.-M.), *4569*
- bottom irregularities, free boundary, particle fluid flow, turbulence, Sumer (B.M.), Deigaard (R.), *4572*
- free boundary, jets, mixing, velocity measurement, weirs, Naib (S.K.A.), *4576*
- boundary roughness, plates (parallel), stokes flow, Phan-Thien (N.), *4583*
- boundary layer (turbulent), preston tubes, shear stress, walls, Kiske (S.), Vasanta Ram (V.), (et al.), *4599*
- hydrodynamic stability, pipe flow, stability theory, Stuart (J.T.), Meyer (R.E.), *4641*
- gravity waves (surface), numerical methods, unsteady flow, Edenhofer (J.), Schmitz (G.), *4666*
- boiling, critical heat flux, Katto (Y.), *4701*
- boiling, evaporation, film flow, heat exchangers, heat transfer, Vasilev (L.L.), Abramenko (A.N.), (et al.), *4721*
- estuaries, rotating fluids, Nof (D.), *4869*
- cylindrical bodies, drag coefficient, floating bodies, free boundary, froude number, Zein (S.A.A.), *5388*
- flow irregularities, flow obstructions, pressure drop, reynolds number (high), Unger (J.), *5439*
- experimental results, turbulence, turbulence (structure), Nakagawa (H.), Nezu (I.), (et al.), *5468*
- convection, heat transfer, micropolar media, Migun (N.P.), *5538*
- cooling, cryogenics, transient effects, Gorbachev (S.P.), Krikunov (A.A.), (et al.), *5571*
- boiling, circulation, cooling, heat exchangers, thermal instability, Braginskiy (A.M.), Ivanov (L.B.), *5593*
- crossflow, erosion, river beds, scour, wall jets, Rajaratnam (N.), *6596*
- finite difference methods, flood routing, reservoirs, Desikan (V.), Nath (S.C.), *6597*
- bottom irregularities, force, gates, hydraulic jump, Narayanan (R.), Schizas (L.S.), *6602*
- boundary integral methods, fredholm equations, stokes flow, two dimensional flow, Bezine (G.), Bonneau (D.), *6620*
- cooling, injection molding, polymers, two dimensional flow, viscoelastic fluids, Isayev (A.I.), Hieber (C.A.), *6656*
- cavities, convection, thermal instability, Unger (J.), *6784*
- currents, estuaries, rotating fluids, Nof (D.), *7053*
- bed load, free boundary, secondary flow, Ikeda (S.), *7647*
- free boundary, froude number, stability, turbulent flow, Berlamont (J.E.), Vanderstappen (N.), *7648*
- energy dissipation, free boundary, variational methods, Song (C.C.S.), Yang (C.T.), *7650*
- critical speed, free boundary, particle fluid flow, pipe flow, Bonapace (A.C.), *7658*
- laminar flow, pressure drop, runge kutta method, viscous flow, wavy walls, Vajravelu (K.), Nayfeh (A.H.), *7714*
- eigenvalue problems, gravity waves, Ivashchenko (B.P.), Nikitin (S.K.), *7765*
- annular flow, heat transfer, turbulent flow, variable fluid properties, Nemira (M.), Vilemas (J.), (et al.), *7827*
- boiling, convection (forced), cooling, critical heat flux, heat exchangers, Zeigarnik (Yu.A.), Privalov (N.P.), (et al.), *7834*
- binary flow, glaciers, Spring (U.), Hutter (K.), *7872*
- magneto fluid dynamics, plates (parallel), theory, velocity profiles, Belogrivtsev (V.M.), *7895*
- incompressible flow, lubrication (hydrodynamic), navier stokes equation, plates (parallel), squeeze films, Verma (R.L.), *8057*
- elliptic equations, hyperbolic equations, unsteady flow, vortex flow, Lyapidevskii (V.Yu.), *8507*
- flow obstructions, free boundary, stratified flow, two dimensional flow, Janowitz (G.S.), *8532*
- flow reversal, laminar flow, moving surfaces, navier stokes equation, Brady (J.F.), Acrivos (A.), *8566*
- duct flow, laminar flow, shock waves, wakes, Byrkin (A.P.), Shchennikov (V.V.), *8568*
- galerkin method, simulation, turbulent flow, Rozhdestvensky (B.L.), Priymak (V.G.), *8569*
- existence theorems, gravity waves (finite depth), unsteady flow, Forste (J.), *8623*
- ducts (curved), gases, three dimensional flow, Sepp (V.A.), *8688*
- crossflow, film cooling, injection, Alekseyev (N.M.), Zelengur (A.A.), *8689*
- closed conduit flow, convection (free), laminar flow, Nansteel (M.W.), Greif (R.), *8701*
- conduction (heat), rewetting, Salcudean (M.), Rahman (M.), *8731*
- heat exchangers, thermal diffusion, transient effects, Suvorov (A.V.), Rabinovich (G.D.), *8746*
- boiling, evaporation, Mironov (Yu.V.), *8760*
- boundary layer (thermal), heat transfer, magneto fluid dynamics, performance, Ahluwalia (R.K.), Doss (E.D.), *8826*
- bottom irregularities, free boundary, hydraulic jump, separation, Bouhadef (M.), Bauche (B.), (et al.), *9510*
- cavitation, erosion, variable area flow, venturi tubes, vibration, He (J.-G.), Hammitt (F.G.), *9516*
- channels (divided), flow obstructions, poiseuille flow, wedges, Zamir (M.), Camiletti (S.E.), *9575*
- cavities, liquid liquid interface, viscoplasticity, Burde (G.I.), Ilyasov (E.P.), (et al.), *9582*
- convection, non newtonian flow, variable fluid properties, Benderskaya (S.L.), Khusid (B.M.), (et al.), *9583*
- dispersion, shear flow, turbulence, turbulence (transport), Durbin (P.A.), *9609*
- convection (forced), slots, thermal stresses, turbulent flow, Ryadno (A.A.), Franko (N.V.), *9683*
- convection (forced), pipe flow, viscous effects, Nazmeev (Yu.G.), Feifer (L.I.), (et al.), *9684*
- conduction, convection (forced), heat transfer (combined modes), nucleate boiling, thermal instability, Humbert (M.), Martin (M.), *9685*
- liquid liquid interface, liquid metals, stratified flow, turbulent flow, Takahashi (M.), Inoue (A.), (et al.), *9691*
- augmentation, convection (free), extended surfaces, heat transfer, plates (parallel), rayleigh number, Sparrow (E.M.), Prakash (C.), *9699*
- conduction (heat), hydrodynamic stability, thermal instability, transition flow, Hassab (M.A.), Ozisik (M.N.), *9702*
- heat transfer, non newtonian flow, power law fluids, shear stress, viscoelastic fluids, Shulman (Z.P.), Khusid (B.M.), (et al.), *9708*
- casting, film flow, non newtonian flow, plates (parallel), polymers, squeeze films, Kazankov (Yu.V.), Pervushin (V.E.), *9709*
- conformal mapping, flow irregularities, separated flow, separation, Dzugaev (V.V.), *10436*
- axisymmetric flow, channels (divided), divided flow, irrotational flow, Konovalov (A.E.), *10437*
- entrance region, turbulence model, turbulent flow, Zaryankin (A.E.), Likherzak (E.E.), (et al.), *10440*
- ducts (curved), non newtonian flow, power law fluids, screw machinery, slip flow, Pervadchuk (V.P.), Yankov (V.I.), (et al.), *10442*
- finite element techniques, holes, plates (holed), viscoelastic fluids, Richards (G.D.), Townsend (P.), *10445*
- boilers, dynamic stability, liquid vapor mixture, vibration, Vlasov (S.M.), Ratnikov (E.F.), (et al.), *10486*
- aerodynamic interference, pressure measurement, walls, Heikal (H.), *10538*
- granular media, heat transfer, nusselt number, peclet number, Spelt (J.K.), Brennen (C.E.), (et al.), *10570*
- fluid injection, heat transfer, nusselt number, porous walls, suction, Yeroshenko (V.M.), Zaichik (L.I.), (et al.), *10572*
- boundary conditions, convection (forced), micropolar media, microstructural fluids, thermal effects, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *10573*
- buoyant flow, cavities, convection, heat transfer, laminar flow, Humphrey (J.A.C.), Jacobs (E.W.), *10585*
- convection, heat transfer (combined modes), plates (parallel), radiant interchange, solar collectors, Liu (C.H.), Sparrow (E.M.), *10610*
- convection, heat transfer (combined modes), radiant interchange, scattering, turbulent flow, Popov (Yu.A.), Polovnikov (V.I.), *10611*
- thermosyphons, two phase flow, Beinusov (A.G.), Utkin (V.B.), *10619*
- cylindrical bodies, extended surfaces, fins, heat transfer, Vanfossen (G.J.), *10621*
- coolers, cooling, power generation, spray canals, sprays, Chaturvedi (S.K.), Porter (R.W.), *10642*
- circuits, heat transfer, magneto plasma dynamics, rarefied gases, Soundalgekar (V.M.), Akolkar (S.P.), *10737*
- end effects, magneto fluid dynamics, numerical methods, walled structures, Sarma (P.R.L.), Mittal (M.L.), (et al.), *10752*
- helical flow, magneto fluid dynamics, pumps, two dimensional flow, Kapusta (A.B.), Zibold (A.F.), (et al.), *10756*
- internal flow, tube bundles, Aly (A.M.M.), *10824*
- plates (parallel), sedimentation, suspensions, Herbolzheimer (E.), Acrivos (A.), *11358*
- plane flow, poiseuille flow, rarefied gases, Siewert (C.E.), *11437*
- kinetic theory, pressure, Chernyak (V.G.), Kalinin (V.V.), (et al.), *11443*
- diffusion, mass transfer, roughness, Polyakova (L.A.), Shakhov (V.G.), *11486*
- laminar flow, particle dynamics, sublayers, turbulent flow, Grishin (Yu.M.), Mosin (A.A.), *11489*
- dispersion, mass transfer, non newtonian flow, solutions (material), Soundalgekar (V.M.), Mohiuddin (M.), *11505*
- noncircular pipes, viscoplasticity, Jakovenko (A.), *11507*
- heat transfer, porous surfaces, pulsatile flow, viscoelastic fluids, Roy (J.S.), Nayak (P.), (et al.), *11509*
- cavities, non newtonian flow, viscoelastic fluids, Burde (G.I.), Ilyasov (E.P.), (et al.), *11510*
- hydrodynamic stability, shear flow, stability theory, turbulent flow, velocity profiles, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- acoustic properties, boiling, hydrodynamic stability, two phase flow, Romberg (T.M.), Rees (N.W.), *11540*

- boundary layer (turbulent), swirl flow, turbulence (structure), velocity profiles, Shchukin (V.K.), Khalatov (A.A.), (et al.), *11547*
- basins, critical flow, rotating bodies, weirs, Shen (C.Y.), *11614*
- capillary flow, evaporation, heat pipes, Suslov (A.D.), Ustinov (V.Ya.), *11772*
- diffusion coefficient, rivers, water pollution, West (J.R.), Cotton (A.P.), *11777*
- electrical conductivity, magneto fluid dynamics, temperature, theory, Vishnyakov (V.I.), Sultanov (I.F.), *11806*
- magneto fluid dynamics, mathematical models, pumps, stability theory, Poklonskii (E.V.), Elkin (A.I.), *11807*
- drag coefficient, helical flow, magneto fluid dynamics, pumps, Kapusta (A.B.), Likhacheva (A.I.), (et al.), *11808*
- elastoplasticity, magneto fluid dynamics, stability theory, tensor methods, viscous flow, Simkhovich (S.L.), Ionochkina (L.I.), (et al.), *11809*
- acoustic waves, ionized gases, propagation, shock waves, Levin (V.A.), *11811*
- particle fluid flow, two phase flow, Chizhov (V.I.), Demura (M.V.), *12020*

channels, mixing layers, screens, turbulence, wind, Kit (E.), Berent (E.), (et al.), *559*
- gravity waves (internal), shear flow, stratified flow, wave interactions, Grimshaw (R.), *1601*
- bed load, rivers, sediment transport, Bagnold (R.A.), *3605*
- aeration, particles, porous walls, two phase flow, Ishida (M.), Hatano (H.), (et al.), *4006*
- laminar flow, suspensions, Rubinstein (I.), *4009*
- deposition, entrance region, suspensions, Korjack (T.A.), Chen (R.Y.), *4010*
- biomechanics, channel flow, darcy flow, river beds, roughness, vegetation, Kouwen (N.), Li (R.-M.), *4569*
- multicomponent flow, multiphase flow, Barrau (J.J.), Fabre (J.), (et al.), *4824*
- design criteria, generators, magneto plasma dynamics, open loop systems, Kessler (R.), *5681*
- divergence, free boundary, hydraulic jump, France (P.W.), *6595*
- bgk model, condensation, rarefied gases, two dimensional flow, Gajewski (P.), Wismiewski (A.), *6634*
- discontinuities, free boundary, surface profiles, surge, Barr (D.I.H.), Das (M.M.), *7651*
- discharges, flood waves, free boundary, saint venants equation, Sridharan (K.), Mohan Kumar (M.S.), *8506*
- discharges, head, shallow water, spillways, Sivakumaran (N.S.), Hosking (R.J.), (et al.), *9505*
- erosion, river beds, variable area flow, Gill (M.A.), *9507*
- hinged bodies, moment coefficient, pressure, wavemakers, Hudspeth (R.T.), Leonard (J.W.), (et al.), *9511*
- porous walls, pressure gradient, unsteady flow, Sai (K.S.), *10446*
- finite difference methods, ships, three dimensional formulation, wave generation, Ohring (S.), *11580*
- boussinesq equation, finite amplitude, gravity waves (solitary), Toland (J.F.), *11587*
- friction factor, perturbation methods, tidal waves, Kabbaj (A.), Le Provost (C.), *11610*
- flow irregularities, gravity waves (surface), submerged bodies, Jeffrey (A.), Mvungi (J.), *11676*
- leading edge, missiles, supersonic flow, wedges, Chushkin (O.I.), *11732*

channels (closed), boundary conditions, conduits, convection (free), transforms, De Socio (L.M.), Misici (L.), *1683*
- jets, return flow, Sallam (T.M.), Kaji (M.), (et al.), *2660*
- counterflow, turbulent flow, visualization, vortex flow, Humphrey (J.A.C.), Li (S.), *5397*
- diffusers, ducts (variable area), stratified flow, turbulence, Mehta (P.R.), *9502*

Chao (E.Y.S.), biological joints, experimental methods, human body, kinematics, *9048*

Chao (S.-Y.), baroclinic waves, bottom irregularities, internal waves, kelvin waves, *8976*

Chao (S.P.), boundary layer (atmospheric), shear flow, turbulence (geophysical), wind-wave interaction, *8034*

Chao (W.C.), see Reddy (J.N.), *3310*
- see Reddy (J.N.), *5128*
- see Reddy (J.N.), *9273*

Chaplin (J.R.), cylindrical bodies, gravity waves (surface), irrotational flow, submerged bodies, unsteady flow, *11633*

Chapman (C.J.), convection (benard), insulating materials (thermal), nonlinear theory, rayleigh benard instability, Proctor (M.R.E.), *2607*

Chapman (M.C.), evaporation, fins, heat exchangers (crossflow), otec evaporator, pressure drop, transient loading, Heydt (G.T.), *7867*

Chapoy (L.L.), see Pedersen (S.), *2577*

Charackis (W.G.), conduction (heat), heat exchangers, microbial fouling, resistance, thermal contact resistance, thermal effects, Nimmons (M.J.), (et al.), *6812*

characteristic methods, compressible flow, linear theory, three dimensional formulation, Hendriks (T.P.M.), *40*
- compressional waves, pipelines, pneumatic components, transient effects, Matsumoto (Y.), Ishibashi (K.), *1597*
- hyperbolic equations, pipelines, rupture, shock tubes, Cronje (J.S.), Bishnoi (P.R.), (et al.), *3721*
- shock waves, sonic booms, supersonic flow, three dimensional flow, Hendriks (T.P.M.), *4592, book*
- hyperbolic equations, unsteady flow, waves, Kluwick (A.), *4964*
- cauchy problem, crystals, hyperbolic equations, refraction, Uhlmann (G.A.), *4978*
- coding, fluidics, networks, unsteady flow, Haloulakos (V.E.), *5487*
- euler equations, finite element techniques, vorticity, Bardos (C.), Bercovier (M.), (et al.), *7680*
- explosions, implosion, shock waves, Yousaf (M.), *8637*
- discontinuities, dissociation, gases, Sharma (V.D.), Sharma (J.), (et al.), *9636*
- hyperbolic equations, matrices, unsteady flow, Edenhofer (J.), Schmitz (G.), *11392*
- cylindrical bodies, fluid-structure interaction, numerical methods, Takeuchi (K.), Spencer (A.C.), *11625*

Charakhchyan (A.A.), compressible flow, dissociation, finite difference methods, numerical methods, shock waves, *11431*

charged particles, electro-osmosis, fluid mechanics, porous media, Auriault (J.L.), Strzelecki (T.), *949*
- electro fluid dynamics, inertia, one dimensional flow, two phase flow, Vatazhin (A.B.), Grabovskii (V.I.), *1774*
- fog, jets, nozzles, precipitation, survey, Frost (W.), Collins (F.G.), (et al.), *3893*
- energy spectrum, ionic flow, laser plasma interaction, measurements (dynamic), Clement (R.M.), Davies (R.A.), (et al.), *5689*
- currents, diagnostics, plasma, saturation, Benilov (M.S.), Tirskii (G.A.), *6858*
- brownian motion, diffusion, Prem (A.), Pilat (M.J.), *7001*

Chari (T.R.), see Lopez (R.), *6611*

Charit (Y.), bones, geometrical properties, rigid bodies, *9070*

Charles (J.A.), see Wilson (D.W.), *7576*

Charlton (T.M.), muller-breslau principle, structures, virtual work methods, *2505*

Charmchi (M.), see Sparrow (E.M.), *4699*
- see Ramsey (J.W.), *10637*

Charnay (G.), see Bario (F.), *9592*

Charnaya (I.S.), see Vilenkin (S.Ya.), *2113*

charpy tests, fractography, fracture energy, fracture toughness, notch tests, Oldfield (W.), *2498*
- crack opening displacement, crack resistance, indentation, notch tests, Belik (A.V.), Dolzhenkov (F.E.), (et al.), *3502*
- crack resistance, dynamic loads, fracture toughness, steel, strain energy, Basko (E.M.), Makhutov (N.A.), *4519*
- crack growth, electrical analysis, steel, Okumura (N.), Venkatasubramanian (T.V.), (et al.), *5293*
- cast steel, ductility, fracture control, microstructures, steel, Fortner (E.) eds., Praeger (M.), *6476, book*

Charrier (J.M.), composite materials, conduction (steady), finite difference methods, iterative methods, Gupta (R.), (et al.), *282*

Chashechkin (Yu.D.), convection (free), cylindrical bodies, heat, stratified flow, Popov (V.A.), *577*
- buoyant flow, convection (free), heat transfer, stratified flow, thermal instability, Tupitsyn (V.S.), *1684*
- see Popov (V.A.), *2667*
- see Tupitsyn (V.S.), *11514*

Chater (E.), see Neale (K.W.), *274*

chatter, digital control, process control, turning, Eman (K.), Wu (S.M.), *437*
- tools, vibration (self excited), Kondo (Y.), Kawano (O.), (et al.), *2354*
- bearings (journal), elastomers, vibration, water, Krauter (A.I.), *4890*
- cutting, dynamic analysis, mathematical methods, vibration (forced), De Canniere (J.), Van Brussel (H.), (et al.), *9325*

Chatterjee (A.K.), channel flow, gravity waves (surface), propagation, rivers, saint venants equation, tides, *2707*
- see Debnath (L.), *11359*

Chatterjee (S.S.), bed load, erosion, jets, sediment transport, shear stress, Ghosh (S.N.), *2591*

Chatterton (J.B.), see Penning-Rowsell (E.C.), *4043*

Chattopadhyay (A.), half space, interface phenomena, love waves, prestressed structures, viscoelastic materials, De (R.K.), *9342*

Chattopadhyay (B.C.), see Saha (S.), *11150*

Chattoraj (D.), beam columns, compression, second order analysis, structural stability, Bose (S.K.), *5177*

Chattot (J.-J.), blades, helicopters, numerical methods, pressure distribution, transonic flow, unsteady flow, Philippe (J.-J.), *9686*

Chaturani (P.), see Soundalgekar (V.M.), *6655*
- couple stresses, poiseuille flow, polar fluids, *8497*
- blood flow, couple stresses, poiseuille flow, Rathod (V.P.), *8577*
- blood flow, couple stresses, mixture theories, particle fluid flow, polar fluids, Upadhya (V.S.), *9060*

Chaturvedi (G.K.), acoustics, flaw detection, machinery, noise measurements, Thomas (D.W.), *10374*

Chaturvedi (M.C.), see Chung (D.W.), *445*

Chaturvedi (S.K.), channel flow, coolers, cooling, power generation, spray canals, sprays, Porter (R.W.), *10642*

Chatwin (P.C.), diffusion, mass transfer, plumes, turbulence (transport), Sullivan (P.J.), *656*

Chau (T.S.), see Soliman (H.M.), *3786*

Chaudhary (H.R.), see Chawla (A.N.), *5159*

Chaudhary (R.C.), heat transfer, laminar flow, plates (parallel), porous surfaces, Gaur (Y.N.), *10683*
Chaudhry (M.H.) eds., cavitation, closed conduit flow, piping systems, slurries, transient effects, Yevjevich (V.), *3596, book*
Chaudhuri (K.S.), see Mondal (S.K.), *10873*
Chaudhuri (S.K.), galerkin method, plates (simply supported), plates (triangular), vibration (free), *7394*
Chaussee (D.S.), see Hung (C.M.), *5413*
Chauvin (C.), see Brun (R.), *2723*
Chawla (A.N.), bending, cosserat solids, plates, plates (annular), Chaudhary (H.R.), *5159*
Chawla (M.M.), boundary value problems, differential equations (ordinary), discrete systems, finite difference methods, Katti (C.P.), *57*
Chawla (O.P.), see Khandwawala (A.I.), *72*
- augmentation, energy conservation, radiant interchange, regenerators, waste heat, Khandwawala (A.I.), *9733*

Chazan (D.), see Ramm (D.), *7005*
Cheatham (J.B.), see Celle (C.C.), *5265*
Cheatham (J.B.) Jr., see Smith (M.B.), *2390*
Chebanova (N.A.), asymptotic behavior, dirichlet problem, fourier series, tricomi problem, *8116*
Chebulaev (V.V.), boilers, design, nonuniform flow, steam, superheater, Lokshin (V.A.), *3881*
chebyshev approximations, linkages, mechanisms, Dijksman (E.A.), *1472*
- plates (annular), plates (orthotropic), postbuckling behavior, Reddy (B.S.), Alwar (R.S.), *5180*

Chee-Seng (L.), gravity waves, oscillations, pressure distribution, wave generation, *672*
Chekalov (M.A.), see Bykov (N.N.), *10525*
Chekin (O.N.), measurements, nondestructive tests, strain measurement, structures, surfaces, *10340*
Chekulaev (Yu.V.), see Buyakas (V.I.), *2193*
Chelomei (S.V.), dynamic stability, eigenvalues, elastodynamics, *2322*
Chelpanov (I.B.), see Gilbo (E.P.), *2139*
Chelyshev (N.A.), acoustic emission, crack propagation, monitoring, Chervov (G.A.), (et al.), *2464*
Chelyshkov (V.S.), flow irregularities, plane flow, three dimensional flow, *4660*
chemical kinetics, chemically reactive flow, combustion, elliptic equations, numerical methods, Greenberg (J.B.), Presser (C.), *3874*
- combustion, numerical methods, quenching, Dendy (J.E.) Jr., Wendroff (B.), *3875*
- combustion, diffusion, exhaust gases, Malte (P.C.), Schmidt (S.C.), (et al.), *3877*
- hydrogen, ignition, reaction rates, Rogers (R.C.), Schexnayder (C.J.) Jr., *4735*
- flames, models, two dimensional flow, Bracco (F.V.), O'Rourke (P.J.), *4737*
- flame propagation, mathematical models, reaction kinetics, Matkowsky (B.J.), Olagunju (D.O.), *4738*
- chemical reactors, combustion, differential equations (ordinary), Do (D.D.), Weiland (R.H.), *5626*
- exhaust gases, flames (diffusion), methane, nitric oxide, Mitchell (R.E.), Sarofim (A.F.), (et al.), *5635*
- combustion, flames (turbulent), reaction rates, Yoshida (A.), Gunther (R.), *6837*
- combustors, flames (turbulent), statistical mechanics, velocity profiles, Moreau (P.), *6838*
- chemical reactions, cylindrical bodies, Kapila (A.K.), Matkowsky (B.J.), *7878*
- absorption, drilling, rocks, Mills (J.J.), Westwood (A.R.C.), *8353*
- burning velocity, flames (laminar), methane, Fiallis (C.J.), Garforth (A.M.), *8791*
- chemical reactions, combustion, thermal effects, Tennankore (K.N.), *8792*
- chemically reactive flow, combustion, fluid mechanics, rockets, Markatos (N.C.), Spalding (D.B.), (et al.), *8796*
- combustors, emissions, Clark (W.D.), Folsom (B.A.), (et al.), *8797*
- mixtures, porous media, Liu (I.-S.), *8897*
- blast waves, detonation (two phase), explosions, explosive loading, Eidelman (S.), Sichel (M.), *9822*
- detonation, explosions, thermal explosions, Eidelman (S.), Sichel (M.), *9823*
- detonation, detonative ignition, explosions, thermal explosions, Kassoy (D.R.), Poland (J.), *9824*
- combustion, detonation, explosions, Dremin (A.N.), Nelin (V.M.), (et al.), *9825*
- detonation, detonative ignition, explosions, Ulyanitskii (V.Yu.), *9826*
- deflagration, detonation, explosions, Lesnyak (S.A.), Slutskii (V.G.), *9827*
- detonation (two phase), explosions, premixed fuel air, Vasilev (V.M.), Volpert (A.I.), (et al.), *9828*
- detonation (two phase), explosions, Putyatin (B.V.), *9829*
- detonation, explosions, Gendugov (V.M.), *9830*
- blast waves, detonation, explosions, propagation, Levin (V.A.), Svalov (A.M.), *9831*
- detonation, explosions, Shurshalov (L.V.), *9832*
- flame propagation, flames (laminar), Lovachev (L.A.), *10704*
- convection, interfaces, liquid liquid interface, surface tension, Dalle Vedove (W.), Sanfeld (A.), *11379*
- burning rate, deflagration, models, solid propellants, Ben-Reuven (M.), Caveny (L.H.), *11790*

chemical propulsion, electric propulsion, orbit transfer, vehicles, Rehder (J.J.), Wurster (K.E.), *849*
chemical reactions, absorption, interface phenomena, models, packed beds, Patwardhan (V.S.), *832*
- additives, friction, lubrication (boundary), metals, Sanin (P.I.), *1022*
- aerodynamic heating, blunt bodies, fluid injection, Karashima (K.), Nakahashi (K.), *1733*
- equilibrium, injection, ionization, plasma, Poissant (G.), Prudhomme (R.), *1779*
- convection (free), gas solid interface, Sotnichenko (L.V.), Shtessel (E.A.), *2851*
- dielectrics, electro fluid dynamics, liquids, tubes, Pribylov (V.N.), Chernyi (L.T.), *2879*
- boundary value problems, diffusion, dirichlet problem, mathematical methods, polymerization, Bobisud (L.E.), *3853*
- asymptotic methods, boundary layer, catalytic surface, Benilov (M.S.), Tirskii (G.A.), *3864*
- airplanes, ozone, upper atmosphere, Whitten (R.C.), Borucki (W.J.), (et al.), *4065*
- composite materials, differential equations (partial), diffusion, galerkin method, Cavendish (J.C.), Oh (S.H.), *4731*
- combustion, explosions, ignition, kinetics, Bowen (J.R.), Manson (N.), (et al.), *4734, book*
- compressible flow, jets, nonequilibrium flow, numerical methods, supersonic flow, Kireev (V.I.), Pirumov (U.G.), *5418*
- combustion, hydrocarbons, mathematical models, Arbib (H.A.), Goldman (Y.), (et al.), *5645*
- absorption, ocean, underwater acoustics, Mellen (R.H.), Browning (D.G.), (et al.), *5719*
- adhesion, friction, lubricants, lubrication, wear, Buckley (D.H.), *5972, book*
- constitutive equations, continuum mechanics, phase changes, Tokuoka (T.), *6037*
- deflagration, kinetic theory, nonlinear waves, transport phenomena, Abouseif (G.E.), Toong (T.Y.), *6708*
- coal, heat addition, liquefaction, rheology, Khandhadia (P.S.), Forsyth (T.H.), (et al.), *6769*
- explosions, ignition, ignition sensitivity, Burkina (R.S.), Vilyunov (V.H.), *6832*
- boiling, dissociation, unsteady flow, Andrizhievskii (A.A.), Mikhalevich (A.A.), (et al.), *6975*
- blades, cyclic loading, high temperature, surface flaws, Kosygin (E.P.), Verkhovodov (P.A.), *7492*
- experimental methods, mixing layers, turbulence (structure), wakes, Breidenthal (R.), *7756*
- chemical kinetics, cylindrical bodies, Kapila (A.K.), Matkowsky (B.J.), *7878*
- combustion (submerged), simulation, Coats (K.H.), *7992*
- chemical kinetics, combustion, thermal efkore (K.N.), 8792
- additives, antiwear films, fatigue, films, lubrication (elastohydrodynamic), rolling contact, wear, Sakurai (T.), *9961*
- burning velocity, combustion, heat transfer, particles, Strunin (V.A.), Dyakov (A.P.), (et al.), *10703*
- boltzmann equation, diffusion, pollution, Muller (K.H.), *11525*
- sound propagation, thermal effects, Tal (R.T.), *11958*

chemical reactors, heat transfer, Maksimov (E.I.), *827*
- exothermic reactions, theory, Butal.), *828*
- chemical kinetics, combustion, differential equations (ordinary), Do (D.D.), Weiland (R.H.), *5626*
- filtration, porous media, Ngoc (D.M.), *7006*
- chemically reactive flow, unsteady flow, Gupalo (Yu.P.), Novikov (V.A.), (et al.), *7720*

chemical thermodynamics, dilute solutions, statistical mechanics, thermodynamics (statistical), Dudowicz (J.), *6756*
chemically reactive flow, equilibrium, internal combustion engines, numerical methods, Ramshaw (J.D.), Cloutman (L.D.), *1756*
- boundary layer, frozen flow, lasers (gasdynamic), nozzles, supersonic flow, Bassina (I.A.), Dorot (V.L.), (et al.), *2639*
- boundary layer, ignition, plates, vaporization, Law (C.K.), Law (H.K.), *3865*
- boundary layer, ignition, nonequilibrium flow, plates, vaporization, Ahluwalia (R.K.), Chung (P.M.), *3866*
- chemical kinetics, combustion, elliptic equations, numerical methods, Greenberg (J.B.), Presser (C.), *3874*
- asymptotic beics, liquid gas mixture, modulated systems, waves, Bagdoev (A.G.), Oganyan (G.G.), *5488*
- catalysts, film boiling, Kirillov (V.A.), Ogarkov (B.L.), *5545*
- cycles, energy transport, heat pumps, thermodynamic processes, Abelson (H.I.), Horowitz (J.S.), *6752*
- convection (forced), plane flow, thermal instability, Eremin (E.A.), Kolesnikov (A.K.), *6785*
- combustion, flames (laminar), mathematical models, numerical methods, Oran (E.S.), Boris (J.P.), *6833*
- dilute solutions, polymers, Kwack (E.Y.), Hartnett (J.P.), (et al.), *7640*
- chemical reactors, unsteady flow, Gupalo (Yu.P.), Novikov (V.A.), (et al.), *7720*
- inlets, numerical analysis, scramjets, Kumar (A.), *7726*
- chemical kinetics, combustion, fluid mechanics, rockets, Markatos (N.C.), Spalding (D.B.), (et al.), *8796*
- numerical methods, porous media, Chin (R.C.Y.), Braun (R.L.), *8941*
- monte carlo analysis, real gas effects, turbulence model, turbulent flow, Pope (S.B.), *10479*

- aerosols, compressible flow, hypersonic flow, particle fluid flow, wakes, Dmitriev (L.M.), Markachev (Yu.E.), *11408*
- compressible flow, nonequilibrium flow, similarity methods, Kolesnichenko (E.G.), *11422*
- compressible flow, shock waves, supersonic flow, Ni (A.L.), Ryzhov (O.S.), *11424*
- axial flow, dispersed flow, Gupalo (Yu.P.), Novikov (V.A.), (et al.), *11500*

Chen (B.), bifurcation, capillary waves, finite amplitude, gravity waves (surface), Saffman (P.G.), *11595*
Chen (B.M.), see Zhu (Y.L.), *11398*
Chen (C.), design, seismic loading, Moreadith (F.L.), *8968*
Chen (C.-C.), arrays, detection, estimation, filters, radar, Andrews (H.C.), *195*
Chen (C.-J.), cavities, finite element methods (hybrid), heat transfer, two dimensional flow, Naseri-Neshat (H.), (et al.), *2605*
- see Chang (L.M.), *10430*

Chen (C.-L), dam breaks, dams, modeling, wave interactions, Armbruster (J.T.), *11613*
Chen (C.F.), see Paliwal (R.C.), *8712*
- see Paliwal (R.C.), *11536*

Chen (E.P.), see Sih (G.C.), *8414*
Chen (E.Y.-T.), axisymmetric loading, concrete, cracks, geomechanics, monotonic loading, Schnobrich (W.C.), *2450*
Chen (F.F.), see Yao (L.S.), *6777*
- see Yao (L.S.), *8748*

Chen (I-W.), see Cleary (M.P.), *2224*
Chen (J.), see Singh (S.N.), *1689*
- dynamic analysis, gyrodynamics, maneuverability, rotating bodies, Kane (T.R.), *3923*

Chen (J.C.), see Bennett (D.L.), *743*
- dynamic interaction, space vehicles, transient loading, vibration (forced), Zagzebski (K.P.), (et al.), *6314*

Chen (J.Y.F.), see Bell (J.F.W.), *1836*
Chen (L.-T.), axisymmetric bodies, compressible flow, finite difference methods, three dimensional flow, transonic flow, Caughey (D.A.), *2614*
- rotating disks, thermal stresses, vibration (thermally excited), Dugundji (J.), *5797*
- airfoils, finite difference methods, transonic flow, two dimensional flow, *10497*

Chen (M.), boltzmann equation, gases, kinetic theory, particles, Chen (M.-C.), *11440*
- see Hudspeth (R.T.), *7653*

Chen (N.C.J.) Jung (L.), bifurcation, cooling towers, drops, plumes, vortices, *4058*
Chen (N.N.S.), bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), Ho (K.W.), *7099*
Chen (P.Y.P.), boundary value problems, conduction (unsteady), differential equations (ordinary), lanczos-chebyshev, stress analysis, *7192*
Chen (R.Y.), see Korjack (T.A.), *4010*
- deposition, entrance region, suspensions, tubes, Gelber (M.W.), *6957*

Chen (S.-F.), beam columns, beams (flexural), buckling (torsional), *6247*
Chen (S.-H.), see Ho (C.-M.), *7735*
Chen (S.-S.), cylindrical bodies, damping, heat exchangers, tube bundles, *10490*
Chen (S.S.), see Lin (W.H.), *3931*
- crossflow, damping, tube bundles, Jendrzejczyk (J.A.), *4662*
- crossflow, dynamic stability, tube bundles, vibration (flow induced), Jendrzejczyk (J.A.), *11647*

Chen (T.-C.), see Long (R.R.), *645*
Chen (T.S.), boundary layer, heat transfer, mass transfer, moving surfaces, thermal diffusion, Strobel (F.A.), *8776*
- see Moutsoglou (A.), *10465*

Chen (T.W.), see Spanos (P.-T.D.), *5697*
Chen (W.F.), beam columns, buckling, end effects, imperfections, *3324*
- concrete, nonlinear analysis, plastic behavior, shells (cylindrical), Suzuki (H.), (et al.), *5116*
- concrete, constitutive equations, cracks, work hardening, Suzuki (H.), *5117*
- beam columns, beams, connections, Patel (K.V.), *10139*

Chen (W.L.), fuel elements, mathematical models, melting, nuclear reactors, Ishii (M.), (et al.), *5589*
Chen (Y.-H.), see Chen (Y.-Z.), *6444*
Chen (Y.-T.T.), see Lutes (L.D.), *2019*
Chen (Y.-Z.), boundary value problems, cracks, plates, Chen (Y.-H.), *6444*
Chen (Y.M.), conduction (heat), conductivity, inverse problems, mathematical models, numerical methods, Liu (J.Q.), *7855*
Chen (Y.T.), see Tsai (Y.M.), *4499*
Cheney (M.C.), control, propellers, wind turbines, *713*
Cheng (A.H.-D.), boundary integral methods, fredholm equations, free boundary, sluices, spillways, surface flow, Liggett (J.A.), (et al.), *10391*
Cheng (A.H.D.), see Liu (H.), *10677*
Cheng (C.Y.), dies, films, materials processing, melting, polymers, *6407*
Cheng (F.Y.), buildings, inelasticity, nonlinear analysis, seismic loading, structural response, *1449*
Cheng (H.K.), compressible flow, lifting line theory, lifting surfaces, numerical methods, swept wings, transonic flow, Meng (S.Y.), (et al.), *2612*

- compressible flow, lifting-line, potential theory, swept wings, vortex lines, vortex sheets, Chow (R.), (et al.), *9649*
- see Brown (S.N.), *9651*

Cheng (H.S.), see Wang (K.L.), *2561*
- see Durkee (D.B.), *3037*
- see Rohde (S.M.) eds., *4895, book*

Cheng (H.S.) eds., contact stresses, continuum mechanics, friction, lubrication (elastohydrodynamic), rolling contact, wear, Keer (L.M.), *996, book*
Cheng (K.-S.), conservation laws, hydrodynamics, hyperbolic equations, nonlinear mechanics, shock waves, *9102*
Cheng (K.-T.), design (optimum), elastic bodies, plates, Olhoff (N.), *7589*
Cheng (K.C.), crossflow, cylindrical bodies, ice mechanics, melting, solidification, Inaba (H.), (et al.), *8739*
Cheng (L.), algorithms, multivariable systems, regulator problem, synthesis, Pearson (J.B.) Jr., *160*
Cheng (L.Y.), see Lahey (R.T.) Jr., *1844*
Cheng (P.), boundary layer (thermal), convection (free), nusselt number, perturbation methods, porous walls, Chang (I.-D.), *1680*
- see Hsu (C.T.), *8711*

Cheng (R.C.H.), estimation, identification, simulation, *2202*
Cheng (R.M.H.), see Loquoc (S.), *9483*
Cheng (R.T.), see Walters (R.A.), *11611*
Cheng (S.M.), see Churchill (S.W.), *2819*
Cheng (S.Y.), elastoplasticity, incremental analysis, loads, stress analysis, Hsu (T.R.), (et al.), *3271*
Cheng (Y.-H.), see Ge (Z.-M.), *10010*
Chenoweth (J.M.) eds., biofilm fouling, extended surfaces, fins, flow obstructions, fouling, heat exchangers, Impagliazzo (M.), *8754*
Cheo (B.), see Kuo (S.), *852*
Cheong-Siat-Moy (F.), beam columns, combined loading, Downs (T.), *336*
Cherchas (D.B.), magnetic levitation, magnetic stabilization, simulation, transportation devices, vehicles, *211*
- derailment, dynamic analysis, railroads, statistical design, wheels, *1062*

Cherepanov (G.P.), conservation laws, continuum mechanics, fracture, integral methods, mathematical methods, similarity methods, *4489*
Cherepenin (N.D.), cascades, developing flow, nozzles, velocity profiles, *9579*
Cherevatskii (V.B.), see Kreichman (M.M.), *8248*
Cherevko (T.N.), see Tarakanov (Yu.A.), *3006*
Cherkesov (L.V.), see Suvorov (A.M.), *6297*
Chern (S.Y.), see Lin (F.N.), *7837*
Chernenko (E.V.), combustion, metals, powders, self ignition, Rozenband (V.I.), *5627*
- combustion, kinetics, oxidation, porous media, Ivleva (T.A.), (et al.), *6841*

Chernets (M.V.), see Teplyi (M.I.), *7327*
Chernik (V.I.), see Kosmodamianskii (A.S.), *10145*
Chernikov (A.K.), see Protosenya (A.G.), *6397*
Chernitser (A.V.), algorithms, large scale systems, optimal control, stochastic control, *5056*
Chernobai (V.A.), boiling, critical heat flux, pipe flow, roughness, *5546*
Chernoberevskii (V.V.), see Vinogradov (B.D.), *3388*
Chernousko (F.L.), automatic control, control, linear systems, nonlinear mechanics, Akulenko (L.D.), (et al.), *2115, book*
- see Moiseev (N.N.), *11066*

Chernov (G.P.), see Bykovtsev (A.S.), *4851*
Chernov (I.A.), see Brezhnev (A.L.), *2620*
- see Ivanov (V.A.), *3638*

Chernov (Yu.V.), combustion, powders, surface temperature, temperature, *9760*
Cherns (D.), aluminum alloys, copper alloys, dislocations, experimental results, micromechanisms, Hirsch (P.), (et al.), *5120*
Chernyak (V.G.), channel flow, kinetic theory, pressure, Kalinin (V.V.), (et al.), *11443*
Chernyavskii (E.B.), see Kutalo (A.A.), *5952*
Chernyi (L.T.), see Pribylov (V.N.), *2879*
Chernysh (V.P.), liquid metals, magneto fluid dynamics, mixing, unsteady flow, welding, Shakla (L.M.), *10754*
Chernyshenko (S.I.), acoustic waves, differential equations (ordinary), oscillations, self excitation, *4157*
Chernyshev (K.V.), see Prudnikov (A.S.), *3511*
Chernyy (G.G.), asymptotic methods, boundary layer, laminar flow, moving surfaces, *593*
Chernyy (I.M.), liquid gas mixture, slip flow, two phase flow, Kuzmenko (L.M.), (et al.), *5813*
Cherry (N.J.), see Hillier (R.), *5470*
Chervenivanova (E.E.), see Zapryanov (Z.), *4018*
Chervov (G.A.), see Chelyshev (N.A.), *2464*
Chester (S.T.), see Nath (J.H.), *11695*
Chesters (A.K.), bubble dynamics, plumes, two phase flow, Van Doorn (M.), (et al.), *2988*
Chestnova (A.A.), biomathematics, mathematical models, nervous system, respiratory system, Chetayev (A.N.), *3224*
Chestnut (P.C.), direction, reflection, sonar, underwater acoustics, Floyd (R.W.), *11901*
Chetayev (A.N.), see Chestnova (A.A.), *3224*
Chettiar (C.G.), see Subramanian (N.), *3548*

Chetverushkin (B.N.), see Volchinskaya (M.I.), *11413*

Cheung (F.B.), freezing, melting, models, transient, *4727*
- convection (free), heat addition, heat transfer (combined modes), internal sources, radiant interchange, turbulent flow, Chan (S.H.), (et al.), *8743*
- see Epstein (M.), *8751*

Cheung (M.S.), plates (anisotropic), plates (thick), vibration, Chan (M.Y.T.), *8253*

Cheung (Y.K.), bending, finite element methods (hybrid), mesh generation, plates (thick), Wong (P.M.), (et al.), *5029*
- see Lau (S.L.), *6272*
- finite element methods, finite element methods (hybrid), finite element techniques, mesh generation, structural analysis, Yeo (M.F.), *7202*

Cheverton (K.J.), combined loading, cosserat solids, cylindrical bodies, micropolar media, Beatty (M.F.), *8182*

Chew (F.), currents, eddies, meandering, oceanography, upwelling, *4051*

Chia (C.Y.), galerkin method, plates (circular), rotary inertia, shear, vibration (nonlinear), Sathyamoorthy (M.), *4423*

Chiam (T.C.), see Unsworth (K.), *2806*

Chian (A.C.-L.), dispersion relation, ionic flow, nonlinear characteristics, oscillations, plasma, relativity, *11834*

Chian (C.T.), cylindrical waves, magnetoelastic waves, thermal waves, thermoelasticity (transient), Moon (F.C.), *6945*

Chiang (A.S.), see Hatton (T.A.), *7875*

Chiang (F.P.), holography, lasers, moire methods, optical techniques, stress analysis, *1393*
- composite materials, moire methods, optical techniques, strain analysis, Parker (B.), (et al.), *2475*
- see Bailangadi (M.), *7548*
- crack tip geometry, fracture mechanics, photoelasticity, stress intensity factor, white light, Asundi (A.), *7555*

Chiarito (V.), see Yang (C.Y.), *7044*

Chiarugi (A.), see Augusti (G.), *6524*

Chiatti (G.), computer programming, computing techniques, conduction (unsteady), finite element methods (hybrid), matrix methods, Sestieri (A.), *7222*

Chiba (T.), see Hoshiya (M.), *147*

Chichinadze (A.V.), brakes, clutches, friction, friction drives, Braun (E.D.), (et al.), *1006*

Chickanagappa (L.S.), piles, soils, stresses, Ramiah (B.K.), (et al.), *10256*

Chie (C.M.), see Lindsey (W.C.), *2090*

Chiem (C.Y.), crystals, dynamic plasticity, shear loading, strain rate, Duffy (J.), *2236*

Chien (S.), see Skalak (R.), *8075*

Chiesa (M.L.), conical bodies, deformation (plastic), finite element techniques, impact, plasticity, time dependence, Callabresi (M.L.), *8342*

Chigarev (A.V.), composite materials, couple stresses, elasticity (nonhomogeneous), elasticity (nonlocal), nonhomogeneous media, *5096*

Chigier (N.A.), see Yule (A.J.), *841*

Chigrakov (K.I.), oceanography, turbulence (geophysical), turbulence (isotropic), *5923*

Chikhachev (A.S.), see Zharinov (A.V.), *9802*

Chikhladze (E.D.), beams, plates, vibration (free), Kislov (A.G.), *8298*

Chikova (N.V.), see Kuznetsov (L.I.), *9820*

Chikrii (A.A.), algorithms, differential games, pursuit, *4273*

Chikwanha (R.), see Ward (P.R.B.), *4574*

Childs (T.H.C.), chip formation, contact stresses, cutting, elastic behavior, *1347*
- cutting, friction, wear, Kinsella (F.H.), *1929*

Chilukuri (R.), buoyant flow, curved surfaces, duct flow, laminar flow, recirculation, Humphrey (J.A.C.), *3785*

chimneys, earthquake effects, elastoplasticity, Shiau (L.-C.), Yang (T.Y.), *1884*
- vibration (flow induced), vortex shedding, wind loads, Hansen (S.O.), *3905*
- seismic loading, soil structure interaction, Aranda (G.R.), *4846*
- aerodynamic performance, tornados, wind turbines, Ayad (S.S.), *5502*
- gust loads, resonance, vortex shedding, wind loads, Richardson (J.R.), *8835*

Chin (H.B.), drops, polymers, shear flow, Han (C.D.), *8492*

Chin (R.C.Y.), chemically reactive flow, numerical methods, porous media, Braun (R.L.), *8941*
- asymptotic behavior, boundary value problems, differential equations (ordinary), *10039*

Chin (W.C.), caustics, currents, gravity waves, nonlinear analysis, *4656*

Chinn (J.), see Mansouri (A.H.), *3290*

Chiorescu (G.), elastic bodies, lyapunov's functions, rods, stability theory, *7354*

Chiou (J.P.), conical bodies, convection (free), heat addition, laminar flow, Na (T.Y.), *3799*
- see Na (T.Y.), *9610*

Chiou (K.L.), see Chow (P.L.), *1994*

chip formation, drawing, friction, plastic flow, rolling, Dobrucki (W.), Odrzywolek (E.), *1341*
- contact stresses, cutting, elastic behavior, Childs (T.H.C.), *1347*
- cutting, materials properties, Hastings (W.F.), Mathew (P.), (et al.), *2401*
- milling, turning, Venuvinod (P.K.), Lau (W.S.), (et al.), *7460*
- machine design, metallography, temperature, tools, Wright (P.K.), Mccormick (S.P.), (et al.), *8363*
- abrasion, cutting, grinding, tool wear, Kita (Y.), Ido (M.), (et al.), *9377*

Chirkov (V.P.), see Bolotin (V.V.), *2544*

Chiroiu (V.), see Nicolae (V.), *1065*
- capillary waves, meniscus, surface tension, *3710*
- galerkin method, half space, layered media, surface waves, viscoelasticity, Nicolae (V.), *10234*

Chirva (L.G.), see Belik (N.P.), *11605*
- see Belik (N.P.), *11629*

Chisholm (D.), see Grant (I.D.R.), *4021*
- boundary layer (turbulent), condensation (filmwise), heat transfer, pipe flow, turbulent flow, *4706*
- mixtures, pipes, reynolds number (small), turbulent flow, two phase flow, *5815*
- choked flow, flashing, mass flow, pipe flow, two phase flow, *9580*

Chitty (D.E.), see Kelly (J.M.), *7046*

Chiu (H.K.), see Dight (P.M.), *9485*

Chiu (S.T.), see Brussat (T.R.), *3443*

Chivers (R.C.), attenuation, diffraction, transducers (ultrasonic), ultrasonics, Rosselaar (L.), (et al.), *2952*
- acoustic waves, nonhomogeneous media, sound propagation, *5769*
- acoustic waves, nonhomogeneous media, sound propagation, *6922*
- see Anson (L.W.), *11985*

Chizhenkov (Yu.Ya.), see Popovskii (V.I.), *164*

Chizhik (A.A.), crack initiation, fracture toughness, material testing, steel, *4495*

Chizhov (V.I.), channel flow, particle fluid flow, two phase flow, Demura (M.V.), *12020*

Chlodzinski (J.), lasers (gasdynamic), radiation pressure, shock waves (normal), Denus (S.), (et al.), *6338*

Cho (S.H.), freezing, phase changes, phase velocity, Sunderland (J.E.), *11773*

Cho (S.M.), convection (forced), heat transfer, nuclear reactors, recirculation, Kane (R.S.), *1687*

Cho (U.W.), aging, creep, plasticity, steel, Findley (W.N.), *6174*

Cho (Y.I.), analogies, pipe flow, turbulent flow, viscoelastic fluids, Hartnett (J.P.), *617*
- approximations (higher order), entrance region, mass transfer, pipe flow, turbulent flow, viscoelastic fluids, Hartnett (J.P.), *2645*
- heat transfer, pipe flow, turbulent flow, viscoelastic fluids, Ng (K.S.), (et al.), *3670*

Choi (I.), elasticity (nonlinear), indentation, punch problems, Shield (R.T.), *5081*

choked flow, discharges, pipes, tubes, Tikhonenko (L.K.), Kevorkov (L.R.), (et al.), *941*
- free boundary, gravity, water, waterfall, Simpson (H.C.), Rooney (D.H.), (et al.), *1517*
- nonequilibrium flow, steam, Konorski (A.), Nahlik (S.), *6984*
- actuator theory, compressors, flutter, Micklow (J.), Jeffers (J.), *7781*
- compressible flow, flow measurement, nozzles, saint venants equation, Mollenbruck (W.), *7814*
- flashing, mass flow, pipe flow, two phase flow, Chisholm (D.), *9580*
- axial flow, cascades, subsonic flow, three dimensional flow, turbomachinery, Horlock (J.H.), *10526*
- bubbly flow, cavitation inception, sodium, water, Kamiyama (S.), Yamasaki (T.), *11753*

Chonan (S.), plates (annular), random loading, vibration (random), *3364*
- bonding, dynamic response, elastic foundations, shells (cylindrical), *8313*

Chong (K.P.), fracture mechanics, oil shale, strain rate, *8356*

Chongrungreong (S.), boiling, heat transfer, nucleate boiling, refrigerant-oil mixtures, refrigeration, Sauer (H.J.) Jr., *7831*

Chopra (A.K.), dams, hydrodynamic pressure, seismic loading, soil structure interaction, Gupta (S.), *10849*

Chorlton (F.), see Lal (K.), *1568*

Chou (C.-T.), biaxial loading, crack opening displacement, fracture criteria, stress intensity factor, Kuo (C.-P.), *9397*

Chou (D.C.), see Fagerlund (A.C.), *11926*

Chou (K.H.), acoustic waves, acoustics, shock waves, travelling waves, turbulence, Lee (P.S.), (et al.), *903*
- acoustic loading, aerosols, aggregates, Lee (P.S.), (et al.), *6999*

Chou (S.C.), see Ting (T.C.T.), *7269*

Chou (T.-W.), see Taya (M.), *279*
- see Fukuda (H.), *6194*
- composite materials, fibers, fracture, materials properties, strength, Kelly (A.), *8227*

Chou (Y.T.), see Wu (R.S.), *8191*

Chow (C.L.), crack propagation, fracture toughness, plates, torsion, Ngan (K.M.), *2438*
- experimental mechanics, photoelasticity, strain, tires, Woo (C.W.), *3560*

Chow (J.G.Y.), see Soo (P.), *7478*

Chow (P.L.), asymptotic behavior, periodic orbits, perturbation methods, random excitation, stability theory, Chiou (K.L.), *1994*

Chow (P.L.) eds., random media, scattering, waves, Kohler (W.E.), (et al.), *6043, book*

Chow (R.), see Cheng (H.K.), *9649*

Chow (S.-L.), see Koussis (A.D.), *953*

Chow (W.L.), see Han (T.Y.), *3600*
- ducts (curved), gravity, hodograph methods, irrotational flow, Chan (P.C.T.), *10439*

Chowdhury (K.L.), half space, heat sources, semi infinite media, thermal stresses, thermoelasticity (steady), Glockner (P.G.), *7948*
- constitutive equations, dielectrics, functional analyis, group theory, Glockner (P.G.), *8085*

Chowdhury (S.K.R.), adhesion, contact resistance, metals, roughness, wear, Pollock (H.M.), *1007*
Chowdhury (S.S.), diagnostics, energy spectrum, ionic flow, laser plasma interaction, measurements (dynamic), Clement (R.M.), (et al.), *5687*
Christ (A.), see Schreiber (V.), *3776*
Christensen (D.A.), see Bardsley (B.G.), *10797*
Christensen (D.E.), see Cochran (J.E.) Jr., *7921*
Christensen (E.J.), gravimetrics, mars, planetary theory, potential theory, Williams (B.G.), *6887*
Christensen (R.M.), crack growth, crack propagation, edge cracks, viscoelastic materials, Wu (E.M.), *3461*
Christer (A.H.), algorithms, operations research, optimization, renewal reward processes, *2168*
Christian (J.T.), finite element techniques, fluid mechanics, porous media, streamlines, *7981*
Christiansen (K.), beams, deformation, reinforced concrete, *11327*
Christiansen (S.), computing techniques, elliptic equations, fredholm equations, matrix methods, singularities, *8119*
Christie (I.), see Sanz-Serna (J.M.), *6088*
- see Griffiths (D.F.), *8750*

Christman (C.L.), absorption, experimental methods, tissues, ultrasonics, *8082*
Christman (P.J.), calibration, flow measurement, hot wire, low velocity flows, velocity measurement, Podzimek (J.), *7812*
Christoffersen (J.B.), currents, gravity waves (finite depth), nonlinear analysis, sloping bottom, Jonsson (I.G.), *6697*
- bottom irregularities, currents, energy dissipation, gravity waves (shallow water), Jonsson (I.G.), *9626*

Christov (P.I.), see Kondratev (I.K.), *5873*
Chrysler (G.M.), see Sparrow (E.M.), *6791*
Chrzanowski (E.M.), diffusion, existence theorems, inverse problems, uniqueness, *8115*
Chu (B.T.), see Long (M.B.), *9605*
- see Long (M.B.), *10539*

Chu (C.-C.), forming, necking, strain analysis, *10269*
Chu (C.-W.), nozzles, plumes, two dimensional flow, Der (J.) Jr., (et al.), *10454*
Chu (C.C.), elastoplasticity, forming, necking, nucleation, Needleman (A.), *4471*
Chu (F.H.), differential equations (partial), integration, rotating shafts, transient effects, Pilkey (W.D.), *1114*
Chu (K.-H.), see Wiriyachai (A.), *9452*
Chu (K.H.), bridges, dynamic interaction, moving loads, railroads, Garg (V.K.), (et al.), *3382*
Chu (L.), random media, seismic waves, shear waves, Askar (A.), (et al.), *3005*
Chu (L.L.), approximation methods, sh waves, soil structure interaction, Askar (A.), (et al.), *967*
Chu (S.N.G.), crystals, failure, fatigue, overloads, Li (J.C.M.), *1404*
Chu (W.-Y.), alloys, crack propagation, metallurgy, nucleation, stress corrosion, Hsiao (C.-M.), (et al.), *9394*
Chu (W.T.), coherent structure, reverberation, sound fields, *5770*
Chuchadeyev (D.N.), see Kuchay (V.K.), *154*
Chudnenko (A.N.), dynamic stability, rigid bodies, rotating bodies, *1068*
Chudzikiewicz (A.), dynamic analysis, railroads, vibration, Kisilowski (J.), (et al.), *387*
Chugh (A.K.), elastoplasticity, excavation, materials properties, mining, underground, *7288*
- computing techniques, slopes, soil mechanics, stability, Smart (J.D.), *9360*

Chukhrov (A.Yu.), convection, cylindrical bodies, heat sources, magneto fluid dynamics, numerical analysis, *2981*
Chumachenko (A.V.), see Rogankov (V.B.), *1654*
Chun (C.-H.), convection, crystals, marangoni convection, thermal instability, thermal waves, *4710*
Chung (B.T.F.), radiation, shape factors, spherical bodies, Naraghi (M.H.N.), *1704*
Chung (D.W.), aluminum alloys, crack propagation, fatigue, heat treatment, life expectancy, Chaturvedi (M.C.), *445*
Chung (H.), bodies (liquid filled), fluid-structure interaction, shells (cylindrical), vibration, Turula (P.), (et al.), *11627*
Chung (J.S.), see Felippa (C.A.), *6534*
- mining, ocean bed, pipelines, vibration (flow induced), Whitney (A.K.), (et al.), *8626*

Chung (K.C.), finite difference methods, finite element techniques, heat transfer, two dimensional flow, *7673*
Chung (K.S.), finite element methods (hybrid), heat transfer, nonlinear systems, time dependence, *6121*
Chung (P.M.), see Ahluwalia (R.K.), *3866*
- combustion, combustors, mathematical models, particulate flow, Carlson (L.), *5644*

Chung (S.H.), see Law (C.K.), *8790*
Chung (T.H.), fluids, high pressure, low temperature, molecular theory, transport properties, Lee (L.L.), (et al.), *7821*
Chung Za Bin, see Kiryushin (V.V.), *10744*
Churchhouse (R.F.), see Lederman (W.) eds., *1109, book*
Churchill (R.C.), dynamic analysis, hamiltonian equations, mathematical methods, Rod (D.L.), *1078*
Churchill (S.W.), approximation methods, conduction (heat), heat transfer, nusselt number, Cheng (S.M.), *2819*
Churchyard (J.N.), ballistics (exterior), launching, trajectory optimization, wind loads, *7929*
Churikov (F.S.), see Mashchenko (I.P.), *1095*
Chushkin (O.I.), channels, leading edge, missiles, supersonic flow, wedges, *11732*
Chushkin (P.I.), see Voskresenskii (G.P.), *10421*
Chyung (D.H.), see Bien (Z.), *1141*
Ciardullo (S.W.), beams, beams (variable cross section), finite element methods, Durocher (L.L.), (et al.), *5144*
Ciarlet (P.G.), eigenvalue problems, plates, *5154*
Ciavaldini (J.-F.), airfoils, compressible flow, porous walls, Pogu (M.), (et al.), *6721*
Cimatti (G.), approximations, asymptotic methods, boundary value problems, *10933*
Cimetiere (A.), buckling, edge effects, plates, structural stability, *2303*
Cinco-Ley (H.), see Da Prat (G.), *8922*
Cinquini (C.), elastoplasticity, plastic behavior, structural optimization, variational methods, Sacchi (G.), *6270*
circuits, finite element techniques, sound fields, Kagawa (Y.), Yamabuchi (T.), *1798*
- channel flow, heat transfer, magneto plasma dynamics, rarefied gases, Soundalgekar (V.M.), Akolkar (S.P.), *10737*

circulation, currents, wave interactions, Leibovich (S.), *666*
- estuaries, finite difference methods, oceanography, two dimensional flow, Wang (D.-P.), Kravitz (D.W.), *2594*
- flow measurement, visualization, vorticity, Brasseur (J.C.), Chang (I.-D.), *2599*
- finite difference methods, ocean waves, oceanography, surface waves, Niemeyer (G.), *4862*
- ekman layer, ocean air interaction, oceanography, Rattray (M.) Jr., Dworski (J.G.), *4866*
- currents, eddies, oceanography, Holland (W.R.), *4874*
- currents, eddies, hydrodynamic stability, oceanography, Haidvogel (D.B.), Holland (W.R.), *4875*
- hydrodynamic stability, oceanography, perturbation methods, Zalenko (A.A.), *4877*
- currents, heat transfer, oceanography, Sarkisyan (A.S.), Rzheplinskiy (D.G.), *4879*
- currents, oceanography, Stengel (K.C.), *4882*
- boiling, channel flow, cooling, heat exchangers, thermal instability, Braginskiy (A.M.), Ivanov (L.B.), *5593*
- currents, oceanography, vorticity, Bryden (H.L.), *5918*
- currents, hydrodynamic stability, oceanography, Holland (W.R.), Haidvogel (D.B.), *5920*
- ocean air interaction, oceanography, vorticity, Briggs (W.L.), *5921*
- currents, heat transfer, ocean air interaction, oceanography, Bye (J.A.T.), Veronis (G.), *5922*
- duct flow, pulsatile flow, two dimensional flow, Sasaki (Y.K.), Reddy (J.N.), *6659*
- heat transfer, oceanography, Wunsch (C.), *7060*
- blood flow, heart, Kogan (V.A.), *7116*
- blood flow, elastic constants, frequency response, laplace transform, Skidmore (R.), Woodcock (J.P.), *7120*
- hydrology, inlet flow, lakes, models, outflow, Gatto (M.), Rinaldi (S.), *7660*
- ocean air interaction, oceanography, vorticity, Welander (P.), *8031*
- conservation laws, theorems, vorticity, Mobbs (S.D.), *8526*
- eddies, oceanography, Niiler (P.P.), *8974*
- eddy diffusivity, oceanography, vorticity, Harrison (D.E.), *8977*
- cellular motions, counterflow, duct flow, Kimura (S.), Bejan (A.), *9703*
- convection, steam gas power plants, thermal instability, thermal waves, tubes, Unal (H.C.), *9705*
- eddies, oceanography, vorticity, Holland (W.R.), Rhines (P.B.), *10860*
- ekman layer, geostrophic flow, ocean air interaction, oceanography, rossby waves, Semtner (A.J.) Jr., Holland (W.R.), *10863*

circulatory systems, blood flow, blood vessels, blood volume, Thirsk (R.B.), Kamm (R.D.), (et al.), *1954*
- doppler effect, experimental methods, flow measurement, Gill (R.W.), *4920*
- blood, hemolysis, prosthetic devices, pumps, Fumero (R.), *6022*
- flow measurement, tracers, transit time, velocity profiles, Huang (S.-C.), *6741*
- blood, oxygen, prosthetic devices, Arunachalam (V.M.), Shettigar (U.R.), *7126*

circumnavigation, astrodynamical constants, gravity, solar system, Moyer (T.D.), *869*
- lagrangian solution, libration theory, periodic orbits, three body problem, Broucke (R.), Anderson (J.D.), (et al.), *874*
- restricted three body problem, three body problem, Llibre (J.), Simo (C.), *4953*
- fluid mechanics, gravity waves, planetary theory, potential theory, Demin (V.G.), Barkin (Yu.V.), *7913*
- bifurcation, differential equations (ordinary), resonance, stability theory, Goltser (I.M.), *7917*

- damage, probability theory, solar system, tides, Ziglina (I.N.), *8838*
- coordinate systems, dynamic analysis, kepler orbits, separation of variables, Broucke (R.), *8839*
- bodies of revolution, gravimetrics, potential theory, Fomin (V.N.), *9807*
- bifurcation, libration theory, mathematical methods, n body problems, periodic orbits, solar system, Szebehely (V.) ed., *10769, book*
- lunar theory, orbit mechanics, perturbation methods, planetary satellites, three body problem, Henrard (J.), *10771*
- artificial satellites, computer algebra, computer programming, oblateness, Deprit (A.), *10776*

Cirina (M.), identification, mathematical models, urban planning, *2197*

Cirp Annals 1981, cutting, machinery, numerical control, optimization, *4468, book*

cladding, nuclear reactors, rewetting, Sawan (M.E.), Temraz (H.M.), *730*
- gust loads, panels, wind loads, Greenway (M.E.), *3551*
- multistory frames, structural analysis, Williams (F.W.), *5360*
- conformal mapping, fuel elements, heat transfer, nuclear reactors, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *8729*
- nuclear fuels, thermoelasticity (transient), Ma (B.M.), *8878*
- creep, nuclear fuels, nuclear radiation, Wilson (H.W.), Hsieh (H.J.), (et al.), *8883*

Claes (H.), artificial satellites, averaging, hamiltonian equations, oblateness, *2920*

Claeys (J.M.), acoustic waves, barriers, liquid solid interface, plane waves, reflection, ultrasonics, Leroy (O.J.), (et al.), *11648*

Clark (A.V.) Jr., acoustic waves, fluid-structure interaction, submerged bodies, vibration, Whitman (A.M.), *11634*

Clark (G.), see Green (G.), *2482*

Clark (J.A.), impedance, transducers, underwater acoustics, *5737*
- acoustic waves, nonhomogeneous media, sound propagation, *5757*

Clark (M.E.), see Liou (R.J.), *9063*

Clark (R.A.), see Newton (S.G.), *1460*

Clark (R.N.), detection, faults, kalman filters, reliability analysis, Setzer (W.), *2099*
- irrigation, power generation, pumps, wind turbines, Nelson (V.), (et al.), *9667*

Clark (W.D.), chemical kinetics, combustors, emissions, Folsom (B.A.), (et al.), *8797*

Clarke (D.), decision theory, multiple scales, pattern recognition, Rivett (B.H.P.), *157*
- cable supported structures, design, roofs, *4537*

Clarke (J.F.), see Allison (R.A.), *1741*
- boron, combustion instability, flame holders, Mcintosh (A.C.), *6840*
- see Allison (R.A.), *9751*

Clarkson (B.L.), cyclic testing, experimental mechanics, plates, vibration, Pope (R.J.), *5210*

classification, bayesian phenomena, geomorphology, pattern recognition, Kuchay (V.K.), Chuchadeyev (D.N.), *154*
- detection, estimation, noise (random), signal detection, Zilbershteyn (A.M.), Natkovich (Yu.S.), *2103*
- data analysis, mathematical methods, Plotkin (A.A.), *3128*
- grainsize, soils, Bhujangarao (C.H.), *3395*
- particle size, testing equipment, Beeckmans (J.M.), *5826*

Claudon (J.-L.), damping, flutter, loads, optimization, Sunakawa (M.), *5342*

Claus (A.J.), arrays, focusing, underwater acoustics, Labianca (F.M.), *11976*

Claus (R.W.), combustors, flames, radiation, soot formation, *3869*

Clauss (J.S.) Jr., jet engines, noise, noise abatement, supersonic flow, Wright (B.R.), (et al.), *4805*

clay, saturation, semi infinite media, soil consolidation, Deresiewicz (H.), *412*
- modeling, strength, Mayne (P.W.), *413*
- modeling, plane strain, saturation, strength, Mitachi (T.), Kitago (S.), *414*
- micromechanics, stress strain relationships, Desai (C.S.), Siriwardane (H.J.), *415*
- micromechanics, modeling, Scott (R.F.), Craig (M.J.K.), *416*
- centrifugation, centrifuge tests, foundations, gravity platform, scale models, Andersen (K.H.), Selnes (P.B.), (et al.), *1313*
- foundations, scale models, Das (B.M.), *1314*
- elastic constants, field tests, shear waves, Abbiss (C.P.), *1318*
- buildings, damage, nonhomogeneous soils, swell, Slavin (M.E.), *1321*
- elastoplasticity, embankments, finite element methods, Cavounidis (S.), *1324*
- piles, scale models, Ranjan (G.), Ramasamy (G.), (et al.), *1328*
- cyclic testing, shear strength, stress strain relationships, Matsui (T.), Ohara (H.), (et al.), *2378*
- anisotropic media, shear strength, Nova (R.), *3396*
- field tests, pressuremeter, shear strength, Denby (G.M.), Clough (G.W.), *3404*
- piles, stability, Burgess (I.W.), *5256*
- cylindrical bodies, penetration, Dayal (U.), Allen (J.H.), (et al.), *6364*
- elastoplasticity, mathematical models, Banerjee (P.K.), Stipho (A.S.), *6375*
- cavities, pore pressure, stress analysis, Carter (J.P.), Randolph (M.F.), (et al.), *6383*
- excavation, soil mechanics, structural stability, tunnels, Davis (E.H.), Gunn (M.J.), (et al.), *6526*
- clay hills, flow, subsidence, Tschierske (N.), *7443*

Cleary (M.P.), composite materials, effective elastic moduli, inclusions, micromechanics, nonhomogeneous media, Chen (I-W.), (et al.), *2224*

Cleghorn (W.L.), design (optimum), flexible bodies, high speed, mechanisms, Fenton (R.G.), (et al.), *5377*

Cleja (V.), see Dumitrescu (H.), *4612*

Clement (A.), mathematical models, robotics, tools, trajectories, *8*

Clement (C.F.), nucleation, swell, void growth, Wood (M.H.), *7503*

Clement (R.M.), see Chowdhury (S.S.), *5687*
- charged particles, energy spectrum, ionic flow, laser plasma interaction, measurements (dynamic), Davies (R.A.), (et al.), *5689*

Clements (R.M.), burning velocity, excitation, flame propagation, radiation, Smith (R.D.), (et al.), *2860*

Clements (R.R.), see Bromilow (I.G.), *8542*

Cleveland (D.), algorithms, flaw detection, frequency domain techniques, transducers (ultrasonic), ultrasonics, Mucciardi (A.N.), *7578*
- algorithms, defects, flaw detection, frequency domain techniques, ultrasonics, Barron (A.R.), (et al.), *7584*

Clever (R.M.), see Frick (H.), *10579*

Cliffe (K.A.), boussinesq equation, conservation laws, finite element techniques, fluid mechanics, *9147*

Clifford (D.), boilers, cogeneration, design (optimum), energy conversion, gas turbines, steam power plants, Coates (R.), (et al.), *1766*

Clift (D.H.M.), see Clift (R.), *7969*

Clift (R.), density, measurements, slurries, Clift (D.H.M.), *7969*

Clifton (R.J.), see Markenscoff (X.), *6155*
- acoustic emission, decay, dislocations, elastic waves, Markenscoff (X.), *8332*

climatology, atmospheric circulation, ocean air interaction, Gates (W.L.), *987*
- heat transfer (atmospheric), Nicolis (C.), *988*
- heat transfer (atmospheric), North (G.R.), Coakley (J.A.), *1908*
- meteorology, solar collectors, Page (J.K.), Rodgers (G.G.), (et al.), *2835*
- convection (forced), energy storage, heat loss, radiation properties, Leduc (R.), Won (T.K.), *2836*
- atmospheric circulation, heat transfer (atmospheric), Golitsyn (G.S.), Mokhov (I.I.), *4056*
- atmospheric circulation, weather forecasting, Kontarev (G.P.), *4059*
- atmospheric circulation, meteorology (physical), ocean air interaction, weather forecasting, Marchuk (G.I.), *4069*
- modeling, Voloshchuk (V.M.), *4075*
- modeling, Vinnikov (K.Ya.), Groisman (P.Ya.), *4076*
- data acquisition, Izrael (Yu.A.), *4091*
- atmospheric circulation, heat transfer (atmospheric), Roads (J.O.), *5930*
- heat transfer (atmospheric), meteorology (physical), potential energy, Vakaiyuk (Yu.V.), *5946*
- clouds, heat transfer, ice, ocean air interaction, Saltzman (B.), Moritz (R.E.), *9940*

Cloot (A.), see Lebon (G.), *757*

closed conduit flow, polymers, unsteady flow, viscoelastic fluids, Ryan (M.E.), Dutta (A.), *544*
- convection (free), heat transfer, interferometry, Flack (R.D.), Konopnicki (T.T.), (et al.), *756*
- boundary layer (thermal), buoyant flow, convection (free), plane flow, Sparrow (E.M.), Prakash (C.), *1681*
- cellular flow, convection (free), nusselt number, Iyican (L.), Witte (L.C.), (et al.), *1682*
- convection (free), heat addition, Flack (R.D.), *2798*
- convection (free), finite difference methods, heat transfer, laminar flow, transient effects, Vasseur (P.), Robillard (L.), *2799*
- flow measurement, heat transfer, recirculation, Launder (B.E.) eds., Humphrey (J.A.C.), *2826, book*
- cavitation, piping systems, slurries, transient effects, Chaudhry (M.H.) eds., Yevjevich (V.), *3596, book*
- air conditioning, similarity methods, Moog (W.), *3789*
- axial flow, conduction (heat), laminar flow, peclet number, Vick (B.), Ozisik (M.N.), *3812*
- cavities, cellular flow, convection (free), critical flow, Simpkins (P.G.), Duddenarar (T.D.), *4709*
- buoyant flow, cellular motions, convection, Melikhov (O.I.), Shcherbak (S.B.), *5539*
- cavities, convection (free), oseen technique, prandtl number, Graebel (W.P.), *5560*
- convection (free), coordinate systems, Van Doormaal (J.P.), Raithby (G.D.), (et al.), *5566*
- particle fluid flow, suspensions, velocity measurement, Kowalewski (T.A.), *6587*
- cellular flow, convection (free), Normand (C.), *6781*
- cavities, convection (free), laser doppler velocimeters, visualization, Linthorst (S.J.M.), Schinkel (W.M.M.), (et al.), *6792*
- convection (free), nuclear reactors, thermal instability, Zvirin (Y.), Jeuck (P.R.) III, (et al.), *6811*
- convection (free), heat transfer, mathematical models, spectral expansion method, Iyican (L.), Bayazitoglu (Y.), (et al.), *7839*
- blood flow, flexible walls, flexural waves, Bonis (M.), Ribreau (C.), *8074*
- cylindrical bodies, non newtonian flow, Kazakia (J.Y.), Rivlin (R.S.), *8485*
- channel flow, convection (free), laminar flow, Nansteel (M.W.), Greif (R.), *8701*
- hydrodynamic stability, rayleigh number, solar ponds, thermal instability, thermohaline stability criteria, Pnueli (D.), *8715*

- convection, solar energy, solar furnaces, Hubbard (M.), Brewer (J.W.), *8770*
- biomechanics, collapse, rheology, vocal cords, Conrad (W.A.), *9058*
- capillary flow, convection (free), heat transfer, porous media, thermal instability, vortex flow, Catton (I.) eds., Smith (R.N.), *9682, book*

closed cycle, design, gas turbines, materials properties, thermodynamic properties, working fluids, Lee (J.C.), Campbell (J.) Jr., (et al.), *11740*

Closier (M.J.), casting, flaw detection, radiography, welded joints, x ray techniques, *5318*

closure, curvature, mixing layers, reynolds stresses, turbulence, turbulence model, Gibson (M.M.), Rodi (W.), *2691*
- kinematics, linkages, mechanisms (spatial), robotics, Sticher (F.), *4559*
- reynolds stresses, statistical theory, turbulence, Yoshizawa (A.), *4644*
- shear flow, turbulence model, turbulent flow, Gallagher (B.), Magaard (L.), (et al.), *6685*
- recirculation, turbulence model, turbulent flow, Minh (H.H.), *6692*
- finite element techniques, valves, water hammer, Watt (C.S.), Hobbs (J.M.), (et al.), *6700*
- sensitivity analysis, turbulence (geophysical), turbulent flow, Dwyer (H.A.), Peterson (T.), *7754*
- dispersion, statistical theory, turbulence, Larcheveque (M.), Lesieur (M.), *8614*
- continuum mechanics, reynolds stresses, turbulence, Speziale (C.G.), *9612*

cloud physics, precipitation, rainfall, Shiino (J.), *4079*
- atmospheric circulation, clouds, storms, Klemp (J.B.), Wilhelmson (R.B.), *4885*
- flow obstructions, latent heat, meteorology (physical), two dimensional flow, Barcilon (A.), Jusem (J.C.), (et al.), *7677*
- clouds, convection (free), meteorology (physical), Pushistov (P.Yu.), Malbakhov (V.M.), (et al.), *8029*
- clouds, precipitation, Imyanitov (I.M.), *12078*

clouds, fog, holography, optical techniques, Smirnov (V.A.), Yaskevich (G.F.), *992*
- atmospheric circulation, forecasting, weather forecasting, Falkovich (A.I.), *1903*
- atmospheric circulation, convection (forced), convection (free), heat transfer (atmospheric), hydrodynamic stability, Falkovich (A.I.), *4063*
- forecasting, meteorology (physical), moisture, Sholokhova (N.I.), *4077*
- atmospheric circulation, cloud physics, storms, Klemp (J.B.), Wilhelmson (R.B.), *4885*
- drops, meteorology, thermal explosions, Svirkunov (P.N.), Sedunov (Yu.S.), (et al.), *5584*
- boundary layer (atmospheric), diffusion, shear flow, turbulence (geophysical), wind, Skhirtladze (G.I.), Yurchak (B.S.), *7061*
- cloud physics, convection (free), meteorology (physical), Pushistov (P.Yu.), Malbakhov (V.M.), (et al.), *8029*
- meteorology (physical), turbulence (geophysical), Coulman (C.E.), *8994*
- convection (free), heat transfer (atmospheric), Haman (K.E.), Niewiadomski (M.), *9931*
- boundary layer (atmospheric), convection (free), mixing layers, Manton (M.J.), *9932*
- climatology, heat transfer, ice, ocean air interaction, Saltzman (B.), Moritz (R.E.), *9940*
- atmosphere, dispersion, models, Eidsvik (K.J.), *11522*
- boundary layer (atmospheric), heat transfer (atmospheric), meteorology (physical), Buikov (M.V.), Khvorostyanov (V.I.), *12077*
- cloud physics, precipitation, Imyanitov (I.M.), *12078*

Clough (D.E.), see Weimer (A.W.), *5845*
- see Weimer (A.W.), *7987*

Clough (G.W.), field tests, pressure change, soils, Denby (G.M.), *421*
- see Tan (D.Y.), *1333*
- see Denby (G.M.), *3404*

Clough (R.W.), see Niwa (A.), *8015*

Cloutman (L.D.), see Ramshaw (J.D.), *1756*

clutches, brakes, friction, friction drives, Chichinadze (A.V.), Braun (E.D.), (et al.), *1006*

coagulation, nozzles, two phase flow, Rychkov (A.D.), *627*
- colloids, emulsions, hydrodynamic stability, non newtonian suspensions, particle size, Reddy (S.R.), Fogler (H.S.), *3592*
- aerosols, approximation methods, asymptotic behavior, particles, Tokar (Ya.I.), *6970*
- drops, evaporation, mathematical models, transport mechanisms, Novikov (V.S.), *10646*

Coakley (J.A.), see North (G.R.), *1908*

coal, particulate flow, pipelines, suspensions, viscometry, Davis (P.K.), Muchmore (C.B.), (et al.), *3594*
- particle fluid flow, rheology, Ghassemzadeh (M.R.), Carmi (S.), *5385*
- chemical reactions, heat addition, liquefaction, rheology, Khandhadia (P.S.), Forsyth (T.H.), (et al.), *6769*
- combustion, dust, flame propagation, pyrolysis, Krazinski (J.L.), Buckius (R.O.), (et al.), *7880*
- combustion products, particulate flow, three dimensional flow, trajectories, turbomachinery, Beacher (B.), Tabakoff (W.), (et al.), *7889*
- heat transfer, multiphase flow, prediction, slurries, Trela (M.), *7962*
- elasticity (three dimensional), mining, Vashakmadze (T.S.), Gotsulyak (E.A.), (et al.), *8184*
- combustion, dust, models, pyrolysis, Kansa (E.J.), Perlee (H.E.), *9800*
- boilers, combustion products, flyash, particles, radiation, Wall (T.F.), Lowe (A.), (et al.), *10708*
- experimental results, pipe flow, slurries, Shook (C.A.), Haas (D.B.), (et al.), *11498*
- combustion, combustion products, oxidation, Song (Y.H.), Pohl (J.H.), (et al.), *11788*

coastal engineering, flow measurement, sediment transport, sloping bottom, visualization, Honji (H.), Matsunaga (N.), *2589*
- currents, sediment transport, surf, Walton (T.E.) Jr., *2590*
- equilibrium, sediment transport, Migniot (C.), Viguier (J.), *2593*
- beaches, currents, ocean waves, sediment transport, Horikawa (K.), *4578*
- beaches, bottom irregularities, piers, sediment transport, Hashimoto (H.), Uda (T.-A.), *5393*
- computer programming, modeling, three dimensional flow, wind generation, Koutitas (C.), O'Connor (B.), *7662*

coasts, breakwater, diffraction, integral methods, Mattioli (F.), *1591*
- atmospheric circulation, jet streams, Philander (S.G.H.), *4859*
- currents, oceanography, Barannik (V.A.), *4884*
- beaches, erosion, Mizumura (K.), Shiraishi (N.), *5916*
- aquifers, finite element techniques, infiltration, porous media, Das Gupta (A.), Arbhabhirama (A.), *8971*
- bores, breakers, density currents, oceanography, Stern (M.E.), *8975*
- eddy viscosity, ekman layer, kelvin waves, oceanography, Mofjeld (H.O.), *8978*
- currents, hydrodynamic stability, oceanography, Collings (I.L.), Grimshaw (R.), *10856*
- bottom irregularities, diffraction, oceanography, surface waves, Wang (D.-P.), *10859*

Coates (R.), see Clifford (D.), *1766*

coatings, axisymmetric loading, contact problems, indentation, Matthewson (M.J.), *248*
- boiling, nucleate boiling, polymers, surface effect, thin films, Hinrichs (T.), Hennecke (E.), (et al.), *2792*
- damping, dynamic response, tubes, vibration (free), Vinogradov (B.D.), Chernoberevskii (V.V.), *3388*
- absorption, radiant interchange, radiation properties, reflection, scattering, Shafey (H.M.), Kunitomo (T.), *3827*
- dies, drawing, glass fibers, lubrication, Eichenbaum (B.R.), *4681*
- piston rings, residual stresses, stress analysis, thermoelasticity (steady), Kulik (A.Ya.), Shapiro (M.I.), *5099*
- damping, experimental mechanics, tubes, vibration, Zeinetdinova (R.Z.), Naumkina (N.I.), (et al.), *5194*
- fatigue, iron, life expectancy, probability, Kalmutskii (V.S.), Frunze (I.P.), *5285*
- film flow, finite element techniques, navier stokes equation, viscous flow, Saito (H.), Scriven (L.E.), *6616*
- mie scattering, radiant interchange, radiation properties, scattered light, spherical bodies, thin films, Shafey (H.M.), Kunitomo (T.), *6804*
- mie scattering, radiant interchange, radiation properties, scattered light, spherical bodies, thin films, Kunitomo (T.), Shafey (H.M.), (et al.), *6805*
- absorption, heat shields, radiant interchange, solar radiation, space vehicles, spectral analysis, thermal loading, Bosma (J.), Levadou (F.), *6807*
- eddy currents, nondestructive tests, radiography, thickness, thin films, Goring (W.H.), *7577*
- bimetallic materials, machine elements, probability theory, reliability, strength, Kalmutskii (V.S.), *7600*
- boundary layer (turbulent), compliant materials, interaction, surface flow, viscoelastic materials, Airapetov (A.B.), *7698*
- boundary layer (turbulent), compliant materials, flow measurement, Kanarskiy (M.V.), Teslo (A.P.), *7701*
- cavitation, corrosion fatigue, erosion, Okada (T.), Awazu (K.), (et al.), *9023*
- laminates, residual stresses, Martynenko (A.A.), *9248*
- carbides, friction (sliding), gases, high pressure, lubricants (gas), wear, Skinner (J.), *9948*
- friction (sliding), models, plastic flow, Heilmann (P.), Rigney (D.A.), *12089*

Coats (K.H.), mathematical models, reservoirs, three dimensional flow, *7984*
- chemical reactions, combustion (submerged), simulation, *7992*

coaxial jets, confined jets, furnaces, Guruz (K.), Ilcali (C.), *2863*
- combustion, flames (turbulent), Kimoto (K.), Shiraishi (I.), (et al.), *3861*
- entrance region, jets, subsonic flow, Ko (N.W.M.), Au (H.), *5455*

Cobb (E.R.), see Readey (H.J.) Jr., *10729*

Cobble (M.H.), fluid injection, magneto fluid dynamics, non newtonian flow, pressure gradient, stream function, *8820*

Cobelli (C.), see Distefano (J.J.) III, *2091*

cochlea, biomechanics, ear, hydroelasticity, Holmes (M.H.), *1952*

Cochran (J.E.), attitude control, hamiltonian equations, resonance, space vehicles, spinning bodies, Holloway (H.E.), *7923*

Cochran (J.E.) Jr., attitude control, guidance systems, rockets, vibration, Christensen (D.E.), *7921*

Cockran (T.H.), combustion, space shuttle, zero g phenomena, *3876, book*

codes, bifurcation, differential equations (ordinary), differential equations (partial), mathematical methods, Hassard (B.D.), Kazarinoff (N.D.), (et al.), *21, book*
- asymptotic behavior, stability theory, Beaudoin (Y.), Nerenberg (M.A.H.), *66*
- numerical methods, solar collectors, solar energy, solar radiation, Mustacchi (C.), Cena (V.), (et al.), *3830*

- error, error control, fourier transform, frequency domain techniques, Blahut (R.E.), *4215*

coding, binary search trees, computer programming, data analysis, Stephenson (C.J.), *67*
- computer programming, finite element methods, finite element techniques, modal analysis, nastran, programming, Schaeffer (H.G.), *75, book*
- computer programming, computing techniques, finite element techniques, interaction, Lewis (B.A.), Cross (M.), *91*
- finite difference methods, free boundary, hydrodynamics, Hirt (C.W.), Nichols (B.D.), *1115*
- algorithms, least squares, Cornwell (L.W.), Kocman (M.G.), (et al.), *5018*
- characteristic methods, fluidics, networks, unsteady flow, Haloulakos (V.E.), *5487*
- plasma, similarity methods, Demchenko (V.V.), *7775*
- computer programming, simulation, Tarlos (B.), *8140*
- computer graphics, finite element techniques, Gordon (J.J.), Goodzeit (C.L.), *9135*
- computer programming, parallel programming, programming, Valkovskiy (V.A.), *10056*
- structural analysis, Soare (M.V.), *10363*
- computer aided design, condensers, numerical methods, optimization, Johnson (C.M.), Vanderplaats (G.N.), (et al.), *10625*

Coe (H.H.), bearings (roller), high speed, lubricants (liquid), lubrication (elastohydrodynamic), Schuller (F.T.), *5998*

Coeffe (Y.), interaction, tube bundles, two phase flow, Todreas (N.), *8900*

Coen (S.), elastic constants, layered media, reflection, sh waves, *5243*
- see Gladwell (G.M.L.), *6154*
- elastic waves, half space, layered media, reflection, scattering, *10236*

Coenen (J.H.), cracking, fracture, limit analysis, reinforced concrete, shells, *8439*

Coffin (L.F.), see Hussain (M.A.), *5021*

Cognet (G.), see Wolff (M.), *2651*

Cogswell (F.N.), flow, plastics, polymers, rheology, *2573, book*

Cohen (A.I.), see Rao (H.S.), *2122*
- algorithms, convergence, descent, minimization, *7193*

Cohen (D.S.), see Rosenblat (S.), *9110*

Cohen (G.A.), buckling, numerical methods, shear loading, shells (anisotropic), *3336*

Cohen (H.), see Murdoch (A.I.), *4926*
- see Wilms (E.V.), *6939*

Cohen (R.E.), see Caruthers (J.M.), *1190*

Cohen-Tenoudji (F.), see De Billy (M.), *5314*

coherent structure, perturbation methods, power generation, power plants, Sastry (S.), Varaiya (P.), *124*
- compressible flow, experimental results, jets, noise (aerodynamic), turbulence, Armstrong (R.R.) Jr., *1580*
- boundary layer, jets, pipe flow, turbulence (structure), Cantwell (B.J.), *2688*
- noise, noise abatement, power plants, Ying (S.P.), Dennison (E.E.), *3978*
- axisymmetric flow, jets, spark discharge, Sokolov (M.), Kleis (S.J.), (et al.), *5451*
- acoustic measurements, ocean bed, reflection, underwater acoustics, Berkson (J.M.), *5749*
- reverberation, sound fields, Chu (W.T.), *5770*
- jets, multiple scales, turbulence, Mankbadi (R.), Liu (J.T.C.), *7752*
- mixing layers, turbulent mixing, visualization, vortices, Bernal (L.P.), *9598*
- shear flow, sound flow interaction, turbulence, turbulence (structure), Kleis (S.J.), Hussain (A.K.M.F.), (et al.), *10470*
- turbulence model, turbulent flow, turbulent mixing, Latyshev (A.V.), Ordanovich (A.E.), *10477*
- lakes, loch ness, mixing layers, wind, Thorpe (S.A.), Hall (A.J.), *11521*

Cohn (A.), see Brown (D.H.), *2749*

Cohn (D.R.), see Bromberg (L.), *8831*

Cohn (M.Z.), see Ronca (P.), *5359*

Cohrt (H.), bending (viscoelastic), ceramics, creep, micromechanisms, Grathwohl (G.), (et al.), *6175*

Colt (W.G.), analysis, computer aided design, linkages, mechanisms, sensitivity, Riley (D.R.), *4557*

Colasurdo (G.), see Zannetti (L.), *1524*

Colbourne (D.E.), diffusers, inlets, simulation, supersonic flow, unsteady flow, *9590*

Colbourne (J.), see Alexander (M.J.L.), *3057*

Colbourne (J.R.), design, gears, kinematics, *9470*

cold working, extrusion, metals, rods, Ghosh (T.P.), *1340*
- forming, plastic behavior, upset forging, yield condition, Pohlandt (K.), *2393*
- constitutive equations, forming, polymers, survey, yield condition, Shaw (M.T.), *2396*
- deformation (plastic), sheet metal, stress strain relationships, Reif (T.), *3422*
- anisotropic media, deformation (plastic), rolling, sheet metal, Honda (K.), Hosokawa (N.), (et al.), *5271*
- buckling (local), coldformed steel, collapse, failure, multistory frames, steel, Zamecnik (F.J.), *5349*
- buckling, shells (cylindrical), shells (stiffened), stiffened structures, welding, Bushnell (D.), *6262*
- brittle fracture, failure, steel, Rybin (V.V.), Morozov (A.M.), (et al.), *6424*
- friction (rolling), friction (sliding), lubrication (boundary), wear, Sethuramiah (A.), Shukla (B.M.), (et al.), *7096*
- interface phenomena, pressure peaks, rolling, strips, Lenard (J.G.), *8361*

Cole (B.N.), inflatable structures, inflation, membranes (inflatable), restraint systems, *1242*

Cole (D.), see Mellor (M.), *7479*

Cole (G.L.), see Tinling (B.E.), *1166*

Cole (J.D.), see Kevorkian (J.), *3111, book*

Cole (R.), see Shankar (N.), *9880*

Coleby (J.R.), dynamic response, plates, shock waves, transient effects, vibration (forced), Mazumdar (J.), *3365*

Coleman (H.W.), boundary layer (turbulent), gas turbines, heat exchangers, heat transfer, roughness, Moffat (R.J.), (et al.), *2629*

collagen, composite materials, stress strain relationships, tendons, Kastelic (J.), Palley (I.), (et al.), *7106*

collapse, beam columns, beams (thin section), tubes, Graves Smith (T.R.), Sridharan (S.), *1248*
- large displacement, plastic behavior, postbuckling behavior, rings, Kyriakides (S.), Babcock (C.D.), *1249*
- optimization, plates (circular), plates (simply supported), Yang (W.H.), *1423*
- compression, postbuckling behavior, shells (cylindrical), Foster (C.G.), *2305*
- buckling (experimental), shells (ellipsoidal), shells (torispherical), structural stability, Galletly (G.D.), *2309*
- elastoplasticity, imperfections, shells (plastic), shells (spherical), Kao (R.), *3322*
- panels, plasticity, May (I.M.), *3514*
- structural analysis, trusses, ultimate strength, Schmidt (L.C.), Morgan (P.R.), (et al.), *3550*
- discharges, plasma, schlieren methods, shock waves, Baronets (P.N.), Saprykin (A.I.), (et al.), *4667*
- buckling (local), cold working, cold-formed steel, failure, multistory frames, steel, Zamecnik (F.J.), *5349*
- framed structures, imperfections, random media, La Tegola (A.), *6242*
- columns, failure, framed structures, structural analysis, welded structures, Kanba (T.), Kanatani (H.), (et al.), *6244*
- aluminum alloys, buckling (nonlinear), nonlinear materials, nonlinear theory, plates, Little (G.H.), *6250*
- panels, plates (rectangular), stability theory, Satyamurthy (K.), Khot (N.S.), (et al.), *6252*
- buckling (torsional), plates (stiffened), thin walled structures, Nordsve (N.T.), Moan (T.), *6261*
- axial loading, shells (cylindrical), shells (stiffened), Walker (A.C.), Sridharan (S.), *6264*
- anisotropic media, failure, finite element methods, soils, Toh (C.T.), Sloan (S.W.), *6382*
- bubble dynamics, cavitation, compressional waves, Nishiyama (T.), Akaizawa (M.), *6994*
- imperfections, rods, trusses, Badala (A.), Marinetti (A.), (et al.), *7353*
- critical load, structural stability, Dooley (J.F.), Galoussis (E.G.), *8259*
- frames, reinforced concrete, ultimate strength, Ford (J.S.), Chang (D.C.), (et al.), *8450*
- buckling, experimental mechanics, explosive loading, pipes, Kinelovskii (S.A.), *8466*
- granular media, infiltration, packed beds, Buevich (Yu.A.), Ellengorn (S.M.), *8923*
- finite element techniques, icebreakers, nonlinear analysis, ship structures, Hakala (M.K.), *9005*
- biomechanics, closed conduit flow, rheology, vocal cords, Conrad (W.A.), *9058*
- limit analysis, slopes, soils, stability, De Josselin De Jong (G.), *9361*
- limit analysis, minimization, plates (circular), plates (weakened), Yang (W.H.), *10164*
- cylindrical bodies, holes, stress concentration, Montague (P.), Horne (M.R.), *10168*
- numerical methods, panels (stiffened), plastic behavior, Vasarhelyi (A.), *10174*
- bearing capacity, foundations, plastic behavior, slabs, Dolinski (K.), Sawczuk (A.), *10176*
- finite element techniques, numerical methods, plasticity, Marti (J.), Cundall (P.), *10183*
- cylindrical bodies, pressure vessels, shakedown structures, Tooth (A.S.), Jones (N.), *11336*
- compressional waves, ducts (variable area), flexible walls, supercritical flow, Kececioglu (I.), Mcclurken (M.E.), (et al.), *11608*
- bubble dynamics, walls, Shima (A.), Sato (Y.), *12043*
- bubble dynamics, walls, Sato (Y.), Shima (A.), *12048*

Collier (J.G.), see Bergles (A.E.), *934, book*

Collier (R.P.), see Segev (A.), *8698*

Collier (S.L.), flow, modeling, prediction, valves, Hoerner (C.C.), *7543*

Collings (A.G.), computer programming, curve fitting, dynamic response, interpolation, linear systems, Saunders (L.R.), *2050*
- see Saunders (L.R.), *3380*

Collings (I.L.), coasts, currents, hydrodynamic stability, oceanography, Grimshaw (R.), *10856*

Collins (E.L.), see Caveny (L.H.), *3868*
Collins (F.G.), see Frost (W.), *3893*
Collins (I.), see Supple (W.J.), *1246*
Collins (I.F.), combined loading, slip line methods, wedges, *271*
Collins (R.), see Dover (W.D.), *10283*
collision models, energy dissipators, offshore structures, ship maneuvers, Fumes (O.), Amdahl (J.), *993*
- nonlinear analysis, random excitation, vibration (random), Fujita (T.), Hattori (S.), *3346*
- dynamic effects, impact, Grigoryan (S.S.), *4458*
- drops, two phase flow, Neizvestnyy (A.I.), Kobzunenko (A.G.), *4832*
- drops, jets, Segal (R.B.), Gaysinskiy (Yu.F.), *5819*
- particle dynamics, particle fluid flow, stagnation point, walls, Matsufuji (H.), Hasegawa (E.), *6047*
- geosynchronous orbits, mission analysis, probability, Hechler (M.), Van Der Ha (J.C.), *6882*
- offshore structures, probability theory, simulation, Thoft-Christensen (P.), *7615*
- hamiltonian equations, periodic orbits, three body problem, Losco (L.), Marchal (C.), *7914*
- heat transfer, plasma, propagation, waves, Namikawa (T.), Hamabata (H.), *8828*
- absorption, energy conversion, laser plasma interaction, resonance, Guillaneux (P.), *8832*
- mathematical methods, n body problems, stability theory, Simo (C.), Llibre (J.), *10770*
- hamiltonian equations, oscillators, perturbation theory, two body problem, Terry (P.W.), *10772*
- boltzmann equation, particles, transport, unsteady flow, Ganapol (B.D.), Boffi (V.C.), *11436*
- planetary theory, rarefied gases, transition flow, two phase flow, Pai (S.I.), *11448*

collocation, convergence, numerical methods, singular integral equations, Tsamasphyros (G.), Theocaris (P.S.), *45*
- boundary value problems, finite element techniques, parabolic equations, Hayes (L.J.), *82*
- condensation, curved surfaces, extended surfaces, isothermal processes, Panchal (C.B.), Bell (K.J.), *807*
- cauchy integral, singular integral equations, splines, Napolitano (M.), Rubini (F.), (et al.), *3119*
- computing techniques, elasticity, singular integral equations, Ioakimidis (N.I.), Theocaris (P.S.), *4182*
- boundary layer, falkner-skan equation, splines, Mastro (R.A.), Voss (D.A.), *4615*
- cauchy principal value, computing techniques, singular integral equations, Theocaris (P.S.), *6083*
- computer programming, elliptic equations, finite element methods, galerkin method, rayleigh ritz method, Weiser (A.), Eisenstat (S.C.), (et al.), *6096*

colloids, coagulation, emulsions, hydrodynamic stability, non newtonian suspensions, particle size, Reddy (S.R.), Fogler (H.S.), *3592*
- electro fluid dynamics, hydrodynamics, particle fluid flow, spherical bodies, Adler (P.M.), *6580*
- brownian motion, polar fluids, shear flow, suspensions, Takamura (K.), Van De Ven (T.G.M.), (et al.), *6583*
- liquid solid interface, numerical methods, surfactants, Gur (Y.), Ravina (I.), Babchin (A.J.), *6585*
- dispersions, optical techniques, particle size, Tausk (R.J.M.), Venselaar (H.C.J.), (et al.), *7003*
- anisotropy, birefringence, optical techniques, suspensions, Meeten (G.H.), *8502*

Collotta (T.), see Gatti (G.), *10260*
columns, modal analysis, vibration, Gajewski (A.), *367*
- deformation, reinforced concrete, Ford (J.S.), Chang (D.C.), (et al.), *1439*
- thermal diffusion, transfer functions, Rabinovich (G.D.), *2856*
- beams, buckling, elastic foundations, Williams (F.W.), *3326*
- stayed columns, structural stability, Howson (W.P.), Williams (F.W.), *3327*
- buckling, design (optimum), elastoplasticity, optimization, Amari (M.), Okumura (A.), *3521*
- flexure, punch problems, reinforced concrete, slabs, strength, Gesund (H.), Goli (H.B.), *3532*
- design (optimum), follower forces, Bogacz (R.), Irretier (H.), (et al.), *4527*
- seismic loading, Lin (Y.K.), Shih (T.-Y.), *5889*
- concrete, earthquake engineering, Selna (L.), Martin (I.), (et al.), *5895*
- beams (curved), beams (elastic), buckling, postbuckling behavior, James (R.D.), *6243*
- collapse, failure, framed structures, structural analysis, welded structures, Kanbe (T.), Kanatani (H.), (et al.), *6244*
- beams, girders (plate), structural stability, Bjorhovde (R.), *6245*
- creep buckling, reinforced concrete, Bazant (Z.P.), Tsubaki (T.), *6269*
- buckling, framed structures, sway, Lay (M.G.), *6530*
- eccentric loading, imperfections, Herman (H.), *7317*
- composite materials, reinforced concrete, shape factors, Smith (D.G.E.), *7355*
- cracks, eccentric loading, reinforced concrete, Bridge (R.Q.), *7505*
- design, finite element methods, mines, pillars, structural support, underground, Pariseau (W.G.), Sorensen (W.K.), *7610*
- gravity, harmonic waves, hydrodynamic stability, liquids, Malik (S.K.), Singh (M.), *7740*
- plates (rectangular), slabs, structural analysis, waffle construction, Karasudhi (P.), Hovichitr (I.), (et al.), *8241*
- buckling, cooling towers, Kovacs (B.), *8459*
- axial loading, beams, bending, strain gages, strain measurement, Tuttle (M.E.), *9425*
- design (optimum), dynamic stability, Hanaoka (M.), Washizu (K.), *9441*
- connections, plates, punch problems, reinforced concrete, Neth (V.W.), De Paiva (H.A.R.), (et al.), *9446*
- buckling (nonlinear), elastoplasticity, imperfection sensitivity, trusses, Byskov (E.), *10167*
- beams (thin section), buckling, Hancock (G.J.), *10171*
- design (minimum weight), design (optimum), optimization, postbuckling behavior, Venkateswara Rao (G.), Narayanaswami (R.), *10351*
- annuli, bodies (liquid filled), fluid-structure interaction, seismic loading, Fujita (K.), *11637*

columns (eccentrically loaded), bending, design (ultimate strength), reinforced concrete, tension, Nazir (C.P.), *6500*
columns (variable cross section), beam columns, probability theory, safety, Frangopol (D.), Nguyen Dang Hung, *335*
Coman (G.), see Blaga (P.), *3126*
Combescure (A.), finite element techniques, fluid-structure interaction, frequency domain techniques, Gibert (R.J.), (et al.), *6705*
combined loading, cracks, finite element techniques, fracture, stress intensity factor, Ishikawa (H.), *85*
- slip line methods, wedges, Collins (I.F.), *271*
- beam columns, Cheong-Siat-Moy (F.), Downs (T.), *336*
- buckling, lattices, trusses, Holzer (S.M.), Plaut (R.H.), (et al.), *341*
- experimental results, polymers, viscoelastic materials, Nishitani (T.), Murayama (Y.), *1189*
- aluminum alloys, creep, Findley (W.N.), Lai (J.S.), *1411*
- aluminum alloys, fatigue, life expectancy, multiaxial fatigue, Sines (G.), Ohgi (G.), *2407*
- fatigue, material testing, notch sensitivity, stress concentration, Kurajian (G.M.), Na (T.Y.), *2433*
- creep, pressurized components, shells (cylindrical), Lau (J.H.), Listvinsky (G.K.), *3252*
- plastic behavior, plasticity, Gorodetskii (A.V.), *3261*
- dislocations, plastic waves, Jimma (T.), Inoue (H.), (et al.), *4445*
- buildings (tall), multistory frames, Anderson (D.), *4539*
- bending, fatigue, notch tests, torsion, Matake (T.), Imai (Y.), *6418*
- cosserat solids, cylindrical bodies, micropolar media, Cheverton (K.J.), Beatty (M.F.), *8182*
- buckling, elasticity (linear), rings, Schmidt (R.), *8262*
- beams (cantilever), large displacement, Lau (J.H.), *9261*
- design (optimum), plasticity, space frames, structural analysis, Grierson (D.E.), Aly (A.A.), *11319*

combustion, flames, interaction, jets, schlieren methods, transition, Yule (A.J.), Chigier (N.A.), (et al.), *841*
- boundary layer (turbulent), discharges, magneto fluid dynamics, waves, Okazaki (K.), Mori (Y.), (et al.), *857*
- flame propagation, kinetics, thermodynamics, vessels, Babkin (V.S.), Babushok (V.I.), (et al.), *1742*
- catalyzed ignition, reactors, tubes, Harrison (B.K.), Ernst (W.R.), *1743*
- hydrogen, injection, porous media, Hubbartt (J.E.), Strahle (W.C.), (et al.), *1751*
- models, numerical analysis, two component flow, Buldakov (V.F.), Romanov (O.Ya.), (et al.), *1752*
- boundary layer, heat transfer, hydrocarbons, mass transfer, porous media, Batievskii (V.L.), Sergeev (G.T.), *1753*
- combustion chambers, liquid fuels, Asoskov (V.A.), Shestakov (N.S.), *1755*
- diesel engines, fuel jets, injectors, Greeves (G.), *1765*
- asymptotic methods, flame holders, one dimensional flow, Bobrova (N.R.), Burkina (R.S.), (et al.), *2861*
- channel flow, hydrogen, shock waves, supersonic flow, Zimont (V.L.), Levin (V.M.), (et al.), *2865*
- cracks, flame propagation, solid propellants, Kumar (M.), Kovacic (S.M.), (et al.), *2866*
- coaxial jets, flames (turbulent), Kimoto (K.), Shiraishi (I.), (et al.), *3861*
- chemical kinetics, chemically reactive flow, elliptic equations, numerical methods, Greenberg (J.B.), Presser (C.), *3874*
- chemical kinetics, numerical methods, quenching, Dendy (J.E.) Jr., Wendroff (B.), *3875*
- space shuttle, zero g phenomena, Cockran (T.H.), *3876, book*
- chemical kinetics, diffusion, exhaust gases, Malte (P.C.), Schmidt (S.C.), (et al.), *3877*
- flames (diffusion), lasers, scattering, spectral analysis, Bard (S.), Pagni (P.J.), *3878*
- diagnostics, lasers (gasdynamic), scattering, Eckbreth (A.C.), Bonczyk (P.A.), (et al.), *3879*
- acoustic measurements, ducts, spectral analysis, Miles (J.H.), Raftopoulos (D.D.), *3957*
- chemical reactions, explosions, ignition, kinetics, Bowen (J.R.), Manson (N.), (et al.), *4734, book*

- combustors, modeling, numerical methods, Mcdonald (H.), *4736*
- flammability, ignition, textiles, Miller (B.), Martin (J.R.), (et al.), *4739*
- diesel engines, hydrogen, ignition sensitivity, Ikegami (M.), Miwa (K.), (et al.), *4742*
- bodies of revolution, compressible flow, mathematical models, supersonic flow, Artyukh (L.Yu.), Kashkarov (V.P.), (et al.), *5415*
- chemical kinetics, chemical reactors, differential equations (ordinary), Do (D.D.), Weiland (R.H.), *5626*
- metals, powders, self ignition, Chernenko (E.V.), Rozenband (V.I.), *5627*
- aluminum, ignition, particles, Polishchuk (D.I.), Shevchuk (V.G.), (et al.), *5628*
- burning rate, diffusion, liquid vapor interface, Sukhov (G.S.), Yarin (L.P.), *5629*
- detonation, reaction kinetics, shock waves, tubes, Gendugov (V.M.), *5630*
- jets, turbulent mixing, Buriko (Yu.Ya.), Lebedev (A.B.), *5631*
- electrical properties, flames (diffusion), jets, Kidin (N.I.), Makhviladze (G.M.), *5633*
- boltzmann equation, kinetic theory, mathematical models, Makashev (N.K.), *5634*
- extinguishment, inhibition, reaction rates, Nesterko (N.A.), Taran (E.N.), *5636*
- doppler effect, pressure measurement, solid propellants, Strand (L.D.), Magiawala (K.R.), (et al.), *5638*
- mathematical models, stability (numerical), thermal diffusion, Baushev (V.S.), Vilunov (V.N.), (et al.), *5643*
- combustors, mathematical models, particulate flow, Chung (P.M.), Carlson (L.), *5644*
- chemical reactions, hydrocarbons, mathematical models, Arbib (H.A.), Goldman (Y.), (et al.), *5645*
- chemically reactive flow, flames (laminar), mathematical models, numerical methods, Oran (E.S.), Boris (J.P.), *6833*
- burning rate, flammability, ignition, textiles, Reeves (W.A.), Hammons (M.A.), (et al.), *6834*
- flames (diffusion), hydrogen, methane, turbulent flow, Annushkin (Yu.M.), Maslov (G.F.), *6835*
- burners, flames (diffusion), swirl, Hellat (J.), Gunther (R.), *6836*
- chemical kinetics, flames (turbulent), reaction rates, Yoshida (A.), Gunther (R.), *6837*
- kinetics, oxidation, porous media, Chemenko (E.V.), Ivleva (T.A.), (et al.), *6841*
- fire spread, flame propagation, ignition, solid propellants, Andoh (E.), Mizomoto (M.), (et al.), *6845*
- fire spread, flame propagation, pyrolysis, sublimation, Frenandez-Pello (A.C.), Mao (C.-P.), *6846*
- environmental tests, materials properties, thermal fatigue, Tretyachenko (G.N.), Kravchuk (L.V.), (et al.), *7474*
- coal, dust, flame propagation, pyrolysis, Krazinski (J.L.), Buckius (R.O.), (et al.), *7880*
- emissions, hydrocarbons, oil films, spark ignition engines, Kaiser (E.W.), Lorusso (J.A.), (et al.), *7882*
- emissions, gas turbines, swirl flow, Mestre (A.), *7887*
- convection, navier stokes equation, Makhviladze (G.M.), Shcherbak (S.B.), *7888*
- aerothermochemistry, bifurcation, propagation, thermal waves, Sivashinsky (G.), *8789*
- drops, vaporization, Law (C.K.), Chung (S.H.), (et al.), *8790*
- chemical kinetics, chemical reactions, thermal effects, Tennankore (K.N.), *8792*
- convection (free), numerical methods, spherical bodies, Potter (J.M.), Riley (N.), *8793*
- initial value problems, mathematical models, Tam (K.K.), *8794*
- exothermic reactions, propagation, thermal waves, Leibenzon (A.S.), *8795*
- chemical kinetics, chemically reactive flow, fluid mechanics, rockets, Markatos (N.C.), Spalding (D.B.), (et al.), *8796*
- coal, dust, models, pyrolysis, Kansa (E.J.), Perlee (H.E.), *8800*
- diesel engines, flow irregularities, geometrical properties, Losonci (P.), *8802*
- diesel engines, evaporation, injection systems, modeling, Baumer (K.), Hartje (J.), (et al.), *8804*
- design, geometrical properties, scramjets, supersonic flow, Waltrup (P.J.), Billig (F.S.), (et al.), *8809*
- atomization, drops, Lefebvre (A.H.), *8904*
- soot formation, Haynes (B.S.), Wagner (H.G.), *9744*
- flame propagation, flow measurement, premixed fuel air, Gololobov (I.M.), Granovskii (E.A.), (et al.), *9749*
- catalyzed ignition, combustion (catalytic), granular media, mathematical models, packed beds, reactive systems, Kiselev (O.V.), Matros (Yu.Sh.), *9753*
- filtration, porous media, Aldushin (A.P.), Seplyarskii (B.S.), (et al.), *9757*
- powders, surface temperature, temperature, Chernov (Yu.V.), *9760*
- particle dynamics, particles, Sulima (I.M.), *9761*
- flame propagation, wave equations, Ivleva (T.P.), Merzhanov (A.G.), (et al.), *9764*
- mathematical models, steam, steam zone, Voll (L.), Smohai (F.), (et al.), *9766*
- diffusion, evaporation, metals, oxidation, Fursov (V.P.), Shevtsov (V.I.), (et al.), *9767*
- aerosols, carbon, particles, Bukatyi (V.I.), Sagalakov (A.M.), (et al.), *9769*
- hypergolic propellants, regression rate, self ignition, Paul (P.J.), Mukunda (H.S.), (et al.), *9770*
- burning rate, carbon, oxidation, particles, Matalon (M.), *9771*
- filtration, reactors, Stolyarova (N.N.), Sukhov (G.S.), (et al.), *9773*
- diffusion, metals, models, Kudryavtsev (V.M.), Sukhov (A.V.), (et al.), *9774*
- models, solid fuels, Strunin (V.A.), Manelis (G.B.), *9775*
- convection (free), navier stokes equation, Zakarin (E.A.), Kashkarov (V.P.), (et al.), *9779*
- chemical kinetics, detonation, explosions, Dremin (A.N.), Nelin (V.M.), (et al.), *9825*
- explosions, reactors, shock waves (normal), Sukhov (G.S.), Yarin (L.P.), *9899*
- combustion chambers, energy conservation, fluidized beds, solid wastes, Hamm (J.R.), Keairns (D.L.), *10623*
- heat addition, solar collectors, solar energy, solar radiation, Becker (B.), Finckh (H.H.), (et al.), *10632*
- porous surfaces, Sergeev (G.T.), *10684*
- flame propagation, time dependence, Zeldovich (Y.), *10699*
- burning velocity, chemical reactions, heat transfer, particles, Strunin (V.A.), Dyakov (A.P.), (et al.), *10703*
- drops, evaporation, sprays, Umemura (A.), Ogawa (S.), (et al.), *10709*
- agglomeration, aluminum, particles, Grigorev (V.G.), Zarko (V.E.), (et al.), *10713*
- evaporation, liquid fuels, sprays, Tambour (Y.), *10716*
- combustors, optical techniques, Switzer (G.L.), Goss (L.P.), (et al.), *10720*
- compressible flow, numerical methods, subsonic flow, Kansa (E.J.), *11423*
- convection, mass transfer, relaxation, Sieniutycz (S.), *11775*
- combustion (catalytic), critical phenomena, Tam (K.K.), *11784*
- models, solid propellants, Beckstead (M.W.), Mccarty (K.P.), *11786*
- burning rate, solid propellants, wires, Kubota (N.), Ichida (M.), (et al.), *11787*
- coal, combustion products, oxidation, Song (Y.H.), Pohl (J.H.), (et al.), *11788*
- burning rate, solid fuels, Seetharamacharyulu (D.), Pai Verneker (V.R.), (et al.), *11789*
- carbon, char particles, fluidized beds, mass transfer, particles, Gavalas (G.R.), *11792*
- carbon, char particles, mass transfer, particles, porous media, Simons (G.A.), *11793*

combustion (oscillatory), acoustic measurements, combustors, doppler effect, Caveny (L.H.), Collins (E.L.), (et al.), *3968*
- flame propagation, Ermolaev (B.S.), Sulimov (A.A.), (et al.), *9759*

combustion (submerged), chemical reactions, simulation, Coats (K.H.), *7992*
- immiscible fluids, jets, Sukhov (G.S.), Yarin (L.P.), *9776*

combustion (turbulent), convection (forced), impact jets, impingement, isothermal processes, jets, thermal measurements, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*
- flames (laminar), models, Libby (P.A.), Bray (K.N.C.), (et al.), *1740*
- lasers, stokes flow, thermal measurements, turbulence, Eckbreth (A.C.), *5632*
- flow obstructions, fluidized beds, heat exchangers, Miller (G.), Zakkay (V.), *6815*
- boundary layer, computing techniques, Kang (S.-W.), Levatin (J.L.), *7710*
- explosions, heat transfer, ignition, turbulence, Liu (V.C.), *8788*
- compressible flow, swirl flow, turbulent mixing, Sislian (J.P.), *9554*
- combustion instability, combustors, flashback, Keller (J.O.), Vaneveld (L.), (et al.), *9754*
- flames (turbulent), noise, noise (combustion), turbulent flow, Legendre (R.), *10705*

combustion (unsteady), burning rate, depressurization, propellants, Suhas (H.K.), Bose (T.K.), *9762*
- models, powders, Zarko (V.E.), Kiskin (A.B.), *10706*
- diesel engines, flames (diffusion), stochastics, Ikegami (M.), Shioji (M.), *10710*

combustion chambers, cooling, flames, gas turbines, Sudarev (A.V.), *846*
- combustion, liquid fuels, Asoskov (V.A.), Shastakov (N.S.), *1755*
- gas turbines, jets, mixing, Spiridonov (Yu.A.), Premet (E.I.), (et al.), *5637*
- gas turbines, scale models, Dan-Zhi (C.), *5641*
- aerodynamics, combustors, jets, mixing, Grigorenko (P.P.), Spiridonov (Yu.A.), (et al.), *6844*
- boilers, heat transfer, mathematical models, Gulic (M.G.), Gvozdenac (D.D.), *7886*
- aerodynamic interference, computer programming, diesel engines, thermal measurements, Gwinner (J.U.), *8803*
- reservoirs, simulation, Youngren (G.K.), *8943*
- frequency response, gases, vibration, Furletov (V.I.), *9765*
- combustion, energy conservation, fluidized beds, solid wastes, Hamm (J.R.), Keairns (D.L.), *10623*
- diesel engines, fuel economy, heat transfer, injection systems, Kamel (M.), Watson (N.), *11797*

combustion instability, flames (turbulent), Sivashinsky (G.I.), Matkowsky (B.J.), *838*
- mathematical models, probability theory, Polinszky (K.), Bator (B.), (et al.), *844*
- boron, flame holders, Clarke (J.F.), Mcintosh (A.C.), *6840*
- flames (laminar), mathematical models, thermal effects, Aldushin (A.P.), Kasparyan (S.G.), *7881*
- frequency response, solid propellants, thermal waves, De Luca (L.), *8799*
- combustion (turbulent), combustors, flashback, Keller (J.O.), Vaneveld (L.), (et al.), *9754*
- filtration, oxidizers, porous media, Sukhov (G.S.), Yarin (L.P.), *9763*

combustion products, flames, mathematical models, methanol, quenching, spark ignition engines, Browning (L.H.), Pefley (R.K.), *840*

- diesel engines, exhaust gases, particle fluid flow, Cuthbertson (R.D.), Stinton (H.C.), (et al.), *1763*
- diesel engines, exhaust gases, particle fluid flow, Carpenter (K.), Johnson (J.H.), *1764*
- contamination, exhaust gases, interferometry, optical techniques, propellants, spectral analysis, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- coal, particulate flow, three dimensional flow, trajectories, turbomachinery, Beacher (B.), Tabakoff (W.), (et al.), *7889*
- axial turbines, blades, cascades, erosion, particles, synthetic fuels, Wenglarz (R.A.), Menguturk (M.), *8807*
- gas surface interaction, heat transfer, radiant interchange, Popov (Yu.A.), Melman (M.M.), (et al.), *10707*
- boilers, coal, flyash, particles, radiation, Wall (T.F.), Lowe (A.), (et al.), *10708*
- combustors, gas turbines, hybrid fuels, Lew (H.G.), Decorso (S.M.), (et al.), *10711*
- combustors, gas turbines, hybrid fuels, Novick (A.S.), Troth (D.L.), (et al.), *10712*
- combustors, gas turbines, hybrid fuels, Cutrone (M.B.), Hilt (M.B.), (et al.), *11785*
- coal, combustion, oxidation, Song (Y.H.), Pohl (J.H.), (et al.), *11788*
- flames, methane, mixtures, quenching, Fukuda (M.), Korematsu (K.), (et al.), *11794*
- flames (diffusion), soot formation, Nishida (O.), *11795*

combustors, catalyzed ignition, models, transient effects, Tien (J.S.), *1754*
- design, flame holders, gas turbines, vaporization, Plee (S.L.), Mellor (A.M.), *1767*
- cooling, gas turbines, Sudarev (A.V.), *2871*
- design, turbojet engines, wind loads, Shou (Z.Q.), *3748*
- acoustic measurements, combustion (oscillatory), doppler effect, Caveny (L.H.), Collins (E.L.), (et al.), *3868*
- flames, radiation, soot formation, Claus (R.W.), *3869*
- emissions, gas turbines, Odgers (J.), *3870*
- gas turbines, mathematical models, pyrolysis, soot formation, Kesten (A.S.), Sangiovanni (J.J.), (et al.), *3871*
- combustion, modeling, numerical methods, Mcdonald (H.), *4736*
- film cooling, film flow, gas turbines, Sturgess (G.J.), *5622*
- emissions, gas turbines, mixing, Noyce (J.R.), Sheppard (C.G.W.), (et al.), *5640*
- combustion, mathematical models, particulate flow, Chung (P.M.), Carlson (L.), *5644*
- ramjets, regression rate, solid fuels, Hewett (M.E.), Netzer (D.W.), *5646*
- control, design, gas turbines, Egan (W.J.) Jr., Reilly (R.S.), (et al.), *5654*
- fluid injection, gas turbines, sprays, Simmons (H.C.), Harding (C.F.), *5655*
- gas turbines, high temperature, Evin (O.A.), Yankovskii (V.M.), (et al.), *5656*
- boilers, heat exchangers, magneto plasma dynamics, open loop systems, Johnson (T.R.), Berry (G.F.), (et al.), *5680*
- chemical kinetics, flames (turbulent), statistical mechanics, velocity profiles, Moreau (P.), *6838*
- aerodynamics, combustion chambers, jets, mixing, Grigorenko (P.P.), Spiridonov (Yu.A.), (et al.), *6844*
- emissions, gas turbines, scale models, Roberts (P.B.), Kubasco (A.J.), (et al.), *7883*
- emissions, gas turbines, vaporization, Sjoblom (B.G.A.), *7884*
- chemical kinetics, emissions, Clark (W.D.), Folsom (B.A.), (et al.), *8797*
- mathematical models, ramjet engines, Lilley (D.G.), *8798*
- combined cycles, gas turbines, power generation, reheat, Mori (K.), Kitajima (J.), (et al.), *8806*
- heat transfer (combined modes), magneto fluid dynamics, mass transfer, three dimensional flow, Im (K.H.), Ahluwalia (R.K.), *8811*
- combustion (turbulent), combustion instability, flashback, Keller (J.O.), Vaneveld (L.), (et al.), *9754*
- combustion products, gas turbines, hybrid fuels, Lew (H.G.), Decorso (S.M.), (et al.), *10711*
- combustion products, gas turbines, hybrid fuels, Novick (A.S.), Troth (D.L.), (et al.), *10712*
- combustion, optical techniques, Switzer (G.L.), Goss (L.P.), (et al.), *10720*
- design, gas turbines, jets, Novick (A.S.), Arvin (J.R.), (et al.), *11513*
- combustion products, gas turbines, hybrid fuels, Cutrone (M.B.), Hilt (M.B.), (et al.), *11785*

Comincioli (V.), see Capelo (A.), *8070*

Commault (C.), see Willems (J.C.), *11037*

comminution, crushing, dynamic behavior, Krogh (S.R.), *12054*
- aggregates, equipment, grinding, Krycer (I.), Hersey (J.A.), *12055*

communication satellites, attitude control, geosynchronous orbits, gyrodynamics, Hsing (J.C.), Ramos (A.), (et al.), *5703*
- artificial satellites, trajectory optimization, weather satellites, Contant (J.-M.), Winkels (H.-M.), (et al.), *7925*

Comninou (M.), conduction (heat), contact problems, green function, thermoelasticity, Dundurs (J.), (et al.), *5793*
- contact problems, half space, punch problems, thermoelasticity, Barber (J.R.), (et al.), *8870*
- contact problems, corners, thermal contact resistance, thermoelasticity, Dundurs (J.), *9042*
- see Dundurs (J.), *10288*

compaction, field tests, granular media, soils, Leonards (G.A.), Cutter (W.A.), (et al.), *418*
- dies, friction (rolling), materials properties, powder metallurgy, Lammens (R.F.), Struyk (C.), (et al.), *7463*
- crackling, materials properties, powder metallurgy, powders, Gerritsen (A.H.), Stemerding (S.), *7464*
- dies, friction, powder metallurgy, powders, punch problems, Lammens (R.F.), Liem (T.B.), (et al.), *7465*
- finite element methods, multiphase flow, reservoir engineering, subsidence, Morgan (K.), Lewis (R.W.), (et al.), *8912*
- ceramics, powders, Broese Van Groenou (A.), *9379*
- explosions, impulsive loading, porous media, transient loading, underground, Bovt (A.N.), Kobets (V.I.), (et al.), *9838*

complex variables, correspondence principle, cyclic loading, viscoelasticity (dynamic), Dasgupta (G.), *264*
- contact problems, elasticity (linear), potential theory, Guz (A.N.), *1175*
- holes, plates (holed), strips, Hering (J.), Uj (J.), *2214*
- distributed parameters, extended complex plane, linear systems, poles, transfer functions, zeros, Ferreira (P.M.G.), *4211*
- plates (weakened), stress intensity factor, Kuliev (V.D.), *4334*
- elasticity (linear), holes, prisms, torsion, Bhargava (R.D.), Puranik (S.S.), *4341*
- cracks, edge dislocations, kinked crack, mixed mode loading, singular integral equations, Karihaloo (B.L.), *4500*
- plates (holed), thermal stresses, Yamada (K.), *4814*
- elasticity (linear), plates (holed), plates (holed), Theocaris (P.S.), Bardzokas (D.), *5086*
- cylindrical bodies, irrotational flow, two dimensional flow, walls, Petrila (T.), *6614*
- fluid mechanics, porous media, Orasanu (M.), *7019*
- approximations, asymptotic methods, differential equations (ordinary), eigenvalue problems, sturm-liouville problems, Boyd (J.P.), *7158*
- differential equations (partial), integral operators, linear equations, survey, Kracht (M.), Kreyszig (E.), (et al.), *7162*
- airfoil characteristics, incompressible flow, potential flow, two dimensional flow, White (J.W.), *7785*
- analogies, conduction (heat), waves, Dunne (E.G.), Mugler (D.H.), *8089*
- cylindrical bodies, inviscid fluid, plates, porous surfaces, Capodanno (P.), *8521*
- cylindrical bodies, inviscid fluid, plates, porous surfaces, Petrila (T.), *8522*
- corners, crack initiation, holes, stress intensity factor, Hasebe (N.), Ueda (M.), *9403*
- bending, plates (weakened), Hasebe (N.), Ueda (M.), *10146*
- boundary value problems, cracks, dislocations, energy release rate, kinking, Hayashi (K.), Nemat-Nasser (S.), *10289*
- cracks, rotating disks, Isida (M.), *10296*

composite materials, laminates, nonlinear materials, numerical methods, stress strain relationships, Ditcher (A.K.), Rhodes (F.E.), (et al.), *280*
- glass fibers, high strength, Prewo (K.M.), Brennan (J.J.), *281*
- conduction (steady), finite difference methods, iterative methods, Charrier (J.M.), Gupta (R.), (et al.), *282*
- contact problems, impact, Takeda (N.), Sierakowski (R.L.), *284*
- dynamic stresses, fibers, rupture, Moskvitin (V.V.), Ovchinskii (A.S.), *285*
- composite structures, stability, Guz (A.N.), Babic (I.U.), *354*
- crack arrest, crack propagation, polymers, Barnes (C.R.), Rosenfield (A.R.), *455*
- bimodulus materials, caustics, crack opening displacement, interface cracks, stress intensity factor, Theocaris (P.S.), Stassinakis (C.A.), *474*
- crack arrest, dynamic loads, interface cracks, stress intensity factor, Theocaris (P.S.), Milios (J.), *475*
- crack propagation, inclusions, stress intensity factor, Averbukh (A.Z.), *476*
- bending, bimodulus materials, plates (rectangular), plates (thick), thermoelasticity (steady), Reddy (J.N.), Bert (C.W.), (et al.), *920*
- diffusion, hygrothermal effects, Sih (G.C.), Shih (M.T.), (et al.), *931*
- boundary elements, conduction (steady), inclusions, Jaworski (A.R.), *932*
- biomaterials, fibers, mechanical properties, teeth, Fox (P.G.), *1034*
- orthotropic materials, plates (anisotropic), stress concentration, stretching, Peiekh (B.L.), Makhnitskii (R.N.), *1180*
- fibers, materials properties, plastics, Worndle (R.), Daschner (W.), *1203*
- constitutive relations, fibers, stiffness, vibration, Aboudi (J.), *1207*
- conductivity, fibers, Gogol (W.), Furmanski (P.), *1208*
- fatigue, glass fibers, high cycle fatigue, life expectancy, Kim (H.C.), Ebert (L.J.), *1209*
- dynamic stresses, fibers, fracture, Sakharova (E.N.), Ovchinskii (A.S.), *1210*
- materials, nondestructive tests, physical properties, Van Suchtelen (J.), *1211*
- layered media, yield condition, Sawicki (A.), *1212*
- brittle fracture, fracture toughness, laminates, plates (holed), Nepershin (R.I.), Klimenov (V.V.), (et al.), *1213*
- polymers, shells (anisotropic), structural stability, Tomashevskii (V.T.), Yakovlev (V.S.), *1257*
- creep rupture, laminates, plasticity, polymers, Brinson (H.F.), Griffith (W.I.), (et al.), *1356*
- fracture mechanics, kinetic theory, statistical mechanics, three dimensional formulation, Tamuzh (V.P.), *1359*
- debonding, delamination, fatigue, fibers, Gradin (P.A.), Backlunk (J.), *1478*
- bonding, fibers, Liiri (O.), Kivisto (A.), (et al.), *1480*

- anisotropy, effective elastic moduli, thermoplasticity, Stephenson (R.C.), Turner (S.), (et al.), *1834*
- anisotropic media, laminates, slabs, thermoelasticity (steady), Tauchert (T.R.), *1838*
- saint venant principle, sandwich construction, strips, Rao (N.R.), Valsarajan (K.V.), *2210*
- effective elastic moduli, inclusions, micromechanics, nonhomogeneous media, Cleary (M.P.), Chen (I-W.), (et al.), *2224*
- creep, plastics, polymers, Sokolov (E.A.), Maksimov (R.D.), *2228*
- resins, Kray (R.J.), *2244*
- data analysis, failure, reliability, triaxial loading, Wetherhold (R.C.), *2245*
- design, optimization, Bryzgalin (G.I.), *2246*
- edge effects, reinforced openings, Partsevskii (V.V.), Petrovskii (A.V.), *2249*
- fibers, shells (anisotropic), shells (stiffened), structural stability, Ershov (N.P.), *2304*
- elastic waves, impact, laminates, Takeda (N.), Sierakowski (R.L.), (et al.), *2376*
- finite element techniques, fracture criteria, notch sensitivity, Backlund (J.), *2454*
- finite element techniques, notch sensitivity, shear loading, stress analysis, Herakovich (C.T.), Bergner (H.W.) Jr., *2455*
- crack growth, finite element techniques, micromechanisms, thermal effects, Braun (H.), Herrmann (K.), *2456*
- moire methods, optical techniques, strain analysis, Chiang (F.P.), Parker (B.), (et al.), *2475*
- boron, damage, fatigue, laminates, stiffness, O'Brien (T.K.), Reifsnider (K.L.), *2493*
- conduction (heat), conductivity, particles, thermal contact resistance, Yamada (E.), Ota (T.), *2783*
- airplane structures, patching, residual stresses, thermal effects, Jones (R.), Callinan (R.J.), *2980*
- copper, friction, polymers, Savitskii (A.I.), *3046*
- computing techniques, eigenvalue problems, elasticity, finite element methods, fracture, optimization, plasticity, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- conduction (unsteady), discontinuities, eigenvalue problems, variational methods, Nemat-Nasser (S.), Horgan (C.O.), *3110*
- anisotropy, biomaterials, bones, Kreger (A.F.), Zilauts (A.F.), *3248*
- continuum mechanics, smoothing of data, Fishman (L.), Mccoy (J.J.), *3276*
- elastomers, materials properties, Yevstratov (V.F.), Lykin (A.S.), (et al.), *3278*
- beams (sandwich), fatigue, weibull statistics, wood, Kyanka (G.H.), *3280*
- crack growth, crazing, penny shaped crack, stress intensity factor, Mahapatra (R.B.), Satapathy (P.K.), (et al.), *3473*
- brittle materials, compression, specimen design, tests, Kvitka (A.L.), Dyachkov (I.I.), *3491*
- adhesives, airplane structures, bonded joints, moisture, Delasi (R.J.), Schulte (R.L.), *3587*
- dynamic analysis, elasticity (nonhomogeneous), hamilton principle, variational methods, Willis (J.R.), *4174*
- anisotropy, structural optimization, Banichuk (N.V.), *4342*
- ellipsoids, penny shaped crack, reinforced bodies, Taya (M.), *4356*
- acoustic emission, laminates, material testing, nondestructive tests, Prakash (R.), *4360*
- brittle materials, cyclic loading, experimental mechanics, shells (spherical), Amelyanovich (K.K.), Podgornyi (L.N.), *4547*
- chemical reactions, differential equations (partial), diffusion, galerkin method, Cavendish (J.C.), Oh (S.H.), *4731*
- elasticity (linear), photoplasticity, shells, viscoelasticity, Kuznetsov (G.B.) eds., Shakirov (N.V.), *5071, book*
- couple stresses, elasticity (nonhomogeneous), elasticity (nonlocal), nonhomogeneous media, Chigarev (A.V.), *5096*
- residual stresses, shells (of revolution), Blagonadezhin (V.L.), Vorontsov (A.N.), (et al.), *5100*
- compression, creep, failure, tension, Gorev (B.V.), Rubanov (V.V.), (et al.), *5103*
- diatomic solids, microstructures, mixture theories, viscoelasticity, Demiray (H.), *5104*
- cermets, composite structures, fatigue, fracture, materials properties, metallic composites, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
- bonded joints, edge cracks, fracture, singular integral equations, stress intensity factor, Bakioglu (M.), *5127*
- bimodulus materials, finite element techniques, laminates, Reddy (J.N.), Chao (W.C.), *5128*
- fibers, fracture criteria, shear lag, Goree (J.G.), Gross (R.S.), *5130*
- loss factor, ultrasonics, viscoelastic waves, Williams (J.H.) Jr., Lee (S.S.), (et al.), *5140*
- anisotropy, photoelasticity, stress analysis, Jacob (K.A.), *5141*
- crack propagation, micromechanics, polymers, Theocaris (P.S.), Stassinakis (C.A.), *5292*
- fracture mechanics, j-integral, laminates, strength, stress intensity factor, three dimensional formulation, Altus (E.), Rotem (A.), *5312*
- aluminum alloys, elastic constants, metallic composites, ultrasonics, Blessing (G.V.), Elban (W.L.), *5328*
- bolted joints, failure, laminates, Tang (S.), *5380*
- conduction (heat), laminates, mixtures, Murakami (H.), Maewal (A.), (et al.), *5575*
- liquid metals, mass transfer, powder metallurgy, sintered materials, Lisovskii (A.F.), *5624*
- adhesion, compression, fibers, strength, Martinez (G.M.), Piggott (M.R.), (et al.), *6190*
- compression, fibers, mechanical analysis, strength, Piggott (M.R.), *6191*
- discontinuities, fibers, metallic composites, shear lag, Fukuda (H.), Chou (T.-W.), *6194*
- fatigue, life expectancy, programmed loading, stochastics, Yang (J.N.), Jones (D.L.), *6197*
- fatigue, graphite, life expectancy, resins, weibull statistics, Shimokawa (T.), Hamaguchi (Y.), *6203*
- fatigue, loads, material testing, Oldyrev (P.P.), *6204*
- failure, floors, slabs, Davies (J.M.), Fisher (J.), *6229*
- damage (cumulative), delamination, flaws, structural stability, Bolotin (V.V.), Zebelyan (Z.Kh.), (et al.), *6241*
- bearing capacity, plastics, shells (cylindrical), thermal effects, Tretyachenko (G.N.), Dzyuba (V.S.), (et al.), *6265*
- failure, plane stress, strength, Tennyson (R.C.), Nanyaro (A.P.), (et al.), *6435*
- crack growth, crack initiation, delamination, fracture mechanics, Wang (A.S.D.), Crossman (F.W.), *6436*
- crack growth, crack initiation, delamination, fracture mechanics, material testing, Crossman (F.W.), Warren (W.J.), (et al.), *6437*
- beams, cements, fracture mechanics, material testing, Visalvanich (K.), Naaman (A.E.), *6439*
- explosive welding, welding, Khanov (A.M.), Yakovlev (I.V.), *6569*
- elastic waves, inclusions, scattering, sound propagation, spherical waves, Berryman (J.G.), *6898*
- anisotropic media, cylindrical bodies, thermal stresses, thermoelasticity (steady), Iesan (D.), *6952*
- cast steel, fibers, high temperature, materials properties, Skrovanek (S.D.), Herron (R.H.), *6954*
- collagen, stress strain relationships, tendons, Kastelic (J.), Palley (I.), (et al.), *7106*
- averaging, mixture theories, multiphase media, Topovinina (I.V.) ed., *7130, book*
- dynamic behavior, laminates, mixture theories, waves, Benveniste (Y.), Aboudi (J.), *7142*
- discontinuities, eigenvalues, rayleigh ritz method, sturm-liouville problems, Bielak (J.), *7156*
- finite element techniques, heat transfer, mass transfer, porous media, Strada (M.), Lewis (R.W.), *7224*
- anisotropic media, edge effects, stress concentration, wedges, Ting (T.C.T.), Chou (S.C.), *7269*
- micromechanics, resins, viscoelasticity (dynamic), Schaffer (B.G.), Adams (D.F.), *7273*
- creep, cylindrical bodies, pressurized pipes, Hulsurkar (S.), *7283*
- elliptical bodies, polymers, thermal expansion, Takahashi (K.), Harakawa (K.), (et al.), *7297*
- bonded joints, fracture, plastics, transient loading, Suvorova (Yu.V.), Sorina (T.G.), (et al.), *7298*
- dynamic analysis, fibers, structural analysis, Moskvitin (V.V.), *7299*
- cyclic loading, strength, thermal loading, Mukherjee (M.K.), *7300*
- delamination, laminates, Herakovich (C.T.), *7302*
- layered media, reinforced bodies, three dimensional formulation, Lee (J.D.), *7305*
- fracture, glass, glass fibers, strength, Roginskii (S.L.), Kanovich (M.Z.), *7307*
- asymptotic behavior, fibers, rings, Bogan (Yu.A.), *7326*
- plastics, shells (cylindrical), shells (plastic), Khoroshun (L.P.), Strelchenko (I.G.), *7341*
- laminates, plates (anisotropic), Sharma (S.), Iyengar (N.G.R.), (et al.), *7342*
- columns, reinforced concrete, shape factors, Smith (D.G.E.), *7355*
- buckling, explosive welding, fibers, metallic composites, Kornev (V.M.), Yakovlev (I.V.), *7363*
- anisotropy, dynamic behavior, fibers, harmonic waves, orthotropic materials, Nemat-Nasser (S.), Yamada (M.), *7408*
- erosion, impact, Polezhaev (Yu.V.), Romanchenkov (V.P.), (et al.), *7499*
- bonded joints, fracture criteria, interface cracks, singularities, Viola (E.), Piva (A.), *7535*
- bonded joints, delamination, laminates, ultrasonics, Schramm (S.W.), Daniel (I.M.), (et al.), *7557*
- adhesion, shear, strength, Rybin (A.A.), *7569*
- flaw detection, laminates, liquid crystal, thermography, Wilson (D.W.), Charles (J.A.), *7576*
- anisotropic media, mathematical programming, optimization, polymers, shells (of revolution), Tomashevskii (V.T.), Nikolaev (B.A.), (et al.), *7594*
- polymers, thermal stresses, Korotkov (V.N.), Turusov (R.A.), (et al.), *7952*
- inclusions, nonhomogeneous media, thermal fatigue, Malygin (A.F.), Yankovskii (Yu.V.), *7954*
- fatigue, plastics, polymers, Furue (H.), Shimamura (S.), *7958*
- hips, prosthetic devices, Roberts (J.C.), Ling (F.F.), *8079*
- biomechanics, continuum theory, discrete systems, mixtures, porous media, Brulin (O.) eds., Hsieh (R.K.T.), *8090, book*
- finite element techniques, harmonic waves, layered media, variational methods, Minagawa (S.), Nemat-Nasser (S.), (et al.), *8148*

- elasticity, plasticity, solid mechanics, Hopkins (H.G.) eds., Sewell (M.J.), *8179, book*
- disclinations, fibers, fracture mechanics, peeling, Vladimirov (V.I.), Priemskii (N.D.), (et al.), *8217*
- crystals, glass fibers, hardness, indentation, Miyata (N.), Jinno (H.), *8219*
- cylindrical bodies, elastic constants, polymers, strength, textiles, Dumont (J.P.), *8220*
- fibers, fracture, materials properties, strength, Chou (T.-W.), Kelly (A.), *8227*
- beams (composite), finite element techniques, Hirst (M.J.S.), Yeo (M.F.), *8237*
- bending, experimental results, mixture theories, plates, Constanda (C.), *8240*
- cyclic loading, fatigue, fibers, fracture criteria, Hashin (Z.), *8369*
- fatigue, fracture criteria, materials properties, Reifsnider (K.), *8378*
- conduction (heat), green function, laminates, layered media, unsteady flow, Huang (S.C.), Chang (Y.P.), *8733*
- conduction (heat), fibers, mixtures, variable thermal properties, Murakami (H.), Hegemier (G.A.), *8738*
- anisotropic media, laminates, plates (sandwich), thermal effects, Reddy (J.N.), Hsu (Y.S.), *8888*
- cracks, delamination, polymers, Tomashevskii (V.T.), Shalygin (V.N.), (et al.), *9246*
- interlaminar stresses, laminates, perturbation methods, rayleigh ritz method, Bar-Yoseph (P.), Pian (T.H.H.), *9249*
- fibers, fracture, polymers, tension, Protasov (V.D.), Ermolenko (A.F.), (et al.), *9251*
- anisotropic media, strength, Margolin (G.G.), *9253*
- cracks, damage, damping capacity, nondestructive tests, Pye (C.J.), Adams (R.D.), *9254*
- residual stresses, x ray techniques, Tsai (S.-D.), Mahulikar (D.), (et al.), *9255*
- bending, laminates, plates (anisotropic), plates (nonlinear), plates (rectangular), plates (thick), Reddy (J.N.), Chao (W.C.), *9273*
- damping capacity, inclusions, viscoelastic materials, Kligman (R.L.), Madigosky (W.M.), (et al.), *9341*
- elastic waves, fibers, harmonic waves, Hlavacek (M.), *9344*
- computing techniques, crack growth, finite element techniques, microcracks, Ito (Y.M.), Rosenblatt (M.), (et al.), *9418*
- fibers, pipes, reinforced bodies, Ainsworth (L.), *9466*
- adhesives, concrete, dislocations, interface phenomena, Kendall (K.), *9487*
- adhesives, bending, joints, shear stress, stress analysis, Yuceoglu (U.), Updike (D.P.), *9488*
- computing techniques, constitutive relations, equivalence techniques, Lene (F.), Leguillon (D.), *10127*
- elastic constants, glass fibers, laminates, materials properties, Wagner (H.D.), Fischer (S.), (et al.), *10128*
- materials properties, Phillips (M.G.), *10129*
- fatigue, fibers, interlaminar stresses, Ratwani (M.M.), Kan (H.P.), *10130*
- aerospace, hybrid construction, structural analysis, Zweben (C.), *10131*
- failure, plates (sandwich), Turvey (G.J.), *10156*
- elastic waves, propagation, random media, shear waves, Kinra (V.K.), Anand (A.), *10235*
- fibers, fracture, Kousiounelos (P.N.), Williams (J.H.) Jr., *10303*
- crack propagation, glass fibers, interlaminar stresses, low temperature, Han (K.S.), Koutsky (J.), *10309*
- acoustic measurements, flaw detection, fracture, Frolov (D.I.), Kilkeev (R.Sh.), (et al.), *10319*
- bolted joints, fibers, mechanical joints, plastics, Godwin (E.W.), Matthews (F.L.), *10381*
- design, helicopters, rotors, tails, Huber (H.), Frommlet (H.), (et al.), *10515*
- resins, swell, thermal effects, thermal expansion, Adamson (M.J.), *10558*
- conduction (heat), filamentary structures, layered media, Zimmerman (R.H.), *10594*
- harmonic waves, layered media, Nemat-Nasser (S.), Yamada (M.), *11169*
- granular media, optimization, Banichuk (N.V.), Kobelev (V.V.), *11322*
- design (optimum), optimization, plates, Bryzgalin (G.I.), *11323*
- design (optimum), shells (cylindrical), stiffened structures, Pochtman (Yu.M.), Tugai (O.V.), *11324*
- gas turbines, materials processing, steel, titanium, Meetham (G.W.) ed., *11337, book*
- absorption, adhesives, bonded joints, laminates, optical techniques, swelling stresses, water, Sargent (J.P.), Ashbee (K.H.G.), *11343*

composite pressure vessels, hose, hydraulics, pressurized pipes, tubes, Entwistle (K.M.), *6205*

composite structures, finite element techniques, residual stresses, shells (of revolution), Blagonadezhin (V.L.), Dmitriev (A.V.), *92*

- laminates, reliability analysis, structural analysis, surveys, Lenoe (E.M.) eds., Oplinger (D.W.), (et al.), *286, book*
- buckling, laminates, plates, Sharma (S.), Iyengar (N.G.R.), (et al.), *287*
- delamination, effective elastic moduli, interlaminar stresses, micromechanics, Salamon (N.J.), *288*
- laminates, strength, Rabotnov (Yu.N.), *290*
- composite materials, stability, Guz (A.N.), Babic (I.U.), *354*
- panels (stiffened), postbuckling behavior, shear webs, Agarwal (B.L.), *2288*
- nonlinear analysis, reinforced concrete, ultimate strength, Lachance (L.), Hays (C.O.), *2518*
- design (optimum), multicomposite structures, optimization, shape factors, Dems (K.), Mroz (Z.), *3522*
- beams (flexural), reinforced concrete, Taylor (R.), AlNajmi (A.Q.S.), *3531*
- brazed joints, honeycomb structures, sandwich construction, Hepler (A.K.), Arnquist (J.), (et al.), *3540*
- bridges, design, slabs, Heins (C.P.), *3545*
- stress concentration, wedges, Dempsey (J.P.), Sinclair (G.B.), *4335*
- cermets, composite materials, fatigue, fracture, materials properties, metallic composites, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
- reinforced bodies, rotating disks, Tsuda (S.), Shiratori (E.), (et al.), *5129*
- dynamic analysis, plasticity, waves, Skovoroda (A.R.), Shapiro G.S.), *6195*
- energy storage, flywheels, optimization, Portnov (G.G.), Kulakov (V.L.), *6196*
- blades, laminates, turbomachinery, Gorlyshkin (V.T.), *6199*
- boundary value problems, diffusion, mass transfer, models, moisture, Miller (R.K.), *6827*
- finite element techniques, plates (holed), wood structures, Wilkinson (T.L.), Rowlands (R.E.), (et al.), *7214*
- fatigue, fracture, material testing, structural analysis, surveys, Marshall (I.H.) ed., *7296, book*
- elastic behavior, missiles, random loading, stochastic systems, viscoelasticity, Weeks (G.E.), Cost (T.L.), *7301*
- fibers, material testing, resins, Strife (J.R.), Prewo (K.M.), *8218*
- holes, laminates, shells (sandwich), Shnerenko (K.I.), *8221*
- boundary conditions, connected bodies, shells, vibration, Averbukh (A.Z.), Veitsman (R.I.), (et al.), *8222*
- bending, deformation, fibers, layered media, stress concentration, Isupov (L.P.), *8223*
- crack propagation, fibers, fracture mechanics, Mileiko (S.T.), Rabotnov (Yu.N.), *8224*
- crack arrest, crack propagation, dynamic fracture, finite difference methods, Williams (J.H.) Jr., Lee (S.S.), (et al.), *8409*
- conduction (heat), layered media, slabs, thermal contact resistance, Duhamel (P.), Gosse (J.), *8732*
- high cycle fatigue, low cycle fatigue, reinforced bodies, Rosenkranz (G.), Gerold (V.), *9245*
- beams, design (minimum weight), design (optimum), reinforced bodies, structural stability, vibration, Rikards (R.B.), *10348*
- design (minimum weight), flutter, shells (cylindrical), supersonic flow, Kosichenko (A.A.), Pochtman (Yu.M.), (et al.), *10763*

composite vessels, conduction (heat), conductivity, nuclear reactors, prestressed concrete, Bangash (Y.), *774*

compressibility, earth, phase changes, thermal expansion, Trubitsyn (V.P.), *964*

- experimental results, loading rate, sand, Jackson (J.G.) Jr., Ehrgott (J.Q.), (et al.), *4465*
- conductivity, surface effect, thermal excitation, Loudon (R.), *8677*
- modes, plasma, rayleigh taylor instability, theory, Shivamoggi (B.K.), *9801*

compressible flow, characteristic methods, linear theory, three dimensional formulation, Hendriks (T.P.M.), *40*

- ice mechanics, material testing, rate sensitivity, strength, Sinha (N.K.), *493*
- plane flow, rotational flow, streamlines, subsonic flow, vortex flow, Nikolskiy (A.A.), *568*
- conical flow, stagnation point, supersonic flow, Bakker (P.G.), Bannink (W.J.), (et al.), *584*
- navier stokes equation, reynolds number (high), unsteady flow, Zeytounian (R.), *585*
- condensation (dropwise), nozzles, prandtl-meyer flow, Frank (W.), *586*
- euler equations, finite difference methods, two dimensional flow, Hindman (R.G.), Kulter (P.), (et al.), *587*
- lasers (gasdynamic), numerical methods, phase shifts, Roberts (S.A.), Lamberton (H.M.), *588*
- finite difference methods, navier stokes equation, supersonic flow, Berezin (Yu.A.), Kovena (V.M.), (et al.), *589*
- cascades, finite difference methods, thermodynamic processes, two dimensional flow, Thyagaraja (A.), *590*
- nozzles, particle fluid flow, rockets, Chang (I.-S.), *624*
- acceleration, supersonic flow, wedges, Bulakh (B.M.), *1521*
- drag, entropy, supersonic flow, wave drag, Wellmann (J.), *1522*
- entrance region, lasers (gasdynamic), perturbation methods, Kuznetsov (V.M.), *1523*
- inviscid fluid, numerical methods, unsteady flow, Zannetti (L.), Colasurdo (G.), *1524*
- airfoils, numerical methods, transonic flow, Niyogi (P.), Dutta (S.), *1525*
- computing techniques, finite difference methods, navier stokes equation, Abarbanel (S.), Gottlieb (D.), *1526*
- aerodynamics, numerical methods, reynolds number (high), survey, Le Balleur (J.C.), Peyret (R.), (et al.), *1527*
- boundary layer, similarity methods, stagnation point, three dimensional flow, unsteady flow, Kumari (M.), Nath (G.), *1545*
- detection, separated flow, simulation, wires, Degani (D.), Brosh (A.), (et al.), *1546*
- coherent structure, experimental results, jets, noise (aerodynamic), turbulence, Armstrong (R.R.) Jr., *1580*
- caustics, conduction (unsteady), shock waves, supersonic flow, Fung (K.-Y.), *1612*

- jets, noise, pressure measurement, Hoglund (L.E.), Siddon (T.E.), *1649*
- lifting line theory, lifting surfaces, numerical methods, swept wings, transonic flow, Cheng (H.K.), Meng (S.Y.), (et al.), *2612*
- corners, transonic flow, viscid inviscid flow, Diesperov (V.N.), *2613*
- axisymmetric bodies, finite difference methods, three dimensional flow, transonic flow, Chen (L.-T.), Caughey (D.A.), *2614*
- nozzles, numerical methods, shock waves, transonic flow, Wadia (A.R.), Payne (F.R.), *2615*
- differential equations (partial), numerical methods, transonic flow, Neuberger (J.W.), *2616*
- aerodynamics, inviscid fluid, perturbation methods, transonic flow, Seebass (A.R.), Yu (N.J.), (et al.), *2617*
- one dimensional flow, one dimensional waves, shock waves, Hsiao (L.), Chang (T.), *2618*
- dissociation, nonequilibrium flow, Sharma (V.D.), *2619*
- asymptotic methods, bodies of revolution, transonic flow, Brezhnev (A.L.), Chernov (I.A.), *2620*
- finite difference methods, inviscid fluid, unsteady flow, Steger (J.L.), Warming (R.F.), *2621*
- boundary conditions, transonic flow, unsteady flow, Engquist (B.), Majda (A.), *2622*
- aerodynamics, inlet flow, numerical methods, supersonic flow, Knight (D.D.), *2623*
- finite difference methods, one dimensional flow, viscous effects, Gadzhiev (A.D.), Pisarev (V.N.), *2624*
- grids, numerical methods, two dimensional flow, viscous effects, Kovenya (V.M.), Yanenko (N.N.), *2625*
- separated flow, three dimensional flow, Hirschel (E.H.), Kordulla (W.), *2636*
- flow measurement, pipe flow, viscous flow, Botezatu (N.P.), *2762*
- trains (railroad), tunnels, unsteady flow, velocity profiles, Woods (W.A.), Pope (C.W.), *3629*
- aerodynamics, airfoils, numerical methods, transonic flow, Haldar (K.), *3637*
- corners, discontinuities, transonic flow, Ivanov (V.A.), Chernov (I.A.), *3638*
- jets, numerical methods, supersonic flow, Akimov (G.A.), Sobkolov (B.N.), *3639*
- bodies of revolution, hypersonic flow, unsteady flow, Hui (W.H.), Tobak (M.), *3640*
- lasers (gasdynamic), simulation, Achasov (O.V.), Blaga (Ya.), (et al.), *3641*
- boundary conditions, navier stokes equation, subsonic flow, Rudy (D.H.), Strikwerda (J.C.), *3642*
- boundary layer, cauchy problem, computing techniques, plates, reynolds equation, Yakhot (A.), Ben-Dor (G.), (et al.), *3657*
- design, incompressible flow, turbomachinery, Balje (O.E.), *3739, book*
- cylindrical bodies, damping, oscillating bodies, rods, wave absorbers, Lin (W.H.), Chen (S.S.), *3931*
- spray flow, two phase flow, Kinoshita (T.), *4020*
- approximation theory, difference equations, iterative methods, stability theory, Samarskii (A.A.), *4169*
- lifting surfaces, navier stokes equation, oseen flow, plates, Homentcovschi (D.), *4582*
- jets, mathematical models, nozzles, plumes, Kraiko (A.N.), Shelomovskii (V.V.), *4591*
- finite difference methods, shock waves, Anderson (J.D.) Jr., *5411, book*
- cascades, three dimensional flow, transonic flow, turbomachinery, Spurr (A.), *5412*
- axisymmetric flow, jets, mathematical models, supersonic flow, Grabitz (G.), *5414*
- bodies of revolution, combustion, mathematical models, supersonic flow, Artyukh (L.Yu.), Kashkarov (V.P.), (et al.), *5415*
- bodies of revolution, hypersonic flow, numerical methods, viscid inviscid flow, Polyanskii (A.F.), Skurin (L.I.), (et al.), *5416*
- airfoils, finite difference methods, transonic flow, unsteady flow, Kerlick (G.D.), Nixon (D.), *5417*
- chemical reactions, jets, nonequilibrium flow, numerical methods, supersonic flow, Kireev (V.I.), Pirumov (U.G.), *5418*
- euler equations, finite difference methods, potential flow, transonic flow, Caughey (D.A.), *5420*
- boundary conditions, numerical methods, transonic flow, unsteady flow, Kwak (D.), *5421*
- navier stokes equation, numerical methods, reynolds number (high), Davydov (Yu.M.), *5422*
- hydrodynamic stability, perturbations, two dimensional flow, Kerschen (E.J.), Balsa (T.F.), *5459*
- aerodynamic performance, centrifugal compressors, geometrical properties, reynolds number, Wachter (J.), Wohrl (B.), *5499*
- exhaust gases, inlet flow, internal combustion engines, two-stroke cycle, Sher (E.), *5647*
- boundary layer, real gas effects, Schreier (S.), *6626*
- finite difference methods, potential flow, transonic flow, Luo (S.J.), Zheng (Y.W.), (et al.), *6627*
- airfoils, porous walls, transonic flow, wind tunnels, Blynskaya (A.A.), Lifhits (Yu.B.), *6628*
- finite element techniques, stability (numerical), transonic flow, Wellford (L.C.) Jr., Hafez (M.M.), *6629*
- supersonic flow, vortex shedding, Mendenhall (M.R.), *6630*
- mathematical models, thermodynamics (nonequilibrium), two dimensional flow, Popov (S.P.), Romashkevich (Yu.I.), *6631*
- mathematical models, one dimensional flow, Borzov (V.B.), Gutsunaev (T.I.), *6632*
- numerical methods, Moskalkov (M.N.), *6633*
- discontinuities, dissociation, gases, Sharma (V.D.), *6710*
- airfoils, flaps, viscous flow, Oskam (B.), *6719*
- airfoils, porous walls, Ciavaldini (J.-F.), Pogu (M.), (et al.), *6721*
- cylindrical bodies, dynamic behavior, magneto fluid dynamics, optimal control, Pavlov (E.G.), *6857*
- elastic bodies, oscillations, panels, supersonic flow, Babin (O.A.), Vorobev (V.I.), (et al.), *6869*
- mathematical models, navier stokes equation, one dimensional flow, viscous effects, Sakurai (A.), Kukuyu (A.), *7685*
- entropy, finite difference methods, stability (numerical), transonic flow, Engquist (B.), Osher (S.), *7686*
- blunt bodies, numerical methods, real gas effects, supersonic flow, Antonets (A.V.), Marinin (V.P.), *7687*
- drag, jets, nozzles, numerical methods, supersonic flow, Mikhail (A.G.), Hankey (W.L.), (et al.), *7688*
- base flow, jets, supersonic flow, Wagner (B.), White (R.A.), *7689*
- boundary layer, hypersonic flow, inlet flow, Boshenyatov (B.V.), Gilyazemdinov (B.N.), (et al.), *7690*
- hypersonic flow, numerical methods, streamlines, three dimensional flow, viscous effects, Kim (M.D.), Thareja (R.R.), (et al.), *7691*
- numerical methods, shock waves, stability (numerical), supersonic flow, Ivanov (M.J.), Kraiko (A.N.), *7692*
- diffusers, duct flow, numerical methods, swirl flow, Deckker (B.E.L.), Jeffries (C.), (et al.), *7693*
- diffusers, friction (skin), radial flow, Brandt (U.), Teipel (I.), *7731*
- airfoils, base pressure, vortex shedding, Motallebi (F.), Norbury (J.F.), *7736*
- one dimensional flow, waves, Steketee (J.A.), *7779*
- discontinuities, nonequilibrium effects, thermodynamics, Sharma (V.D.), Singh (R.S.), *7780*
- choked flow, flow measurement, nozzles, saint venants equation, Mollenbruck (W.), *7814*
- convection (forced), heat transfer, noether theorem, variable thermal properties, Geraev (K.G.), *7823*
- conformal mapping, cylindrical bodies, two dimensional flow, Sakurai (A.), Arai (T.), *8544*
- jets, mixing, numerical methods, Lukerchenko (N.N.), *8545*
- inviscid fluid, mathematical models, transonic flow, Oswatitsch (K.), *8546*
- separated flow, separation, shock waves, transonic flow, Carter (J.E.), *8547*
- numerical methods, shock waves, transonic flow, Niyogi (P.), Das (T.K.), *8548*
- aerodynamics, numerical methods, transonic flow, Belotserkovski (O.M.), *8549*
- axisymmetric flow, flow obstructions, impingement, jets, shock waves, supersonic flow, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- numerical methods, supersonic flow, transonic flow, Ukeguchi (N.), Sakata (H.), (et al.), *8551*
- aerodynamics, supersonic flow, three dimensional flow, Ehlers (F.E.), Epton (M.A.), (et al.), *8552*
- base pressure, blunt bodies, experimental results, spherical bodies, subsonic flow, Kuptsov (V.M.), *8553*
- kinetic theory, rarefied gases, Fisher (S.S.) ed., *8554, book*
- boundary layer, deposition, gas turbines, particles, two dimensional flow, Menguturk (M.), Sverdrup (E.F.), *8564*
- axisymmetric flow, finite difference methods, internal combustion engines, reciprocating engines, turbulent flow, Ramos (J.I.), Humphrey (J.A.C.), (et al.), *8591*
- contraction, turbulence, velocity profiles, wind tunnels, Winter (K.G.), Boyd (C.), *8671*
- boundary layer, edge effects, laminar flow, rotating disks, Toren (M.), Solan (A.), *8718*
- magneto fluid dynamics, plates (skew), stream function, theory, Chandna (O.P.), Barron (R.M.), *8814*
- acoustic waves, ducts (variable area), nozzles, transmission, Miles (J.H.), *8862*
- consolidation, porous media, Singh (S.R.), Sagar (B.), *8927*
- aerodynamics, transonic flow, Schneider (W.) eds., Platzer (M.), *9547, book*
- aerodynamics, potential flow, subsonic flow, turrets, Laderman (A.J.), De Jonckheere (R.), *9548*
- perturbation methods, piston driven flow, shock waves, Schneider (G.H.), *9549*
- oscillatory flow, slender bodies, transonic flow, Olshanskii (V.Yu.), *9550*
- duct flow, perturbation methods, three dimensional flow, Kraiko (A.N.), Shironosov (V.A.), *9553*
- combustion (turbulent), swirl flow, turbulent mixing, Sislian (J.P.), *9554*
- inviscid fluid, numerical methods, shock waves, transonic flow, Rizzi (A.) eds., Viviand (H.), *9556, book*
- stability (numerical), three dimensional flow, Bosman (C.), Ahrabian (D.), *9557*
- navier stokes equation, numerical methods, unsteady flow, Kuo-Pen-Yu, *9558*
- containers (partially filled), cylindrical bodies, gravity, laminar flow, Greenwell (R.N.), Wang (C.Y.), *9577*
- annuli, irrotational flow, pipe flow, rotating cylinders, swirl flow, Neuberger (A.W.), *9586*

- group theory, shock waves, similarity methods, Logan (J.D.), Perez (J. De J.), *9640*
- liftingline, potential theory, swept wings, vortex lines, vortex sheets, Cheng (H.K.), Chow (R.), (et al.), *9649*
- blunt bodies, shock waves, supersonic flow, three dimensional flow, Schwarze (H.-F.), *10416*
- cavities, heating, jets, pressure change, resonance, supersonic flow, Kuptsov (V.M.), Filippov (K.N.), *10417*
- numerical methods, one dimensional flow, Abrashin (V.N.), *10418*
- airfoils, conformal mapping, numerical methods, transonic flow, Constantinescu (V.N.), Bucur (S.C.), *10419*
- airfoils, numerical methods, subsonic flow, Carey (G.F.), Pan (T.T.), *10420*
- aerodynamics, numerical methods, supersonic flow, three dimensional flow, Voskresenskii (G.P.), Chushkin (P.I.), *10421*
- boundary layer, laminar flow, unsteady state, Chang (L.M.), Chen (C.-J.), *10430*
- navier stokes equation, reattachment, shear layer, turbulent flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10431*
- cascades, finite element techniques, rotating disks, Shirahata (H.), Daiguji (H.), *10451*
- cascades, finite element techniques, transonic flow, Ecer (A.), Akay (H.U.), *11393*
- blunt bodies, supersonic flow, transonic flow, Weiland (C.), *11394*
- airfoils, numerical methods, separated flow, transonic flow, viscous flow, wakes, Le Balleur (J.C.), *11395*
- bodies of revolution, drag, optimization, transonic flow, wave drag, Sigalov (G.F.), *11396*
- aerodynamics, boundary value problems, numerical methods, Zhu (Y.L.), Chen (B.M.), *11398*
- dimensional analysis, impingement, jets, plates, Gerasimov (Yu.I.), *11399*
- fluid injection, nozzles, supersonic flow, Zelentsov (V.V.), Nesterov (A.A.), (et al.), *11400*
- cavities, convection, supersonic flow, Shchukin (V.K.), Gortyshov (Yu.F.), (et al.), *11401*
- axisymmetric flow, drag, hypersonic flow, supersonic flow, Khlopkov (Yu.I.), *11402*
- lasers (gasdynamic), mixing, nozzles, supersonic flow, Efimov (B.G.), Zaklyaziminskii (L.A.), *11403*
- cascades, finite element techniques, transonic flow, Akay (H.U.), Ecer (A.), *11404*
- blunt bodies, drag, hypersonic flow, optimization, rarefied gases, shape factors, Bunimovich (A.I.), Dubinskii (A.V.), *11405*
- planetary atmospheres, plasma, rarefied gases, shock waves, supersonic flow, Gurevich (A.V.), Paschenko (N.T.), *11406*
- dissociation, hypersonic flow, Pandey (B.D.), Ram (R.), *11407*
- aerosols, chemically reactive flow, hypersonic flow, particle fluid flow, wakes, Dmitriev (L.M.), Markachev (Yu.E.), *11408*
- hypersonic flow, rarefied flow, spherical bodies, Artamonov (A.K.), Arknipov (V.N.), *11409*
- cylindrical bodies, fluid-structure interaction, internal flow, shock waves, Dubrovskaya (L.I.), Kim (A.V.), (et al.), *11410*
- afterbodies, supersonic flow, turbulent flow, Yoshikawa (K.K.), Wray (A.A.), *11411*
- cauchy problem, numerical methods, unsteady flow, Katelkin (A.S.), Mikhailov (V.V.), *11412*
- numerical methods, radiating flow, unsteady flow, Volchinskaya (M.I.), Chetverushkin (B.N.), *11413*
- hurled bodies, numerical methods, Romanov (G.S.), Urban (V.V.), *11414*
- heat transfer, perturbations, Prokofev (V.A.), *11415*
- inviscid fluid, mathematical models, Ebin (D.G.), *11416*
- numerical methods, pipe flow, unsteady flow, Alnola (L.Ya.), Lamp (Yu.Yu.), (et al.), *11417*
- gravity, numerical methods, one dimensional flow, Kosovichev (A.G.), Popov (Yu.P.), *11418*
- energy transport, high temperature, similarity methods, unsteady flow, Korobeynikov (V.P.), *11419*
- bubbly flow, cavitation flow, wedges, Tetsuo (N.), Khan (O.F.), *11420*
- numerical methods, one dimensional flow, thermal expansion, two phase flow, Amit (R.), Porsching (T.A.), *11421*
- chemically reactive flow, nonequilibrium flow, similarity methods, Kolesnichenko (E.G.), *11422*
- combustion, numerical methods, subsonic flow, Kansa (E.J.), *11423*
- chemically reactive flow, shock waves, supersonic flow, Ni (A.L.), Ryzhov (O.S.), *11424*
- numerical methods, shock waves, Zhmakin (A.I.), Fursenko (A.A.), *11425*
- acoustic waves, multiphase flow, nonequilibrium flow, numerical methods, rarefied flow, shock waves, Cook (T.L.), Tiemuth (R.B.), (et al.), *11426*
- finite difference methods, numerical methods, Kuzmin (A.V.), Makarov (V.L.), (et al.), *11427*
- blunt bodies, finite difference methods, inviscid fluid, shock layer, Srivastava (B.N.), Werle (M.J.), (et al.), *11428*
- finite element techniques, navier stokes equation, shear layer, supersonic flow, unsteady flow, Cooke (C.H.), Blanchard (D.K.), *11429*
- numerical methods, plane flow, transonic flow, Kozel (K.), Polasek (J.), (et al.), *11430*
- dissociation, finite difference methods, numerical methods, shock waves, Charakhchyan (A.A.), *11431*
- navier stokes equation, numerical methods, viscous flow, Davis (R.T.), Rubin (S.G.), *11432*
- approximations, boundary value problems, difference operator, differential operator, least squares, subsonic flow, Danilov (Yu.M.), *11433*
- navier stokes equation, one dimensional flow, rarefied flow, Aristov (V.V.), Makhmudov (A.A.), (et al.), *11434*
- finite difference methods, Popov (S.B.), Popov (Yu.P.), *11435*
- bubble dynamics, hydrodynamic stability, Rath (H.J.), *11530*
- jets, turbulent flow, Sivirkin (V.F.), *11543*
- spectra, turbulence, vorticity, Moiseev (S.S.), Tur (A.V.), (et al.), *11544*
- compressional waves, entrance region, pipe flow, Zhestkov (G.B.), Mareev (V.A.), *11601*
- axial flow, fluid-structure interaction, shells (cylindrical), Paidoussis (M.P.), Ostoja-Starzewski (M.), *11636*
- eigenvalue problems, fluid-structure interaction, shells, Simonov (I.V.), *11669*
- hydroelasticity, oscillating bodies, spherical bodies, Guz (A.N.), *11686*
- cascades, centrifugal compressors, three dimensional flow, vortices, Murata (S.), Miyake (Y.), (et al.), *11744*
- centrifugal compressors, inviscid fluid, streamlines, three dimensional flow, Bosman (C.), *11750*
- diffusers, geometrical properties, incompressible flow, mixing, pressure drop, Labendik (V.P.), Dantsyg (A.Ya.), (et al.), *11799*
- hypersonic flow, particle fluid flow, unsteady flow, Hui (W.H.), Tobak (M.), *12103*

compression, linear systems, optimal control, singular control, Vasenin (V.A.), Samsonov (V.A.), *115*

- elastoplasticity, shells (cylindrical), Kovalenko (V.A.), Piskun (V.V.), (et al.), *322*
- dynamic behavior, plates (isotropic), vibration (forced), White (R.G.), Teh (C.E.), *369*
- dynamic properties, elastoplasticity, experimental results, metals, shock waves (normal), Astanin (V.V.), *399*
- anisotropic media, failure, rocks, Nova (R.), *425*
- brittle materials, finite element methods, specimen design, tests, Kvitka (A.L.), Dyachkov (I.I.), *492*
- crystals, kinematics, metals, Havner (K.S.), *1204*
- plates (holed), plates (rectangular), structural stability, Volmir (E.A.), Mameeva (E.N.), (et al.), *2301*
- collapse, postbuckling behavior, shells (cylindrical), Foster (C.G.), *2305*
- cycles, dies, powder metallurgy, tableting, Carstensen (J.T.), Toure (P.), *2404*
- elasticity (three dimensional), stability theory, Zubov (L.M.), *3320*
- buckling, imperfections, mode interaction, postbuckling behavior, shells (cylindrical), shells (stiffened), Byskov (E.), Hansen (J.C.), *3323*
- brittle materials, composite materials, specimen design, tests, Kvitka (A.L.), Dyachkov (I.I.), *3491*
- panels, sandwich construction, Camarda (C.J.), *3539*
- boundary conditions, buckling, elliptical bodies, plates, Sato (K.), *4396*
- biaxial loading, cavities, creep, modeling, tension, torsion, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- deformation (plastic), high temperature, plasticity, testi, strength, Granju (J.L.), Maso (J.C.), *4532*
- design (minimum weight), springs, Khare (A.K.), *4553*
- composite materials, creep, failure, tension, Gorav (B.V.), Rubanov (V.V.), (et al.), *5103*
- filamentary structures, materials properties, textiles, yarn, Leaf (G.A.V.), Oxenham (W.), *5131*
- follower forces, nonconservative systems, plates, rods, Leipholz (H.H.E.), *5170*
- beam columns, second order analysis, structural stability, Chattoraj (D.), Bose (S.K.), *5177*
- buckling, plates (annular), plates (orthotropic), Ramaiah (G.K.), *5184*
- bones, disks, finite element methods, spine, Spilker (R.L.), *6030*
- couple stresses, cylindrical bodies, Tzung (F.K.), *6161*
- adhesion, composite materials, fibers, strength, Martinez (G.M.), Piggott (M.R.), (et al.), *6190*
- composite materials, fibers, mechanical analysis, strength, Piggott (M.R.), *6191*
- cements, strength, Granju (J.L.), Maso (J.C.), *6520*
- cyclic testing, powders, tablets, Toure (P.), Puisieux (F.), (et al.), *7466*
- brittle materials, concrete, tests, ultimate strength, Jayatilaka (A. De S.), Nanayakkara (V.K.N.), *7563*
- concrete, saturation, strength, tension, Karapetian (K.S.), Kotiklan (R.A.), (et al.), *7566*
- mechanical properties, strength, Azarov (A.D.), *7567*
- explosive forming, materials processing, plasma, projectiles, Kirko (V.I.), *7903*
- crack initiation, forming, fracture, friction, metals, Matsuura (Y.), Morimoto (H.), *8432*
- cement stabilized soils, concrete, dynamic testing, elastic constants, soils, statics, tension, Kolias (S.), Williams (R.I.T.), *9427*
- elastomers, fibers, material testing, tubes, Farris (R.), Filippov (A.), *10324*
- axisymmetric loading, plastic flow, stress strain relationships, upset forging, Gelin (J.C.), Oudin (J.), (et al.), *10326*

compressional waves, detonation (two phase), explosives, layered media, liquid gas mixture, slurries, Trebinski (R.), Trzcinski (W.), (et al.), *1595*
- characteristic methods, pipelines, pneumatic components, transient effects, Matsumoto (Y.), Ishibashi (K.), *1597*
- cylindrical waves, explosions, nuclear fusion, plasma, Kaliski (S.), *2902*
- damping, ducts (variable area), oscillatory flow, Yanko (A.K.), Korolev (P.V.), *4658*
- fluid mechanics, porous media, sand, saturation, Allen (N.F.), Richart (F.E.) Jr., (et al.), *5836*
- arteries, blood flow, pulsatile flow, Smit (C.H.), *6018*
- blood flow, flexible walls, pulsatile flow, viscoelastic fluids, Kaimal (M.R.), *6020*
- arteries, attenuation, blood flow, energy dissipation, Bertram (C.D.), *6021*
- boiling, hydrodynamic stability, nuclear reactors, sodium, thermal instability, Galati (A.), *6770*
- bubble dynamics, cavitation, collapse, Nishiyama (T.), Akaizawa (M.), *6994*
- arteries, blood flow, pressure measurement, pulsatile flow, Li (J.F-J.), Melbin (J.), (et al.), *7118*
- cavitation, soils, Kotlyarevskii (V.A.), Maiorova (E.G.), (et al.), *7440*
- hydraulic machinery, numerical methods, water hammer, Lecerf (J.P.), *9624*
- earthquakes, focal point, radiation, Blagoveshchenskaya (Ye.E.), *9911*
- earthquakes, initiation, models, Kopnichev (Yu.F.), *9912*
- ocean bed, sedimentation, shear waves, wave interactions, Fryer (G.J.), *10237*
- bubble dynamics, bubbly flow, nozzles, subsonic flow, supersonic flow, Nakagawa (H.), Mori (Y.), (et al.), *10491*
- compressible flow, entrance region, pipe flow, Zhestkov (G.B.), Mareev (V.A.), *11601*
- ducts (variable area), piping systems, resonance, Belik (N.P.), Chirva (L.G.), *11605*
- axial waves, flexible walls, pulsatile flow, Bauer (H.F.), Metten (S.), (et al.), *11607*
- collapse, ducts (variable area), flexible walls, supercritical flow, Kececioglu (I.), Mcclurken (M.E.), (et al.), *11608*
- duct flow, flexible walls, propagation velocity, Amenzade (R.Yu.), *11631*
- flow irregularities, shock waves, two phase flow, Lyakhov (A.G.), *11639*
- bodies (liquid filled), ducts, flexible walls, Barclay (D.W.), Moodie (T.B.), (et al.), *11661*

compressors, gas turbines, performance, pipelines, pumps, Kuznetsov (A.L.), Evdokimov (V.E.), (et al.), *700*
- control, cooling, mathematical models, screw compressors, Airila (M.), *3746*
- pumps, stability, systems engineering, Greitzer (E.M.), *4674*
- actuator theory, choked flow, flutter, Micklow (J.), Jeffers (J.), *7781*
- pumps, surge, turbomachinery, Horvath (A.J.T.), *8654*
- energy conservation, exhaust gases, gas turbines, heat engines, heat exchangers, pipelines, Ludtke (K.), *10547*

computer aided design, computer programming, heat transfer, mathematical models, Amkreutz (J.H.A.E.), Vanier (D.J.), *778*
- dynamic stresses, mathematical models, wind turbines, Kaza (K.R.V.), Janetzke (D.C.), *866*
- graphical methods, ship design, Kupras (L.K.), De Zwaan (A.P.), *995*
- digital control, internal combustion engines, microprocessors, *1167*
- plates, rolling, stress analysis, Lahoti (G.D.), Akgerman (N.), (et al.), *1342*
- artificial intelligence, robotics, Rybak (V.I.), *2182*
- cams, mechanisms, Borun (F.L.), *2554*
- algorithms, optimization, Stoyan (Yu.G.), Sokolovskii (V.Z.), *3199*
- automobiles, casting, tools, Welbourn (D.B.), Cox (G.M.A.), *3426*
- linear systems, multivariable systems, structural analysis, Van Der Weiden (A.J.J.), Bosgra (O.H.), *4235*
- analysis, linkages, mechanisms, sensitivity, Coit (W.G.), Riley (D.R.), *4557*
- design (optimum), linkages, mechanisms (planes), optimization, Gauchel (H.-J.), *4563*
- shape factors, shells (shallow), structural design, thin walled structures, Alpa (G.), Bozzo (E.), (et al.), *7336*
- casting, dies, thermal effects, Siauw (T.H.), *7461*
- constraints, design (optimum), structural optimization, Pappas (M.), *8453*
- burmester configuration, four bar linkage, linkages, vector methods, Wolford (J.C.), *8481*
- design (optimum), optimization, stochastics, Ruppert (M.), *9440*
- mathematical programming, nonlinear programming, optimization, reinforced concrete, Bond (D.), *9442*
- gear teeth, Koller (R.), Esser (H.), *9484*
- bearings (journal), finite difference methods, lubrication (hydrodynamic), reynolds equation, thermal effects, Cowking (E.W.), *9964*
- bearing capacity, bearings (roller), design, loads, Dziurski (A.), Kania (L.), (et al.), *9977*
- coding, condensers, numerical methods, optimization, Johnson (C.M.), Vanderplaats (G.N.), (et al.), *10625*
- algorithms, numerical methods, optimal control, Raggett (G.F.), *11099*
- airplanes, damping, gust loads, power spectral density, yawing, Noback (R.), Blaauboer (C.), *11843*
- packed beds, random media, Powell (M.J.), *12057*

computer aided manufacturing, nonlinear systems, state space techniques, Vasileva (L.G.), Lagunov (V.N.), *102*
- numerical control, positioning accuracy, robotics, tools, Farkas (J.), El-Sonbaty (I.), *2166*
- algorithms, numerical control, optimal control, sampled data systems, tools, Schlueter (R.A.), Retford (E.T.), (et al.), *2194*
- decision theory, nonlinear programming, Keefer (D.L.), Kirkwood (C.W.), *2199*
- algorithms, design, Dunsmuir (A.M.), *2200*
- mathematical models, process control, queue theory, stochastic systems, Hitomi (K.), Nakajima (M.), (et al.), *3214*
- operations research, optimization, process control, White (C.C.) III, *3216*
- numerical control, operations research, optimization, Hitomi (K.), Ohashi (K.), *7250*
- mathematical models, modeling, process control, robotics, Devries (W.R.) ed., *8173, book*
- automation, machinery, manipulators, robotics, Whitney (D.E.), *10093*

computer algebra, boundary value problems, differential equations, newton method, Hanson (J.N.), *6098*
- dynamics, navier stokes equation, Howard (J.C.), *7181, book*
- artificial satellites, circumnavigation, computer programming, oblateness, Deprit (A.), *10776*

computer graphics, human body, moire methods, surface profiles, Duncan (J.P.), Dean (D.P.), (et al.), *1958*
- analog to digital conversion, digital analog computation, Reznichenko (V.A.), Buglov (E.G.), (et al.), *4511*
- computing techniques, finite element techniques, mesh generation, optimization, Shephard (M.S.), Gallagher (R.H.), (et al.), *5031*
- coding, finite element techniques, Gordon (J.J.), Goodzeit (C.L.), *9135*

computer programming, binary search trees, coding, data analysis, Stephenson (C.J.), *67*
- algorithms, fast fourier transform, fourier transform, Despain (A.M.), *70*
- fast fourier transform, processing, real time solution, Kuno (A.Ya.), *71*
- coding, finite element methods, finite element techniques, modal analysis, nastran, programming, Schaeffer (H.G.), *75, book*
- coding, computing techniques, finite element techniques, interaction, Lewis (B.A.), Cross (M.), *91*
- computer aided design, heat transfer, mathematical models, Amkreutz (J.H.A.E.), Vanier (D.J.), *778*
- heat transfer (combined modes), nuclear reactors, slug flow, tube bundles, Yeung (M.R.), Wolf (L.), *789*
- algorithms, stochastics, Zak (Yu.A.), Yakhno (V.N.), *1107*
- computing techniques, differential equations (ordinary), differential equations (partial), mathematical methods, numerical analysis, Lederman (W.) eds., Churchhouse (R.F.), *1109, book*
- computing techniques, simulation, surveys, Stephenson (J.), *1125, book*
- boundary layer (turbulent), froude number, hulls, three dimensional formulation, Krogstad (P.A.), *1537*
- conduction (heat), numerical methods, transforms, Campo (A.), *1702*
- curve fitting, dynamic response, interpolation, linear systems, Collings (A.G.), Saunders (L.R.), *2050*
- data analysis, dynamic response, fortran program, statistical theory, Maine (R.E.), *2055*
- algorithms, matrices, Thompson (E.), Shimazaki (Y.), *2056*
- finite element techniques, interpolation, Ball (A.A.), *2066*
- networks, queue theory, Vishnevskii (V.M.), Tverdokhlebov (A.S.), *2106*
- computing techniques, multiprocessor systems, optimization, Bronshtein (I.I.), Geninson (B.A.), (et al.), *2150*
- hydraulics, hydrology, Croley (T.E.) II, *2596, book*
- boundary layer (thermal), finite difference methods, Bradeanu (D.), *2641*
- data analysis, imaging systems, real time solution, spectra, Meredith (B.D.), Kelly (W.L.) IV, *3129*
- discharges, hydraulics, rivers, Price (R.K.), Samuels (P.G.), *3613*
- aerodynamic loads, missiles, pressure distribution, supersonic flow, vortices, wing body combinations, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- impulsive transfers, orbit correction, reduction, simplex method, trajectory optimization, Vladimirov (V.P.), Aleksandrov (E.V.), *3920*
- finite element techniques, gaussian integration, matrices, mesh generation, Jackson (C.P.), *4191*
- approximations, finite element techniques, higher order theories, shape functions, Wachspress (E.L.), *4192*
- computing techniques, mesh generation, triangular elements, Sadek (E.A.), *4195*
- elastoplasticity, finite element techniques, prandtl-reuss relations, Deb (S.R.), Barman (S.), (et al.), *4203*
- cell-to-cell mapping, dynamics, nonlinear mechanics, probability theory, Hsu (C.S.), *4984*
- algorithms, cholesky algorithm, eigenvalues, matrices, optimization, Meirovitch (L.), Baruh (H.), *5001*
- algorithms, finite element techniques, linear equations, matrix methods, Stabrowski (M.M.), *5017*
- finite element techniques, mesh generation, stiffness matrix, vibration, Hoa (S.V.), Sankar (S.), *5019*
- edge cracks, singularities, three dimensional formulation, Hussain (M.A.), Coffin (L.F.), (et al.), *5021*
- algorithms, integration, singularities, Roose (D.), De Doncker (E.), *6094*

- collocation, elliptic equations, finite element methods, galerkin method, rayleigh ritz method, Weiser (A.), Eisenstat (S.C.), (et al.), *6096*
- mathematical models, prediction, Muller (J.-A.), Ivachnenko (A.G.), *6101*
- finite element techniques, graphical methods, mathematical methods, mesh generation, Haber (R.), Shephard (M.S.), (et al.), *6106*
- boundary value problems, differential equations (ordinary), stiff systems, Mahony (J.J.), Shepherd (J.J.), *7153*
- finite element techniques, linear equations, Dessi (M.), Priolo (P.), *7197*
- automobiles, finite element techniques, stiffness matrix, structural analysis, Tang (S.C.), Yeung (K.S.), (et al.), *7208*
- beams (thin section), elastoplasticity, shells (shallow), Larkin (L.A.), *7217*
- finite element techniques, fluid mechanics, mesh generation, triangular elements, Kleinstreuer (C.), Holdeman (J.T.), *7220*
- computing techniques, conduction (unsteady), finite element methods (hybrid), matrix methods, Chiatti (G.), Sestieri (A.), *7222*
- algorithms, mechanical properties, stress strain relationships, testing equipment, Kharchenko (V.K.), Gnuchii (Yu.B.), (et al.), *7562*
- coastal engineering, modeling, three dimensional flow, wind generation, Koutitas (C.), O'Connor (B.), *7662*
- computing techniques, continuum mechanics, structural analysis, Ross (C.T.F.), *8139*
- coding, simulation, Tarlos (B.), *8140*
- differential equations (ordinary), initial value problems, Gottwald (B.A.), Wanner (G.), *8141*
- augmentation, condensers, fouling, heat transfer, marine engineering, Marto (P.J.) eds., Nunn (R.H.), *8761, book*
- aerodynamic interference, combustion chambers, diesel engines, thermal measurements, Gwinner (J.U.), *8803*
- algorithms, computing techniques, differentiation, Oliver (J.), *9123*
- computing techniques, energy, heat transfer, mathematical models, numerical analysis, Lewis (R.W.), Morgan (K.), (et al.), *9149*
- aging, laminates, viscoelastic materials, volterra equations, Huet (C.), *9250*
- conical flow, delta wings, vortices, Vigevano (L.), *9650*
- approximations, artificial satellites, upper atmosphere, Hoots (F.R.), *9816*
- coding, parallel programming, programming, Valkovskiy (V.A.), *10056*
- digital simulation, dynamic analysis, Fischer (J.), Gerhardt (H.-D.), (et al.), *10058*
- algorithms, finite element techniques, optimization, Hua (B.-H.), *10066*
- computing techniques, finite element techniques, propagation, wave equations, Okrouhlik (M.), *10069*
- cracks, finite element techniques, pipes, stress intensity factor, three dimensional formulation, Miyazaki (N.), Watanabe (T.), (et al.), *10284*
- artificial satellites, circumnavigation, computer algebra, oblateness, Deprit (A.), *10776*
- blunt bodies, delta wings, supersonic flow, viscous flow, Tannehill (J.C.), Venkatapathy (E.), (et al.), *11728*

computing techniques, analytical methods, eigenvalues, matrix methods, Kalaba (R.), Spingarn (K.), (et al.), *20*

- geometric programming, nonlinear programming, surveys, Ecker (J.G.), *53*
- boundary value problems, differential equations (ordinary), splines, Usmani (R.A.), Warsi (S.A.), *60*
- iterative methods, large scale systems, newton method, nonlinear methods, Geradin (M.), Idelsohn (S.), (et al.), *64*
- corrections, design, programming, Guk (K.N.), *68*
- existence theorems, mathematical methods, shells, Visarion (V.), Migdalovici (M.), *69*
- finite element methods, mesh generation, programming, Imafuku (I.), Kodera (Y.), (et al.), *79*
- coding, computer programming, finite element techniques, interaction, Lewis (B.A.), Cross (M.), *91*
- algorithms, convex block programming, mathematical programming, Karpinskaya (N.N.), *158*
- aerodynamics, Moretti (G.), *696*
- finite element methods, soil structure interaction, Ito (Y.M.), England (R.H.), (et al.), *968*
- ocean bed, seismic waves, tsunamis generation, upthrust, Lee (J.-J.), Chang (J.-J.), *974*
- convex programming, nonlinear programming, Oelschlagel (D.), Susse (H.), *1108*
- computer programming, differential equations (ordinary), differential equations (partial), mathematical methods, numerical analysis, Lederman (W.) eds., Churchhouse (R.F.), *1109, book*
- differential equations (ordinary), differential equations (partial), mathematical methods, numerical analysis, Ferziger (J.H.), *1110, book*
- asymptotic behavior, fluid mechanics, nonlinear mechanics, perturbation methods, Glowinski (R.) eds., Lions (J.E.), *1111, book*
- approximations, convergence, newton method, Potra (F.A.), *1123*
- computer programming, simulation, surveys, Stephenson (J.), *1125, book*
- simulation, wind tunnels (environmental), Lee (K.D.), *1126*
- bonding, mathematical models, networks, paper, Smith (J.C.), *1137*
- algorithms, fluid mechanics, tensor methods, Baker (A.J.), Soliman (M.O.), *1139*
- compressible flow, finite difference methods, navier stokes equation, Abarbanel (S.), Gottlieb (D.), *1526*
- boundary layer, laminar flow, three dimensional flow, Dwyer (H.A.), *1543*
- boundary layer, navier stokes equation, recirculation, viscous flow, Brandeis (J.), Rom (J.), *1548*
- conductivity, ionized gases, shock waves, Makhmudov (A.A.), Popov (A.P.), *1613*
- periodic orbits, three body problem, three dimensional formulation, Markellos (V.V.), *1790*
- eigenvalues, electromagnetic waves, radiation, wiener-hopf technique, Siewert (C.E.), *2031*
- differential equations (partial), iterative methods, newton method, nonlinear methods, Carey (G.F.), Krishnan (R.), *2036*
- large scale systems, nonlinear analysis, Mochimaru (Y.), Tomita (Y.), *2041*
- integration, numerical analysis, Thatcher (R.W.), *2048*
- algorithms, continued fraction expansion, inversion, Kumar (A.), *2053*
- algorithms, minimization, Imai (M.), Fukumura (T.), (et al.), *2057*
- finite element techniques, integration, modes, Flanagan (D.P.), Belytschko (T.), *2059*
- mesh generation, three dimensional formulation, Pissanetzky (S.), *2062*
- finite element techniques, newton method, nonlinear analysis, Mansfield (L.), *2064*
- finite element techniques, thermal loading, Pittr (J.), Hartl (H.), *2076*
- computer programming, multiprocessor systems, optimization, Bronshtein (I.I.), Geninson (B.A.), (et al.), *2150*
- elastoplasticity, finite strain, Nagtegaal (J.C.), De Jong (J.E.), *2232*
- error, measurements, monitoring, Zavarin (A.N.), *2484*
- boundary layer (thermal), reflection, shock waves, unsteady state, Brun (R.), Chauvin (C.), (et al.), *2723*
- airfoils, holography, interferometry, shock waves, supercritical flow, Spaid (F.W.), Bachalo (W.D.), *2726*
- aerodynamics, transonic flow, wings, Ballhaus (W.F.), Bailey (F.R.), *2748*
- axisymmetric flow, finite difference methods, magneto fluid dynamics, turbulent flow, Mikelson (Yu.Ya.), Pavlov (S.I.), (et al.), *2876*
- periodic orbits, three body problem, Ichtiaroglou (S.), *2919*
- composite materials, eigenvalue problems, elasticity, finite element methods, fracture, optimization, plasticity, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- convergence, heat transfer, pade approximation, perturbation methods, Aziz (A.), *3112*
- matrix inversion, matrix methods, optimization, Den Broeder (G.), *3113*
- finite difference methods, singular perturbations, Berger (A.E.), Solomon (J.M.), (et al.), *3117*
- finite difference methods, finite element techniques, mesh generation, modeling, Thacker (W.C.), *3122*
- air pollution, interpolation, Miksad (R.W.), Long (G.E.), *3127*
- approximations, finite element techniques, interpolation, isoparametric elements, Webster (W.D.) Jr., *3133*
- bounded variables, elasticity, finite element methods, Kelly (D.W.), *3135*
- dynamic analysis, modal analysis, nonlinear analysis, structures, Noor (A.K.), *3138*
- beams (plastic), dynamic analysis, reinforced bodies, Laudiero (F.), *3279*
- slopes, stability, Franciosi (V.), Migliore (M.), *3415*
- finite element techniques, forming, plastic behavior, Erlmann (K.), Dung (N.L.), *3427*
- dynamic fracture, finite element techniques, stress intensity factor, viscoelastic materials, Aoki (S.), Kishimoto (K.), (et al.), *3476*
- asymptotic behavior, boundary layer, laminar flow, pressure gradient, separation, Curle (N.), *3653*
- boundary conditions, slots, walls, Cooke (C.H.), *3655*
- boundary layer, cauchy problem, compressible flow, plates, reynolds equation, Yakhot (A.), Ben-Dor (G.), (et al.), *3657*
- bifurcation, decay, discontinuities, ducts, Yaushev (K.K.), *3724*
- data analysis, interferometry, two dimensional flow, Ben-Dor (G.), Whitten (B.T.), (et al.), *3760*
- earth, gravity, gravity anomalies, three dimensional formulation, Kudryavtsev (A.V.), *4033*
- algorithms, fast fourier transform, hankel transform, transforms, Oppenheim (A.V.), Frisk (G.V.), (et al.), *4173*
- boundary elements, integration, singularities, Pina (H.L.G.), Fernandes (J.L.M.), Brebbia (C.A.), *4179*
- collocation, elasticity, singular integral equations, Ioakimidis (N.I.), Theocaris (P.S.), *4182*
- algorithms, differential equations (ordinary), runge kutta method, Krinke (D.C.), Huston (R.L.), *4183*
- repetition factor, stability (numerical), volterra equations, Mckee (S.), Brunner (H.), *4184*
- algorithms, iterative methods, newton method, Herzberger (J.), *4185*
- boundary conditions, hyperbolic equations, wave equations, Bayliss (A.), Turkel (E.), *4187*
- adina, algorithms, strain, Toridis (T.G.), Judy (J.), (et al.), *4188*
- computer programming, mesh generation, triangular elements, Sadek (E.A.), *4196*
- bending, bimodulus materials, extension, laminates, Jones (R.M.), Morgan (H.S.), *4358*

- elastoplasticity, finite element techniques, fracture, hardening, Hammel (J.W.), Bodisco (U.V.), (et al.), *4502*
- coordinate systems, mathematical methods, navier stokes equation, shear flow, Hirschel (E.H.), Kordulla (W.), *4596, book*
- fluid injection, laminar flow, navier stokes equation, reynolds number, Smith (F.T.), Dennis (S.C.R.), *4613*
- conduction (heat), hybrid techniques, inverse problems, Matsevityi (Yu.M.), *4712*
- algorithms, nonlinear programming, optimization, Pappas (M.), *4994*
- algorithms, gradient techniques, minimization, ridge-path method, Elzoughby (A.A.), Metwalli (S.M.), (et al.), *4995*
- differential equations (ordinary), evolution equations, integration, Sepehrnoori (K.), Carey (G.F.), *5000*
- elliptic equations, singularities, stability (numerical), Steinberg (J.), *5003*
- boundary conditions, hyperbolic equations, stability (numerical), Sloan (D.M.), *5004*
- algorithms, matrices (sparse), Kafarov (V.V.), Meshalkin (V.P.), (et al.), *5005*
- finite element techniques, integration, nonlinear systems, optimization, Schmid (H.J.), *5008*
- bifurcation, differential equations (ordinary), perturbation theory, Weber (H.), *5015*
- computer graphics, finite element techniques, mesh generation, optimization, Shephard (M.S.), Gallagher (R.H.), (et al.), *5031*
- burgers equation, differential equations (ordinary), differential equations (partial), finite element techniques, Caldwell (J.), Wanless (P.), (et al.), *5037*
- acoustics, finite element techniques, survey, Fix (G.J.), Gunzburger (M.D.), *5038*
- constitutive equations, creep, plastic behavior, Levy (A.), Pifko (A.B.), *5121*
- convergence, fibers, probability, Harlow (D.G.), Phoenix (S.L.), *5138*
- elasticity, multiple cracks, stress intensity factor, Vialaton (G.), Brunet (M.), (et al.), *5298*
- cauchy principal value, collocation, singular integral equations, Theocaris (P.S.), *6083*
- differential equations (ordinary), mesh generation, singular perturbations, Kreiss (B.), Kreiss (H.-O.), *6087*
- continuation methods, finite element techniques, mesh generation, nonlinear mechanics, structural analysis, Rheinboldt (W.C.), *6089*
- convergence, laplace transform, Karimbaev (T.D.), Nozhnitskii (Yu.A.), *6093*
- finite element techniques, integration, triangular elements, Reddy (C.T.), Shippy (D.J.), *6113*
- contact problems, elastic behavior, friction (solid solid), stiffness matrix, Sachdeva (T.D.), Ramakrishnan (C.V.), *6115*
- continuum mechanics, crack propagation, fracture, geomechanics, hydraulic fracturing, stress intensity factor, Hanson (M.E.), Shaffer (R.J.), *6434*
- elastoplasticity, fracture, newton method, Delorenzi (H.G.), *6446*
- cracks, discontinuities, elasticity, Ioakimidis (N.I.), *6455*
- cracks, elasticity, singular integral equations, Boiko (A.V.), Karpenko (L.N.), *6458*
- boundary layer (turbulent), convergence, galerkin method, Soliman (M.O.), Baker (A.J.), *6639*
- algorithms, shock waves, Vorozhtsov (E.V.), Yanenko (N.N.), *6715*
- convection (benard), diffusion coefficient, magneto fluid dynamics, penetration, Drobyshevski (E.M.), Kolesnikova (E.N.), (et al.), *6861*
- data analysis, flight control, stochastic processes, Maine (R.E.), Iliff (K.W.), *6885*
- inequalities, time dependence, variational methods, Glowinski (R.), Lions (J.-L.), (et al.), *7176, book*
- dynamic programming, linear programming, nonlinear programming, optimization, Rao (S.S.), *7177, book*
- boundary integral methods, differential equations (partial), finite difference methods, galerkin method, iterative methods, surveys, Noye (J.) ed., *7180, book*
- approximations, linear equations, singular integral equations, Fabrikant (V.), Hoa (S.V.), (et al.), *7184*
- fredholm equations, iterative methods, pade approximation, Adhikari (S.K.), *7185*
- approximations, differential equations (ordinary), iterative methods, Korner (E.), *7187*
- computer programming, conduction (unsteady), finite element methods (hybrid), matrix methods, Chiatti (G.), Sestieri (A.), *7222*
- high temperature, plastic flow, rolling, steel, stochastics, Murthy (A.), Lenard (J.G.), *7456*
- crack branching, interface cracks, penny shaped crack, singular integral equations, Theocaris (P.S.), *7516*
- boundary integral methods, fracture, pressure, Hungr (O.), Morgenstern (N.R.), *7538*
- boundary layer, cyclones, laminar flow, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7704*
- boundary layer (turbulent), cyclones, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7705*
- boundary layer, laminar flow, navier stokes equation, transition, Dumitrescu (H.), Savulescu (S.N.), *7706*
- boundary layer, combustion (turbulent), Kang (S.-W.), Levatin (J.L.), *7710*
- boundary layer, differential equations (ordinary), differential equations (partial), nonlinear analysis, Shih (T.M.), Huang (H.J.), *7712*
- heat transfer, laminar flow, noncircular pipes, pipe flow, swirl flow, Masliyah (J.H.), Nandakumar (K.), *7715*
- algorithms, equations of motion, orbit mechanics, space vehicle structures, space vehicles, Kane (T.R.), Levinson (D.A.), *7916*
- periodic orbits, planetary satellites, three dimensional formulation, Robin (I.A.), Markellos (V.V.), *7919*
- flexible bodies, launching, rockets, spinning bodies, Weeks (G.E.), Cost (T.L.), *7922*
- chaos, hamiltonian equations, spectra, Blacher (S.), Perdang (J.), *8107*
- elliptic equations, fredholm equations, matrix methods, singularities, Christiansen (S.), *8119*
- statistical theory, stochastics, Cacko (J.), *8123*
- aquifers, identification, perturbation theory, quasilinearization, Galligani (I.), *8127*
- cauchy integrals, integration, singularities, Ioakimidis (N.I.), *8128*
- iterative methods, nonlinear structures, relaxation methods, structural analysis, Wellford (L.C.), Sen (H.), *8131*
- discrete systems, electrical analogies, graph theory, mathematical models, Savage (G.J.), Kesavan (H.K.), *8137*
- computer programming, continuum mechanics, structural analysis, Rosa (C.T.F.), *8139*
- finite element techniques, fourier series, matrix methods, structural analysis, Wang (L.), *8145*
- digital simulation, dirichlet problem, finite element techniques, iterative methods, Korneev (V.G.), Kuzmenko (V.G.), *8147*
- finite element techniques, plates (parallel), stress analysis, Zollinger (M.), *8154*
- finite element methods (hybrid), laminates, plates (thick), Spilker (R.L.), *8226*
- residual stresses, welded joints, Brust (F.W.), Rybicki (E.F.), *8367*
- fatigue, gradient techniques, Brand (A.), *8380*
- corrosion, materials properties, Jankowski (J.), Juchniewicz (R.), *8381*
- crack closure, edge cracks, Penkov (V.B.), Tolokomnikov (L.A.), *8389*
- crack propagation, viscoelasticity, Tsai (Y.M.), *8412*
- cracks, stress analysis, stress intensity factor, Kumar (M.), *8418*
- corners, fracture mechanics, singular integral equations, stress intensity factor, Ioakimidis (N.I.), Theocaris (P.S.), *8419*
- periodic orbits, restricted three body problem, Zikides (M.K.), *8841*
- guidance optimization, optimal control, Demidovich (O.B.), *8845*
- rayleigh ritz method, soil structure interaction, vibration, Solari (G.), Stura (D.), *8963*
- integro differential equations, wave equations, Gladkov (A.A.), *9115*
- elastoplasticity, iterative methods, newton method, Atrek (E.), *9117*
- periodic orbits, riccati equation, Sanchez (D.A.), *9121*
- algorithms, boundary value problems, discontinuities, Welsh (W.), Ojika (T.), *9122*
- algorithms, computer programming, differentiation, Oliver (J.), *9123*
- difference equations, poisson equation, relaxation methods, torsion, Banki (I.), *9124*
- finite element techniques, integration, optimization, Peano (A.), *9129*
- computer programming, energy, heat transfer, mathematical models, numerical analysis, Lewis (R.W.), Morgan (K.), (et al.), *9149*
- finite element techniques, nonlinear theory, Banaszek (J.), Staniszewski (B.), *9151*
- fast fourier transform, vibration (forced), Gossmann (E.), Waller (H.), *9330*
- slopes, soil mechanics, stability, Chugh (A.K.), Smart (J.D.), *9360*
- crack opening displacement, infinite medium, penny shaped crack, stress intensity factor, Mohapatra (R.B.), Parhi (H.), *9415*
- composite materials, crack growth, finite element techniques, microcracks, Ito (Y.M.), Rosenblatt (M.), (et al.), *9418*
- bifurcation, periodic orbits, Contopoulos (G.), Michaelidis (P.), *9815*
- kinematics, mathematical methods, optimization, state space techniques, Sohoni (V.), Haug (E.J.), *10006*
- boundary value problems, singular perturbations, Roberts (S.M.), *10038*
- algorithms, transforms, Candel (S.), *10042*
- conservation laws, difference equations, implicit schemes, Hollanders (H.), Peyret (R.), *10044*
- matrix methods, series, Saha (R.K.), Boriotti (J.R.), *10047*
- approximations (polynomial), differential equations (ordinary), initial value problems, splines, Multhei (H.N.), *10049*
- mathematical methods, newton method, Von Gudenberg (J.W.), *10050*
- finite element methods, fluid mechanics, heat transfer, matrix methods, Rao (S.S.), *10061*
- approximations (polynomial), finite element methods (hybrid), integration, isoparametric elements, Spilker (R.L.), Singh (S.P.), *10062*
- computer programming, finite element techniques, propagation, wave equations, Okrouhlik (M.), *10069*
- finite element techniques, incompressible flow, numerical analysis, Griffiths (D.F.), *10070*
- composite materials, constitutive relations, equivalence techniques, Lene (F.), Leguillon (D.), *10127*
- dynamic analysis, mathematical methods, Wehage (R.A.), Haug (E.J.), *10197*
- dynamic response, stiffness matrix, Bahar (L.Y.), Law (G.E.), *10223*
- contact stresses, eccentric loading, foundations, Selvadurai (A.P.S.), *10254*
- acoustic emission, flaw detection, newton method, nondestructive tests, Vasilev (A.M.), Maslov (B.Ya.), *10317*

- conservation laws, difference equations, differential equations (ordinary), fokker-planck equation, plasma, Volosov (V.N.), Pekker (M.S.), *10932*
- parabolic equations, singularities, Ryvkin (V.B.), Kopeliovich (B.L.), *10937*
- boundary value problems, finite difference methods, Snell (C.), Vesey (D.G.), (et al.), *10938*
- dynamic analysis, eigenvalues, mathematical methods, Iyer (M.S.), *11152*
- dynamic analysis, structural analysis, Underwood (P.), Park (K.C.), *11154*
- condensation (filmwise), mixtures, Volkov (Yu.A.), Nikitin (V.M.), *12052*

concentration, gases, impurities, porous media, Zyabrev (N.B.), Kudryashov (N.A.), (et al.), *823*

- convection (free), models, solidification, Zavgorodnii (P.F.), Kolesnik (V.I.), (et al.), *2847*
- convection (forced), mass transfer, plates, Atimtay (A.), Gill (W.N.), *2849*
- boundary conditions, diffusion, laminar flow, mass transfer, Vorotyntsev (M.A.), Grafov (V.M.), (et al.), *4730*
- absorption, deposition, particles, Goldberg (I.S.), *6961*
- bubble dynamics, inclusions, oscillations, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *6988*
- anisotropy, dispersion, mixed flow, porous media, Routaboul (F.), Quintard (M.), *7973*
- diffusion, drops, peclet number, wakes, Zhivotyagin (A.F.), *9539*
- discharges, friction (skin), pressure drop, slurries, Carstens (M.R.), Addie (G.), *10398*
- jets, mixing, particle fluid flow, scattered light, Long (M.B.), Chu (B.T.), (et al.), *10539*
- air pollution, dispersion, plumes, prediction, Harrison (R.M.), Mccartney (H.A.), *11523*
- optical techniques, particle size, velocity measurement, Stanley-Wood (N.G.), Llewellyn (G.J.), (et al.), *12058*

concrete, endochronic theory, fracture, strain softening, Bazant (Z.P.), Shieh (C.-L.), *430*

- creep, offshore structures, thermal stresses, England (G.L.), *530*
- anelasticity, constitutive relations, strain, Bazant (Z.P.), Tsubaki (T.), *1334*
- mixing, mixtures, vibrators, Eyman (K.H.), *1436*
- beams (prestressed), fibers, impulsive loading, reinforced concrete, Hughes (B.P.), *1438*
- aging, strength, Naik (T.R.), *1440*
- shear, stiffness, Fardis (M.N.), Buyukozturk (O.), *1441*
- fatigue, strength, Tepfers (R.), *1443*
- axisymmetric loading, cracks, geomechanics, monotonic loading, Chen (E.Y.-T.), Schnobrich (W.C.), *2450*
- strain measurement, strength, stress analysis, triaxial loading, Gerstle (K.H.), Ashchi (H.), (et al.), *2486*
- beams (composite), beams (variable cross section), fracture mechanics, stress analysis, web openings, Swartz (S.E.), Eliufoo (K.S.), *3294*
- experimental mechanics, modeling, shells (hyperbolic paraboloid), Sambanthan (T.G.), Aravindan (P.K.), (et al.), *3309*
- beams (composite), slabs, steel, Pyle (J.C.), *3315*
- field tests, highways, sand, subgrade design, Barber (S.D.), Knapton (J.), *3417*
- frequencies, impact, nondestructive tests, tests, Alexander (A.M.), *3496*
- anchors, bolts, pull-out tests, strength, Bungey (J.H.), *4506*
- nonlinear analysis, plastic behavior, shells (cylindrical), Chen (W.F.), Suzuki (H.), (et al.), *5116*
- constitutive equations, cracks, work hardening, Chen (W.F.), Suzuki (H.), *5117*
- nondestructive tests, radio waves, waves, Laine (E.F.), Dines (K.A.), (et al.), *5252*
- consolidation, rheology, vibration, Aci Committee 309, *5352*
- convection (forced), drying, thermal effects, Gritsev (V.M.), Bykov (S.I.), *5573*
- columns, earthquake engineering, Selna (L.), Martin (I.), (et al.), *5895*
- gravity platforms, offshore structures, wave loads, Bangash (Y.), *6539*
- beams (flexural), cyclic loading, reinforced concrete, Thompson (K.J.), Park (R.), *7290*
- energy density, fracture criteria, fracture mechanics, Petersson (P.E.), *7522*
- brittle materials, compression, tests, ultimate strength, Jayatilaka (A. De S.), Nanayakkara (V.K.N.), *7563*
- compression, saturation, strength, tension, Karapetian (K.S.), Kotikian (R.A.), (et al.), *7568*
- convection (forced), energy storage, fins, solar energy, Ortega (J.K.E.), Bingham (C.E.), (et al.), *7863*
- plates, punch problems, reinforced bodies, shear, Godycki-Cwirko (T.), Kosinska (A.), *8379*
- cement stabilized soils, compression, dynamic testing, elastic constants, soils, statics, tension, Kolias (S.), Williams (R.I.T.), *9427*
- fatigue, Hsu (T.T.C.), *9447*
- strength, Popovics (S.), *9448*
- experimental mechanics, impact, Schrader (E.K.), *9449*
- adhesives, composite materials, dislocations, interface phenomena, Kendall (K.), *9487*
- heat transfer, thermal effects, thermal stresses, Thurston (S.J.), Priestley (M.J.N.), (et al.), *11328*

condensation, collocation, curved surfaces, extended surfaces, isothermal processes, Panchal (C.B.), Bell (K.J.), *807*

- nonequilibrium effects, water, Davydov (L.M.), Pirumov (U.G.), *810*
- binary flow, inert gases, Krishna (R.), *811*
- mixing, modeling, three dimensional flow, visualization, Mostofizadeh (C.), Kriegel (E.), (et al.), *1642*
- evaporation, heat transfer, thermosyphons, two phase flow, Imura (H.), Kusuda (H.), (et al.), *1719*
- jet streams, plates, Balakleyevskiy (Yu.I.), *1726*
- mass transfer, multicomponent flow, Krishna (R.), *1727*
- augmentation, convection (forced), fins, heat exchangers, Webb (R.L.), *2827*
- drops, evaporation, gases, Rakhmatulina (I.Kh.), *2840*
- drops, evaporation, Sadhal (S.S.), *2841*
- fins, heat exchangers, tubes, Rifert (V.G.), *2843*
- boiling, multiphase flow, nuclear reactors, safety, Veziroglu (T.N.) ed., *3794, book*
- evaporation, heat transfer, mass transfer, regenerators, rotary regenerators, Van Leersum (J.G.), Ambrose (C.W.), *3838*
- evaporation, excitation, isotopes, lasers (gasdynamic), mixtures, Druzhinin (A.A.), Ptitsyn (G.A.), (et al.), *5612*
- melting, snow, sublimation, Matsuo (T.), Sasyo (Y.), *5614*
- boundary integral methods, dynamic response, pressure vessels, reactor structures, shells (spherical), steam, Krieg (R.), Goller (B.), (et al.), *6549*
- bgk model, channels, rarefied gases, two dimensional flow, Gajewski (P.), Wismiewski (A.), *6634*
- boiling, liquid gas mixture, modeling, similarity methods, Kutateladze (S.S.), *6758*
- safety, two phase flow, Bankoff (S.G.), *6963*
- mass transfer, multicomponent flow, tubes, Webb (D.R.), Sardesai (R.G.), *7870*
- bifurcation, interface phenomena, liquid vapor interface, Bychkov (Yu.A.), Iordanskii (S.V.), *7871*
- safety, two phase flow, Block (J.A.), *7963*
- bubbly flow, buoyant flow, evaporation, immiscible fluids, two phase flow, Moalem-Maron (D.), Sokolov (M.), (et al.), *8696*
- entrance region, film flow, two phase flow, Segev (A.), Collier (R.P.), *8698*
- particles, pulsatile flow, stochastics, two phase flow, Butov (V.G.), Vasenin (I.M.), (et al.), *8898*
- nucleation, steam, two dimensional flow, Bakhtar (F.), Mohammadi Tochai (M.T.), *9781*
- condensation (dropwise), gold, steam, surface effect, Woodruff (D.W.), Westwater (J.W.), *10576*
- critical flow, heat exchangers (crossflow), tube bundles, Rabas (T.J.), *10578*
- convection, heat transfer, tube bundles, turbulent flow, Kutateladze (S.S.), Gogonin (I.I.), (et al.), *10622*
- freezing, heat exchangers, pressure drop, tube bundles, Berg (W.F.), Berg (J.L.), *10626*
- capillary surfaces, evaporation, heat transfer, Shekriladza (I.G.), Rusishvili (D.G.), *10649*
- evaporation, excitation, molecular theory, Abramov (A.A.), Makashev (N.K.), *11442*

condensation (dropwise), compressible flow, nozzles, prandtl-meyer flow, Frank (W.), *586*

- drops, evaporation, surfactants, Borzilov (V.A.), Klepikova (N.V.), (et al.), *1905*
- electric effects, steam turbines, wet steam, Ryley (D.J.), Loftus (F.P.), *2752*
- kinetics, multiphase flow, saturation, supersaturation, Bazarov (S.M.), Shpenzer (G.G.), *2845*
- coalescence, kinetics, models, Srivastava (R.C.), Passarelli (R.E.), *8773*
- drops, external flow, film flow, laminar flow, mist flow, Treia (M.), *9692*
- condensation (filmwise), drops, knudsen number, thermal contact resistance, Tanaka (H.), *9693*
- condensation (filmwise), erosion, steam, steam turbines, Hammitt (F.G.), Krzeczkowski (S.), (et al.), *9780*
- condensation, gold, steam, surface effect, Woodruff (D.W.), Westwater (J.W.), *10576*
- conductivity, surface effect, thermal properties, Abdelmessih (A.H.), Rotenberg (Y.), (et al.), *10577*

condensation (filmwise), plane surfaces, thermal effects, Schroppel (J.), *808*

- laminar flow, theory, waves, Sofrata (H.), *1724*
- heat transfer, tubes, Volodin (V.I.), Mikhalevich (A.A.), (et al.), *1725*
- boundary layer (turbulent), heat transfer, pipe flow, turbulent flow, Chisholm (D.), *4706*
- annular flow, tubes, tubes (horizontal), Nishiyama (E.), *8699*
- condensation (dropwise), drops, knudsen number, thermal contact resistance, Tanaka (H.), *9693*
- condensation (dropwise), erosion, steam, steam turbines, Hammitt (F.G.), Krzeczkowski (S.), (et al.), *9780*
- laminar flow, porous walls, similarity methods, velocity profiles, Liu (C.Y.), Ismail (K.A.R.), (et al.), *11762*
- computing techniques, mixtures, Volkov (Yu.A.), Nikitin (V.M.), *12052*

condensers, mass transfer, porous surfaces, tube bundles, Aly (S.), Cunningham (J.), *2857*

- heat exchangers, thermal loading, tube bundles, Schrey (H.-G.), Kern (J.), *3840*
- heat pipes, transient effects, Shukla (K.N.), *3841*
- heat exchanger (folded-tube), heat exchangers, stratified flow, tube bundles, Pandolfini (P.P.), Dugger (G.L.), (et al.), *4716*
- heat exchangers, mathematical models, refrigeration, Tassou (S.A.), Green (R.K.), *5592*

- augmentation, computer programming, fouling, heat transfer, marine engineering, Marto (P.J.) eds., Nunn (R.H.), *8761, book*
- coding, computer aided design, numerical methods, optimization, Johnson (C.M.), Vanderplaats (G.N.), (et al.), *10625*
- heat pipes, vapor gas interface, variable thermal properties, wick, Van Der Vooren (J.), Delil (A.A.M.), (et al.), *10629*
- contact fronts, heat pipes, variable thermal properties, wick, Van Der Vooren (J.), Sanderse (A.), *10630*

conducting fluid, electrical conductivity, two phase flow, Barnea (D.), Shoham (O.), (et al.), *2989*
- birefringence, boundary layer, rarefied gases, Oudeman (P.), Korving (J.), (et al.), *5423*

conduction, relativity, thermodynamics, thermodynamics (irreversible), Pavon (D.), Jou (D.), (et al.), *3767*
- contact problems, solid solid interface, thermal contact resistance, Kokorev (L.S.), Shelagin (Yu.N.), (et al.), *3818*
- low temperature properties, multiphase media, superconductors, Kogan (V.G.), *5531*
- boussinesq equation, convection (free), heat transfer, open thermosyphons, rayleigh number, thermosyphons, Penot (F.), Peube (J.-L.), *6790*
- coordinate systems, finite difference methods, Goldman (A.), Kao (Y.C.), *6794*
- boltzmann equation, enskog fluid, kinetic theory, pressure, viscoelasticity (dynamic), viscosity, Schmidt (G.), Kohler (W.E.), (et al.), *7819*
- convection, finite difference methods, heat transfer (combined modes), Griffiths (D.F.), Christie (I.), (et al.), *8750*
- channel flow, convection (forced), heat transfer (combined modes), nucleate boiling, thermal instability, Humbert (M.), Martin (M.), *9685*

conduction (heat), backward heat problem, existence theorems, mathematical methods, norms, Biollay (Y.), *39*
- hydrocarbons, thermal properties, thermodynamic properties, Baroncini (C.), Di Filippo (P.), (et al.), *724*
- convection (free), heat transfer (combined modes), Miyamoto (M.), Sumikawa (J.), (et al.), *764*
- contact problems, thermal contact resistance, CamesPintaux (A.M.), Padet (J.P.), *766*
- conductivity, thermal contact resistance, thermal properties, Nakao (M.), Miyawaki (Y.), *767*
- energy storage, liquid solid interface, melting, phase changes, Henze (R.H.), Humphrey (J.A.C.), *768*
- adiabatic processes, calorimeters, thermal diffusion, Mcnabb (A.), *770*
- asymptotic methods, mathematical models, perturbation methods, variable thermal properties, Aziz (A.), Jaleel (A.), (et al.), *772*
- heat addition, slabs, transient loading, Fhts (P.B.) Jr., De Witt (K.J.), *773*
- composite vessels, conductivity, nuclear reactors, prestressed concrete, Bangash (Y.), *774*
- heat exchangers, heat transfer, nusselt number, rotating fluids, Ramdas (V.), Uhl (V.W.), (et al.), *790*
- finite element techniques, nonhomogeneous media, thermoelasticity, Lisitsyn (B.M.), Bulyga (K.G.), *921*
- thermal waves, transient effects, Swenson (R.J.), *1698*
- floors, green function, heat sources, heating, De Mey (G.), *1700*
- gradient techniques, inverse problems, Artyukhin (E.A.), Rumyantsev (S.V.), *1701*
- computer programming, numerical methods, transforms, Campo (A.), *1702*
- conductivity, radiation, thermal measurements, thermal properties, Salokhin (V.F.), Spirin (G.G.), *1705*
- convection, convection (free), fins, Sparrow (E.M.), Acharya (S.), *1709*
- convection, extended surfaces, fins, heat transfer, Sparrow (E.M.), Hsu (C.F.), *1715*
- composite materials, conductivity, particles, thermal contact resistance, Yamada (E.), Ota (T.), *2783*
- calorimeters, conductivity, thermal measurements, Zhdanov (K.R.), Matizen (E.V.), (et al.), *2784*
- mathematical models, variable thermal properties, Galaktionov (V.A.), *2809*
- asymptotic methods, mathematical models, transient effects, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *2810*
- anisotropic media, transient effects, Tanaka (K.), Tanaka (M.), *2811*
- absorption, conductivity, dispersed flow, Oshima (N.), *2813*
- dispersed flow, dispersed media, freezing, melting, thermophysical properties, Pavlov (A.R.), Permyakov (P.P.), (et al.), *2815*
- boundary integral method, integral methods, transient loading, Wrobel (L.C.), Brebbia (C.A.), *2817*
- boundary integral method, conduction (steady), green function, integral methods, variable thermal properties, Khader (M.S.), Hanna (M.C.), *2818*
- approximation methods, heat transfer, nusselt number, Churchill (S.W.), Cheng (S.M.), *2819*
- finite element techniques, transient effects, variable thermal properties, Keramidas (G.A.), *2821*
- clausius-duhem inequality, shock waves, thermodynamics, viscoelastic fluids, Morro (A.), *3722*
- calorimetry, inverse problems, plasma, Bespalov (A.M.), Gorshkov (M.I.), (et al.), *3773*
- convection, cylindrical bodies, heat transfer, variable thermal properties, Martinson (L.K.), *3778*
- hot wire, thermal measurements, Mohammadi (S.S.), Graboski (M.S.), (et al.), *3808*
- axial flow, closed conduit flow, laminar flow, peclet number, Vick (B.), Ozisik (M.N.), *3812*
- channel flow, heat addition, heat exchangers, rockets, Sultanian (B.K.), Sastri (V.M.K.), *3813*
- absorption, nonlinear materials, thermal waves, Granik (I.S.), Martinson (L.K.), *3814*
- boundary value problems, nonlinear systems, radiant interchange, Tao (L.N.), *3815*
- heat addition, numerical methods, series expansion, Beck (J.V.), *3816*
- numerical methods, variable thermal properties, Taran (M.D.), Favorskii (A.P.), *3824*
- gas turbines, thermal stresses, Vytchikov (Yu.S.), Khorolskii (V.M.), *3988*
- containers, paper, thermal properties, Bormett (D.W.), *4001*
- inverse problems, theorems, uniqueness, Muzylev (N.V.), *4645*
- gaseous ammonia, thermal properties, thermodynamic properties, Afshar (R.), Murad (S.), (et al.), *4692*
- boiling, rewetting, thermal waves, Zhukov (S.A.), Barelko (V.V.), (et al.), *4704*
- computing techniques, hybrid techniques, inverse problems, Matsevityi (Yu.M.), *4712*
- conductivity, liquids, specific heat, Mulyukov (R.R.), Pavlov (P.A.), *5518*
- rocks, thermal measurements, thermodynamic properties, Topolnicki (J.), *5523*
- thin films, Vigdorovich (V.N.), Garanin (V.P.), (et al.), *5524*
- thermal measurements, thermocouples, Sergeev (O.A.), *5534*
- conduction (unsteady), transient effects, Baclic (B.S.), Gvozdenac (D.D.), *5572*
- composite materials, laminates, mixtures, Murakami (H.), Maewal (A.), (et al.), *5575*
- heat addition, heat transfer, numerical methods, Dean (D.J.), *5579*
- inverse problems, numerical methods, Blackwell (B.F.), *5580*
- boundary value problems, gradient techniques, inverse problems, numerical methods, Artyukhin (E.A.), Rumyantsev (S.V.), *5581*
- contact problems, green function, thermoelasticity, Comninou (M.), Dundurs (J.), (et al.), *5793*
- bubble dynamics, sodium, Miyazaki (K.), *5820*
- helical flow, materials possessing memory, uniqueness, Fetecau (C.), *6577*
- air, conductivity, hot wire, Scott (A.C.), Johns (A.I.), (et al.), *6754*
- conductivity, dispersed flow, spherical bodies, thermodynamic functions, viscosity, Endler (B.S.), *6759*
- conductivity, edge effects, plates (circular), thermal measurements, Bode (K.-H.), *6796*
- cylindrical bodies, linear theory, materials possessing memory, tubes, Fetecau (C.), *6797*
- heat transfer, hot wire, thermal excitation, thermal measurements, Mulyukov (R.R.), *6798*
- mathematical models, transient effects, transport properties, variable thermal properties, Maewal (A.), *6799*
- mathematical methods, mathematical models, monte carlo analysis, transient effects, Vorobeva (L.S.), Zhevlakov (G.N.), *6803*
- heat exchangers, microbial fouling, resistance, thermal contact resistance, thermal effects, Characklis (W.G.), Nimmons (M.J.), (et al.), *6812*
- thermal shock, thermoelasticity, Szekeres (A.), *6942*
- cold wire, hot wire, thermal measurements, turbulence, Lecordier (J.C.), Petit (C.), (et al.), *7757*
- bars, cavities, cylindrical bodies, shape factors, Naghdi (A.K.), *7847*
- cellular flow, heat transfer, internal flow, Eftekhar (J.), Darkazalli (G.), (et al.), *7848*
- duct flow, pulsatile flow, thermal loading, Baskov (V.B.), Platonov (E.G.), (et al.), *7849*
- cylindrical bodies, internal flow, lasers, unsteady flow, Lakusta (K.V.), *7850*
- conductivity, inverse problems, mathematical models, numerical methods, Chen (Y.M.), Liu (J.Q.), *7855*
- integral methods, two component flow, Kalinovskii (Yu.V.), *7856*
- finite element techniques, nonlinear analysis, numerical methods, Schreyer (H.L.), *7857*
- conjugate gradient method, data analysis, inverse problems, minimum discrepancy method, steepest descent method, Alifanov (O.M.), Rumyantsev (S.V.), *7859*
- diffusion, heat transfer, mass transfer, mathematical models, Hatton (T.A.), Chiang (A.S.), (et al.), *7875*
- continuum mechanics, porous media, Hlavacek (M.), *7993*
- analogies, complex variables, waves, Dunne (E.G.), Mugler (D.H.), *8089*
- binary flow, conductivity, gases, kinetic theory, mixtures, multicomponent flow, Assael (M.J.), Wakeham (W.A.), (et al.), *8575*
- inverse problems, mathematical models, Novikov (I.A.), *8730*
- channel flow, rewetting, Salcudean (M.), Rahman (M.), *8731*
- composite structures, layered media, slabs, thermal contact resistance, Duhamel (P.), Gosse (J.), *8732*
- composite materials, green function, laminates, layered media, unsteady flow, Huang (S.C.), Chang (Y.P.), *8733*
- cylindrical bodies, hardening, heat addition, inverse problems, mathematical models, Glasko (V.B.), Kulik (N.N.), (et al.), *8734*
- electron beam welding, welding, Miyazaki (T.), Giedt (W.H.), *8735*

- conductivity, heat addition, heat sources, semi infinite media, Melamed (L.E.), *8736*
- composite materials, fibers, mixtures, variable thermal properties, Murakami (H.), Hegemier (G.A.), *8738*
- convection (forced), heat exchangers, heat transfer (combined modes), pipe flow, slug flow, Vick (B.), Ozisik (M.N.), *8745*
- differential equations (partial), elasticity, finite element techniques, Gibert (P.), Gorge (Y.), *9142*
- channel flow, hydrodynamic stability, thermal instability, transition flow, Hassab (M.A.), Ozisik (M.N.), *9702*
- mathematical models, solids, variable thermal properties, Imber (M.), *9713*
- analytical methods, biot number, cylindrical bodies, heisler charts, spherical bodies, unsteady flow, Sha (W.C.), Ganic (E.N.), *9714*
- aquifers, convection (free), geothermal reservoirs, heat transfer (combined modes), thermosyphons, Torrance (K.E.), Chan (V.W.C.), *9724*
- axial flow, graetz problem, mathematical models, Bayazitoglu (Y.), Ozisik (M.N.), *9725*
- freezing, phase changes, soils, Mostaghimi (J.), Pfender (E.), *10563*
- mathematical models, nonlinear materials, transient effects, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *10591*
- cylindrical bodies, heat addition, transient effects, Beck (J.V.), *10592*
- composite materials, filamentary structures, layered media, Zimmerman (R.H.), *10594*
- contact fronts, mathematical models, Litvin (O.N.), *10599*
- fourier problem, green function, Baranski (F.), Musialek (J.), *10600*
- absorption, heat transfer (combined modes), radiant interchange, radiation properties, reflection, Stepanov (S.V.), Bityukov (V.K.), *10602*
- lasers, phase changes, radiant interchange, radiation properties, Zscherpe (G.), *10607*
- drainage, porous surfaces, Girol (A.P.), Mizyuk (V.G.), (et al.), *10688*
- conformal mapping, heat transfer, variational methods, Laura (P.A.A.), Sarmiento (G.S.), *11765, book*

conduction (steady), composite materials, finite difference methods, iterative methods, Charrier (J.M.), Gupta (R.), (et al.), *282*

- boundary elements, composite materials, inclusions, Jaworski (A.R.), *932*
- boundary integral method, conduction (heat), green function, integral methods, variable thermal properties, Khader (M.S.), Hanna (M.C.), *2818*
- penny shaped crack, stress intensity factor, thermal stresses, Barber (J.R.), *2967*
- elliptic equations, finite difference methods, heat transfer, implicit procedure, Schneider (G.E.), Zedan (M.), *3118*
- thermal instability, thermosyphons, transient effects, Mertol (A.), Greif (R.), (et al.), *5598*
- adiabatic lines, heat transfer, Lienhard (J.H.), *6795*

conduction (unsteady), heat transfer, variational methods, Prokopov (V.G.), Bespalova (E.I.), (et al.), *50*

- finite element techniques, moving surfaces, nonlinear theory, Padovan (J.), *98*
- heat transfer, heat transfer (combined modes), wave equations, Sieniutycz (S.), *1082*
- asymptotic behavior, one dimensional flow, parabolic equations, short-time solutions, Gavalas (G.R.), Yortsos (Y.C.), *1087*
- caustics, compressible flow, shock waves, supersonic flow, Fung (K.-Y.), *1612*
- backlund transformation, group theory, nonlinear characteristics, transformation, Munier (A.), Burgan (J.R.), (et al.), *2004*
- approximations, least squares, variational methods, Djukic (D.S.), Atanackovic (T.M.), *2038*
- analog computation, differential equations (partial), Zboril (F.), *2046*
- casting, heat transfer, thermal stresses, Morgan (K.), Lewis (R.W.), (et al.), *2402*
- thermal waves, thermoelasticity (transient), Bargmann (H.), *2972*
- composite materials, discontinuities, eigenvalue problems, variational methods, Nemat-Nasser (S.), Horgan (C.O.), *3110*
- perturbation theory, rods, Kenig (K.E.), Korostelev (A.P.), *3120*
- convergence, crank-nicolson scheme, mesh generation, stability theory, Jamet (P.), *4181*
- boundary conditions, dirichlet problem, parabolic equations, time dependence, Sommeijer (B.P.), Van Der Houwen (P.J.), (et al.), *5002*
- conduction (heat), transient effects, Baclic (B.S.), Gvozdenac (D.D.), *5572*
- nonlinear systems, variational methods, Voros (G.M.), *6079*
- extrapolation, parabolic equations, stability (numerical), Gourlay (A.R.), Morris (J.L.), *6090*
- boundary value problems, differential equations (ordinary), lanczos-chebyshev, stress analysis, Chen (P.Y.P.), *7192*
- computer programming, computing techniques, finite element methods (hybrid), matrix methods, Chiatti (G.), Sestieri (A.), *7222*
- mesh generation, moving media, Padovan (J.), *7223*
- darcy flow, diffusion, half space, mass transfer, Nilson (R.H.), *8778*
- approximations, conformal mapping, Laura (P.A.A.), *10037*
- finite element techniques, random loading, stability theory, Tasaka (S.), *10073*

conductivity, annular flow, heat transfer, insulating materials (thermal), isothermal processes, Shimomura (H.), Okamoto (Y.), (et al.), *765*

- conduction (heat), thermal contact resistance, thermal properties, Nakao (M.), Miyawaki (Y.), *767*
- composite vessels, conduction (heat), nuclear reactors, prestressed concrete, Bangash (Y.), *774*
- boltzmann equation, neutrons, nuclear radiation, radiant interchange, transport, Mennig (J.), Ozisik (M.N.), (et al.), *776*
- composite materials, fibers, Gogol (W.), Furmanski (P.), *1208*
- computing techniques, ionized gases, shock waves, Makhmudov (A.A.), Popov (A.P.), *1613*
- liquids, physical properties, sound speed, thermal properties, Mamedov (A.M.), *1656*
- experimental methods, thermal measurements, thermophysical properties, Buravoi (S.E.), Kurepin (V.V.), (et al.), *1661*
- conduction (heat), radiation, thermal measurements, thermal properties, Salokhin (V.F.), Spirin (G.G.), *1705*
- density, gases, heat transfer, thermal measurements, transient effects, Filippov (L.P.), Eldarov (F.G.), (et al.), *2780*
- composite materials, conduction (heat), particles, thermal contact resistance, Yamada (E.), Ota (T.), *2783*
- calorimeters, conduction (heat), thermal measurements, Zhdanov (K.R.), Matizen (E.V.), (et al.), *2784*
- absorption, conduction (heat), dispersed flow, Oshima (N.), *2813*
- convection (free), energy conversion, radiant interchange, solar collectors, Arsanovitch (E.), *3842*
- conduction (heat), liquids, specific heat, Mulyukov (R.R.), Pavlov (P.A.), *5518*
- heat transfer (combined modes), radiant interchange, Filimonov (S.S.), Khrustalev (B.A.), (et al.), *5569*
- laminates, pressure vessels, thermal properties, Armstrong (W.P.), Jawad (M.H.), *5805*
- heat transfer, packed beds, Dietz (P.W.), *5856*
- air, conduction (heat), hot wire, Scott (A.C.), Johns (A.I.), (et al.), *6754*
- conduction (heat), dispersed flow, spherical bodies, thermodynamic functions, viscosity, Endler (B.S.), *6759*
- conduction (heat), edge effects, plates (circular), thermal measurements, Bode (K.-H.), *6796*
- conduction (heat), inverse problems, mathematical models, numerical methods, Chen (Y.M.), Liu (J.Q.), *7855*
- binary flow, conduction (heat), gases, kinetic theory, mixtures, multicomponent flow, Assael (M.J.), Wakeham (W.A.), (et al.), *8675*
- compressibility, surface effect, thermal excitation, Loudon (R.), *8677*
- conduction (heat), heat addition, heat sources, semi infinite media, Melamed (L.E.), *8736*
- buoyant flow, convection (free), diffusion, heat addition, heat transfer (combined modes), radiant interchange, Epstein (M.), Cheung (F.B.), (et al.), *8751*
- approximation methods, experimental methods, mathematical models, radiant interchange, Saito (A.), *9722*
- metals, thermal diffusion, thermophysical properties, thin films, Pugachev (A.T.), Volkov (Yu.A.), (et al.), *10557*
- anisotropic media, polymers, thermophysical properties, thin films, Voronkov (V.A.), Sukhareva (L.A.), (et al.), *10559*
- condensation (dropwise), surface effect, thermal properties, Abdelmessih (A.H.), Rotenberg (Y.), (et al.), *10577*
- contact problems, drying, particle fluid flow, Schlunder (E.-U.), *10638*
- convection (benard), convection (free), heat addition, slabs, thermal instability, Proctor (M.R.E.), *11763*

conduits, boundary conditions, channels (closed), convection (free), transforms, De Socio (L.M.), Misici (L.), *1683*

- algorithms, resistance, roughness, Kumar (S.), Roberson (J.A.), *6594*
- finite difference methods, ice mechanics, lakes, unsteady flow, Spring (U.), Hutter (K.), *6608*

Coney (J.E.R.), see Simmers (D.A.), *1566*

- see Simmers (D.A.), *3752*

confined jets, coaxial jets, furnaces, Guruz (K.), Ilcali (C.), *2863*

conformal mapping, thermal stresses, thermoelasticity (transient), Takeuti (Y.), Yamada (K.), *926*

- existence theorems, flow obstructions, potential flow, wakes, Hilbig (H.), *2008*
- mixed flow compressors, turbomachinery, vorticity, Lewis (R.I.), Fairbairn (G.W.), *2754*
- blades, potential flow, three dimensional flow, turbomachinery, Agarwal (P.K.), Viktorov (G.V.), *4677*
- cylindrical bodies, plates, Shirakura (M.), *4989*
- free jets, incompleteness, plates, potential flow, streamlines, Van Der Zanden (J.), *7663*
- hypersonic flow, magneto plasma dynamics, solar wind, three dimensional flow, Belotserkovskii (O.M.), Mitnitskii (V.Ya.), *7902*
- irrotational flow, plates, porous surfaces, walls, Prosnak (W.J.), Rokicki (J.), *8541*
- compressible flow, cylindrical bodies, two dimensional flow, Sakurai (A.), Arai (T.), *8544*
- airfoil theory, inviscid fluid, two dimensional flow, Prosnak (W.J.), Rokicki (J.), *8640*
- cladding, fuel elements, heat transfer, nuclear reactors, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *8729*
- gear teeth, numerical methods, stress intensity factor, Cardou (A.), Tordion (G.V.), *9472*
- approximations, conduction (unsteady), Laura (P.A.A.), *10037*
- airfoils, compressible flow, numerical methods, transonic flow, Constantinescu (V.N.), Bucur (S.C.), *10419*

- channel flow, flow irregularities, separated flow, separation, Dzugaev (V.V.), *10436*
- conduction (heat), heat transfer, variational methods, Laura (P.A.A.), Sarmiento (G.S.), *11765, book*

conical bodies, impact, layered media, simulation, Rimskii (V.K.), Sabodash (P.F.), *405*

- penetration, soils, stress analysis, Forrestal (M.J.), Norwood (F.R.), (et al.), *406*
- boundary layer (thermal), incompressible flow, laminar flow, singular perturbations, Kortikov (N.N.), Novikova (I.B.), *2608*
- shock waves, stability theory, supersonic flow, wedges, Rusanov (V.V.), Sharakshanae (A.A.), *2680*
- acoustic loading, acoustics, loudspeakers, membranes, Van Der Pauw (L.J.), *2949*
- laminar flow, navier stokes equation, rotating bodies, viscous flow, Patni (G.C.), Rawat (M.L.), *3620*
- annuli, approximations (higher order), divergence, laminar flow, Renaud (M.F.), *3662*
- convection (free), heat addition, laminar flow, Chiou (J.P.), Na (T.Y.), *3799*
- penetration, porous media, rocks, Forrestal (M.J.), Longcope (D.B.), (et al.), *4457*
- deformation, flexible bodies, pressure distribution, supersonic flow, wedges, Belyaev (N.M.), Khrushch (V.K.), *4585*
- heat transfer, shock tubes, Ardasheva (M.M.), Bezmenov (V.Ya.), (et al.), *5537*
- penetration, porous media, rocks, Longcope (D.B.), Forrestal (M.J.), *6358*
- dynamic stresses, shock, vibration (torsional), Brepta (R.), Tmka (J.), *7386*
- forging, work hardening, Stahlberg (U.), *7455*
- deformation (plastic), finite element techniques, impact, plasticity, time dependence, Chiesa (M.L.), Callabresi (M.L.), *8342*
- ducts (variable area), dynamic response, frequency domain techniques, unsteady flow, Muto (T.), Kinoshita (Y.), (et al.), *8574*
- heat transfer, rotating bodies, rotating fluids, spinning bodies, Vira (N.R.), Fan (D.-N.), *8716*
- boundary layer, hydrodynamic stability, rotating bodies, Kobayashi (R.), *9601*
- asymptotic methods, moment coefficient, reservoirs, stresses (normal), Layrangues (P.), *10395*

conical flow, compressible flow, stagnation point, supersonic flow, Bakker (P.G.), Bannink (W.J.), (et al.), *584*

- boundary layer, diffusers, entrainment, shape factors, Odukwe (O.), *625*
- aerodynamic performance, diffusers, entrance region, Sharma (P.C.), *626*
- experimental results, wall jets, Sharma (R.N.), *1575*
- aerodynamic performance, delta wings, design, supersonic flow, Nastase (A.), *2731*
- diffusers, inlet flow, inlet flow (sheared), shear flow, velocity profiles, Nakamura (I.), Ishikawa (K.), (et al.), *3679*
- aerodynamic performance, annuli, diffusers, turbines, Kruse (H.), Quest (J.), *4629*
- aerodynamic performance, diffusers, surveys, Klein (A.), *5444*
- ducts (variable area), flow reversal, pressure gradient, swirl flow, Gogolev (I.G.), Korolev (P.V.), *6654*
- diffusers, rotating bodies, visualization, Kikuyama (K.), Murakami (M.), (et al.), *9581*
- computer programming, delta wings, vortices, Vigevano (L.), *9650*

Conlisk (A.T.), corners, modeling, pressure change, vortices, Rockwell (D.), *8536*

- annular flow, asymptotic methods, cylindrical bodies, rotating cylinders, singularities, Walker (J.D.A.), *9535*

connections, bolted joints, joints, structural analysis, Richard (R.M.), Gillett (P.E.), (et al.), *525*

- beam columns, buried structures, discontinuities, underground, Brockenbrough (R.L.), Frost (R.W.), (et al.), *1435*
- bolted joints, contact stresses, design, flanges, Jofriet (J.C.), Sze (Y.), (et al.), *7635*
- bolted joints, bolts, finite element methods, modeling, prediction, Krishnamurthy (N.), *7637*
- columns, plates, punch problems, reinforced concrete, Neth (V.W.), De Paiva (H.A.R.), (et al.), *9446*
- beam columns, beams, Chen (W.F.), Patel (K.V.), *10139*
- design (optimum), joints, mathematical programming, steel, Douty (R.), *10354*

Connor (J.J.), see Buyukozturk (O.), *534*

- see Shyam Sunder (S.), *1451*

Conor (P.C.), debris, friction (sliding), high speed, lubricants (liquid), lubrication (boundary), wear, Mcrobie (D.E.), *997*

Conrad (W.A.), biomechanics, closed conduit flow, collapse, rheology, vocal cords, *9058*

Conry (T.F.), film thickness, friction (rolling), friction (sliding), lubrication (elastohydrodynamic), rolling contact, *5984*

conservation laws, constitutive equations, continuum mechanics, fluid mechanics, solid mechanics, Spencer (A.J.M.), *1966, book*

- constitutive equations, continuum mechanics, crystallography, deformation, solid mechanics, Billington (E.W.), Tate (A.), *1973, book*
- elasticity (nonlinear), energy methods, path integrals, Simmonds (J.G.), Nicholson (J.W.), *3229*
- mixtures, thermal diffusion, transport properties, Zamskii (B.N.), Rabinovich (G.D.), *4134*
- equations of motion, mixture theories, nonhomogeneous media, Kril (S.I.), *4135*
- continuum mechanics, fracture, integral methods, mathematical methods, similarity methods, Cherepanov (G.P.), *4489*
- navier stokes equation, three dimensional flow, Spradley (L.W.), Stalnaker (J.F.), (et al.), *5407*
- continuum mechanics, variational methods, virtual work methods, Atanackovic (T.M.), *6039*
- asymptotic behavior, mathematical methods, Wang (C.H.), *6071*
- hyperbolic equations, initial value problems, riemann problem, Roe (P.L.), *6082*
- dynamic analysis, finite difference methods, hyperbolic equations, Harten (A.), Tal-Ezer (H.), *6086*
- lagrange equations, mechanics, particle dynamics, Lutzky (M.), *7131*
- boundary conditions, cosserat solids, micropolar media, Kozak (I.), Szeidl (G.), *7263*
- ablation, interplanetary probes, planetary atmospheres, shock layer, Moss (J.N.), Simmonds (A.L.), (et al.), *7777*
- burgers equation, hyperbolic equations, random search, Harten (A.), Lax (P.D.), *8132*
- circulation, theorems, vorticity, Mobbs (S.D.), *8626*
- hydrodynamics, hyperbolic equations, nonlinear mechanics, shock waves, Cheng (K.-S.), *9102*
- boussinesq equation, finite element techniques, fluid mechanics, Cliffe (K.A.), *9147*
- existence theorems, hyperbolic equations, shock waves, Chang (P.H.), *9639*
- computing techniques, difference equations, implicit schemes, Hollanders (H.), Peyret (R.), *10044*
- computing techniques, difference equations, differential equations (ordinary), fokker-planck equation, plasma, Volosov (V.N.), Pekker (M.S.), *10932*

consolidation, concrete, rheology, vibration, Aci Committee 309, *5352*

- compressible flow, porous media, Singh (S.R.), Sagar (B.), *8927*

Constanda (C.), continuum mechanics, differential equations (partial), integration, micropolar media, potential theory, *43*

- bending, composite materials, experimental results, mixture theories, plates, *8240*

constant velocity couplings, kinematics, shafts, splines, transmissions, Davoli (P.), *6556*

Constantinesco (A.), see Schwerdt (H.), *3061*

Constantinescu (V.N.), airfoils, compressible flow, conformal mapping, numerical methods, transonic flow, Bucur (S.C.), *10419*

- heat transfer, lubricants (liquid), thermal effects, viscosity, Smith (R.N.), (et al.), *10895*

constitutive equations, cosserat solids, micropolar media, Cowin (S.C.), Leslie (F.M.), *4*

- relaxing media, viscoelasticity, Kecs (W.), *258*
- correspondence principle, solid mechanics, viscoelasticity, Rajagopal (K.R.), Wineman (A.), *259*
- convexity conditions, elastoplasticity, functional analyis, Krawietz (A.), *266*
- existence theorems, plasticity, yield criteria, Kamenyarzh (Ya.A.), *267*
- extensional flow, non newtonian flow, rheology, Huilgol (R.R.), *546*
- rheology, thermal properties, thermodynamic properties, viscous effects, Lebon (G.), Rubi (J.M.), *719*
- biomaterials, deformation (finite), tissues, Demiray (H.), *1038*
- deformation (finite), elastoplasticity, strain rate, Mandel (J.), *1051*
- alloys, elastoviscoplasticity, strain rate, Sulicku (I.), *1062*
- creep, internal state variables, thermal fatigue, Mccartney (L.N.), *1187*
- deformation (finite), deformation (plastic), finite strain, Neale (K.W.), *1197*
- metals, nonlinear materials, stress strain relationships, Margetson (J.), *1199*
- plastic flow, power law fluids, thixotropic media, Kemblowski (Z.), Petera (J.), *1483*
- biomaterials, nonlinear materials, tissues, viscoelastic materials, Decraemer (W.F.), Maes (M.A.), (et al.), *1951*
- conservation laws, continuum mechanics, fluid mechanics, solid mechanics, Spencer (A.J.M.), *1966, book*
- granular media, micromechanics, Phan-Thien (N.), *1970*
- conservation laws, continuum mechanics, crystallography, deformation, solid mechanics, Billington (E.W.), Tate (A.), *1973, book*
- dielectrics, thermoelasticity, Dost (S.), *2215*
- work hardening, yield criteria, Allen (D.H.), *2239*
- cold working, forming, polymers, survey, yield condition, Shaw (M.T.), *2396*
- materials possessing memory, non newtonian flow, shear flow, viscoelastic fluids, Menezes (E.V.), *2575*
- dynamic viscoelasticity, rayleigh problem, viscoelastic fluids, Soundalgekar (V.M.), Dasgupta (A.K.), *3589*
- equations of state, thermodynamic properties, Kamaukhov (V.G.), Senchenkov (I.K.), *3771*
- elastic bodies, mixture theories, multiphase media, nonhomogeneous media, Khoroshun (L.P.), *4131*
- thermodynamics (irreversible), two phase flow, Hung (N.), *4133*
- deformation (finite), elasticity (nonlinear), shock waves, thermodynamics (nonequilibrium), Malek-Madani (R.), *4925*
- continuum mechanics, deformation (finite), elasticity (nonlinear), solid mechanics, Gurtin (M.E.), *5080, book*

- continuum theory, granular media, micromechanics, Firoozbakhsn (K.), Ahmadi (G.), *5097*
- acceleration waves, granular media, Jaric (J.), Rankovic (S.), *5098*
- concrete, cracks, work hardening, Chen (W.F.), Suzuki (H.), *5117*
- computing techniques, creep, plastic behavior, Levy (A.), Pifko (A.B.), *5121*
- unsteady flow, viscoelastic fluids, Slawomirski (M.R.), *5381*
- couette flow, micromechanisms, viscoelastic fluids, Quentrec (B.), *5382*
- equations of state, high pressure, water, Juza (J.), Sifner (O.), (et al.), *5521*
- equations of state, high pressure, solid mechanics, Filimonov (V.A.), *5525*
- biomechanics, deformation, diagnostics, heart, Ghista (D.N.), Ray (G.), (et al.), *6013*
- biomechanics, deformation, diagnostics, heart, pulsatile flow, Ghista (D.N.), Ray (G.), (et al.), *6014*
- chemical reactions, continuum mechanics, phase changes, Tokuoka (T.), *6037*
- continuum mechanics, elasticity (nonlinear), kinematics, Casey (J.), Naghdi (P.M.), *6158*
- plasticity, shells (thin), torsion, Mozharovskaya (T.N.), *6178*
- cyclic loading, geophysics, strain rate, Hueckel (T.), *6180*
- polymers, shear flow, viscoelastic fluids, Leonov (A.I.), Prokunin (A.N.), *6571*
- non newtonian flow, viscoelastic fluids, Niggemann (M.), *6574*
- seismic loading, viscoelastic fluids, Nazarov (A.G.), *6575*
- couette flow, shear flow, viscometry, Goddard (J.D.), *6593*
- boltzmann equation, mathematical models, thermodynamic functions, thermodynamics (nonequilibrium), Nonnenmacher (T.F.), *6746*
- porous media, viscous flow, Williams (W.O.), *7008*
- elastoplasticity, porous media, rocks, Yamada (S.E.), Schatz (J.F.), (et al.), *7017*
- creep, fracture, nonlinear materials, Barenblatt (G.I.), Botvina (L.R.), *7137*
- creep, viscoelasticity, Mohamed (F.A.), Ginter (T.J.), *7274*
- elastoplasticity, finite strain, plasticity, Sidoroff (F.), *7281*
- continuum theory, granular media, yield criteria, Mullenger (G.), Davis (R.O.), *7291*
- elasticity (linear), shells, Markov (P.), *7338*
- particulate flow, polymers, viscoelastic fluids, White (J.L.), Tanaka (H.), *7645*
- elastoviscoplasticity, pressurized pipes, thermal stresses, Inoue (T.), Nagaki (S.), (et al.), *7951*
- creep, relaxing media, Delph (T.J.), *7956*
- dielectrics, functional analyis, group theory, Chowdhury (K.L.), Glockner (P.G.), *8065*
- creeping flow, plastic flow, viscoelastic fluids, White (J.L.), *8086*
- creep, elastoviscoplasticity, viscoelastic materials, viscoplasticity, Katona (M.G.), *8195*
- creep, crystals, Shesterikov (S.A.), Melnikov (G.P.), (et al.), *8198*
- plasticity, strain analysis, Yoder (P.J.), Iwan (W.D.), *8204*
- materials possessing memory, plasticity, superplastics, Lenskii (V.S.), *8207*
- cyclic loading, pressure vessels, stress strain relationships, Drucker (D.C.), Palgen (L.), *8212*
- extension, non newtonian flow, viscous flow, Powell (R.L.), Schwarz (W.H.), *8486*
- micromechanisms, stresses (normal), viscoelastic fluids, Barrett (A.J.), De Kee (D.), *8504*
- thermodynamic processes, thermodynamic properties, thermodynamics (nonequilibrium), Keller (J.U.), Hess (S.), *10545*
- liquids, thermodynamic functions, thermodynamic processes, Doolittle (A.K.), *10552*
- boundary layer, heat transfer, micropolar media, plane flow, Takhar (H.S.), Soundalgekar (V.M.), *10583*

constitutive relations, continuum theory, space frames, thermoelasticity, Nayfeh (A.H.), Hefzy (M.S.), *522*

- composite materials, fibers, stiffness, vibration, Aboudi (J.), *1207*
- anelasticity, concrete, strain, Bazant (Z.P.), Tsubaki (T.), *1334*
- extrusion, finite element techniques, rate sensitivity, viscoplasticity, Tayal (A.K.), Natarajan (R.), *1339*
- crack propagation, viscoplasticity, work hardening, Aboudi (J.), Achenbach (J.D.), *1377*
- experimental methods, sand, shear strength, Vardoulakis (I.), *3398*
- foundations, numerical analysis, soils, Zienkiewicz (O.C.), *6374*
- deformation (plastic), plasticity, soil mechanics, Borcia (E.), *7439*
- shear, soils, Nakai (T.), Matsuoka (H.), *9354*
- critical state, endochronic theory, sand, Dungar (R.), Nuh (S.), *9355*
- crack opening displacement, elastoplasticity, plane strain, Gao (Y.-C.), *9407*
- composite materials, computing techniques, equivalence techniques, Lene (F.), Leguillon (D.), *10127*
- liquid crystal, thermodynamic functions, thermodynamics (irreversible), thermodynamics (nonequilibrium), Hess (S.), Pardowitz (I.), *10551*
- cyclic loading, liquefaction, sand, strain softening, Tatsuoka (F.), Silver (M.L.), *11177*

constraints, continuum mechanics, differential geometry, discrete systems, dynamics, Benenti (S.), Tulczyjew (W.M.), *1*

- algorithms, optimization, probability, quadratic programming, Lepp (R.), *49*
- linear systems, optimal control, trajectory optimization, Pelczewski (W.), Wakczak (S.), *199*
- dynamic analysis, lagrange equations, Muschik (W.), *1061*
- dynamic analysis, lagrange equations, Hering (J.), *1984*
- functional analyis, graph theory, networks, optimization, Burdyuk (V.Ya.), Reva (V.N.), *2032*
- design (optimum), shells (cylindrical), shells (stiffened), Rao (S.S.), Reddy (E.S.), *2511*
- structural optimization, surveys, Rangacharyulu (M.A.V.), Done (G.T.S.), *2512*
- dynamic analysis, mechanisms, Levitsky (D.N.), *2552*
- finite element techniques, inelasticity, newton method, penalty function, Malkus (D.S.), *3134*
- boundary value problems, elasticity (linear), functional analyis, Rostamian (R.), *3228*
- design (optimum), displacement, elastoplasticity, optimization, Kaneko (I.), Maier (G.), *3515*
- linear systems, optimal control, synthesis, Brunovsky (P.), *4291*
- design, optimal control, regulator problem, Sirazetdinov (T.K.), Smirnov (S.V.), *4292*
- structural optimization, Arora (J.S.), Haug (E.J.), (et al.), *4521*
- algorithms, numerical methods, optimal control, regulator problem, Kalaba (R.), Spingarn (K.), *5054*
- dynamic analysis, lagrange equations, mechanics, Hering (J.), *6053*
- boundary value problems, elasticity, incompressible media, Lazarev (M.I.), *6153*
- contact problems, elasticity (linear), functional analyis, Demkowicz (L.), *6165*
- optimization, penalty function, thermal loading, trusses, Bellagamba (L.), Yang (T.Y.), *6503*
- design (optimum), nonlinear programming, work hardening, Mazzarella (C.), Polizzotto (C.), *6513*
- algorithms, optimization, penalty function, Brunner (J.K.), *7179*
- design (optimum), Belegundu (A.D.), Arora (J.S.), *7591*
- design (optimum), structural design, Mroz (Z.), Mironov (A.), *8446*
- computer aided design, design (optimum), structural optimization, Pappas (M.), *8453*
- linkages, mechanisms (spatial), Yu Hon-Cheung, *9490*
- maximum principle, optimal control, Gollan (B.), *10086*
- design (minimum weight), optimization, trusses, Levy (R.), Parzynski (W.), *10342*
- maximum principle, optimal control, Blatt (J.M.), *11068*
- optimal control, regulator problem, Zolezzi (T.), *11070*
- design (minimum weight), frequencies, optimization, Khan (M.R.), Willmert (K.D.), *11318*

construction, heaving, soils, Pchelintsev (A.M.), Komarov (V.I.), *5254*

contact angle, drops, sliding, thin films, two dimensional flow, Hocking (L.M.), *1534*

- bond number, dimensional analysis, films, friction (skin), Eichhorn (R.), *1536*
- experimental results, liquids, thin films, Feijter (J.A.), Vrij (A.), *6584*
- capillary flow, moving surfaces, viscous flow, Benney (D.J.), Timson (W.J.), *6818*
- drops, surface profiles, surface tension, viscosity, Welygan (D.G.), Burns (C.M.), *8491*

contact fronts, conduction (heat), mathematical models, Litvin (O.N.), *10599*

- condensers, heat pipes, variable thermal properties, wick, Van Der Vooren (J.), Sanderse (A.), *10630*

contact problems, axisymmetric loading, coatings, indentation, Matthewson (M.J.), *248*

- friction (solid solid), indentation, variational methods, Kravchuk (A.S.), *249*
- elastic foundations, plates (circular), singular integral equations, Karasev (S.N.), *252*
- elasticity (linear), singular integral equations, uniqueness, variational methods, Panagiotopoulos (P.D.), Zastrow (U.), *254*
- composite materials, impact, Takeda (N.), Sierakowski (R.L.), *284*
- rings, rotating disks, Babloyan (A.A.), Engibarian (A.A.), *327*
- buckling, rails, rods, Vielsack (P.), *333*
- algorithms, finite element methods, machine design, mechanical joints, Sachdeva (T.D.), Ramakrishnan (C.V.), *541*
- conduction (heat), thermal contact resistance, Cames-Pintaux (A.M.), Padet (J.P.), *766*
- adhesion, deformation, friction, Tabor (D.), *1000*
- friction, roughness, surface profiles, wear, Kragelskii (I.V.), *1002*
- complex variables, elasticity (linear), potential theory, Guz (A.N.), *1175*
- half space, stamping, Aleksandrov (V.M.), Filippova (L.M.), *1183*
- bearings (ball), elastoplasticity, spherical bodies, Shenderov (I.B.), *1198*
- elastica, folding, rolling, strips, Wang (C.-Y.), *1221*
- shells (cylindrical), stress concentration, structural support, Kanaun (S.K.), Elkovskaya (T.M.), *1237*
- friction (rolling), tires, wheels, Browne (A.L.) eds., Tsai (N.T.), *1454, book*
- lubrication (elastohydrodynamic), micropitting, rolling contact, roughness, surface profiles, Berthe (D.), Flamand (L.), (et al.), *1931*
- half space, inclusions, Gladwell (G.M.L.), Hara (T.), *2222*
- boreholes, liners, shells (long), Warren (W.E.), *2270*
- elasticity (nonhomogeneous), half space, Singh (B.M.), Rokne (J.G.), (et al.), *3243*
- friction (solid solid), wear, Galin (L.A.), Goryacheva (I.G.), *3246*
- contact stresses, elastic behavior, inequalities, variational methods, Kravchuk (A.S.), Vasilev (V.A.), *3247*

- conduction, solid solid interface, thermal contact resistance, Kokorev (L.S.), Shelagin (Yu.N.), (et al.), *3818*
- continuum mechanics, fredholm equations, hydrodynamics, volterra equations, Aleksandrov (V.M.), Kovalenko (E.V.), *4167*
- dynamics, finite element techniques, mesh generation, Asano (N.), *4202*
- anisotropic media, indentation, viscoelastic materials, Predeleanu (M.), Dahan (M.), *4348*
- beams, creep, elastic foundations, Uvarov (B.V.), *4361*
- bonded joints, diffusion bonding, elastoplasticity, half space, Kharitonova (A.N.), Sergeev (A.V.), (et al.), *4565*
- flash temperature, gears, temperature, Kolonits (F.), *4904*
- friction (sliding), friction (solid solid), sliding, Lisowski (Z.), Stolarski (T.), *5091*
- cylindrical bodies, elasticity (linear), rolling contact, Martirosyan (Z.A.), *5092*
- elastic bodies, finite element techniques, variational methods, Nguyen Dang Hung, De Saxce (G.), *5093*
- beams, moving loads, Adams (G.G.), Manor (H.), *5143*
- conduction (heat), green function, thermoelasticity, Comninou (M.), Dundurs (J.), (et al.), *5793*
- bearings (unlubricated), friction (solid solid), lubrication (solid), Floquet (A.), Play (D.), *5993*
- elastic behavior, finite element techniques, Sachdeva (T.D.), Ramakrishnan (C.V.), (et al.), *6114*
- computing techniques, elastic behavior, friction (solid solid), stiffness matrix, Sachdeva (T.D.), Ramakrishnan (C.V.), *6115*
- irregular elements, machine design, rotating bodies, stress analysis, Bagci (C.), Wong (J.C.), (et al.), *6117*
- constraints, elasticity (linear), functional analyis, Demkowicz (L.), *6165*
- elasticity (nonlinear), sheet metal, shells (thin), Wang (C.Y.), *6167*
- cylindrical bodies, rolling, Soong (T.-C.), Li (C.), *6168*
- interference fits, shells (cylindrical), Murakami (T.), Yanuki (T.), (et al.), *6169*
- structural analysis, thin walled structures, Artyukhin (Yu.P.), Gerkina (V.S.), *6223*
- elastodynamics, finite element techniques, Doi (O.), Asano (N.), *6369*
- stability theory, thermoelasticity, Barber (J.R.), *6949*
- finite element techniques, friction (rolling), rolling contact, Zeid (I.), Padovan (J.), *7210*
- elasticity (three dimensional), green function, half space, Jentsch (L.), *7261*
- contact stresses, elastic bodies, numerical methods, Paul (B.), Hashemi (J.), *7268*
- machine elements, rings, Teplyi (M.I.), Chernets (M.V.), *7327*
- bending, existence theorems, plates, uniqueness, variational methods, Fortune (D.), Bezine (G.), *7330*
- bending, boundary value problems, plates, Zelentsov (V.B.), *7351*
- bubble dynamics, oscillations, Keller (J.B.), *7966*
- lubrication (elastohydrodynamic), rheology, thermal effects, traction, Houpert (L.), Flamand (L.), (et al.), *8064*
- shells (nonlinear), tires, Tielking (J.T.), Schapery (R.A.), *8201*
- boundary value problems, plates (simply supported), Keer (L.M.), Mak (A.F.), *8239*
- half space, punch problems, thermoelasticity, Comninou (M.), Barber (J.R.), (et al.), *8870*
- film thickness, lubrication (elastohydrodynamic), reynolds number, viscosity, Evans (H.P.), Snidle (R.W.), *9027*
- deformation, friction (sliding), roughness, surface profiles, thermal effects, Burton (R.A.), *9041*
- corners, thermal contact resistance, thermoelasticity, Comninou (M.), Dundurs (J.), *9042*
- dispersed flow, heat transfer, liquid liquid interface, spray columns, sprays, Moresco (L.L.), Marschall (E.), *9731*
- algorithms, friction (solid solid), mechanical joints, tools, Sachdeva (T.D.), Ramakrishnan (C.V.), *9945*
- airfoil theory, cavitation, cavitation number, membranes (inflatable), surface tension, weber number, Vanden-Broeck (J.-M.), *10402*
- evaporation, heat exchangers, liquid vapor interface, mathematical models, Bukharkin (E.N.), *10617*
- conductivity, drying, particle fluid flow, Schlunder (E.-U.), *10638*
- bearings (ball), bearings (thrust), lubrication (boundary), Sen Gupta (S.K.), *10696*
- penalty function, plates (nonlinear), variational methods, Ohtake (K.), Oden (J.T.), (et al.), *11113*

contact resistance, adhesion, metals, roughness, wear, Chowdhury (S.K.R.), Pollock (H.M.), *1007*
- thermal contact resistance, unsteady flow, Sadhal (S.S.), *1696*
- heat exchangers, heat exchangers (membrane), thermal contact resistance, Makarov (A.M.), Romanovskii (V.R.), *11769*

contact stresses, adhesion, anisotropic media, half space, indentation, Dhawan (G.K.), *250*
- continuum mechanics, friction, lubrication (elastohydrodynamic), rolling contact, wear, Cheng (H.S.) eds., Keer (L.M.), *996, book*
- chip formation, cutting, elastic behavior, Childs (T.H.C.), *1347*
- rails, wheels, Kumar (S.), Rajkumar (B.R.), *1455*
- tires, wheels, Jenkins (J.T.), *1458*
- bearings, cylindrical bodies, rings, Kosova (N.V.), Atopov (V.I.), (et al.), *2223*
- friction (sliding), gear teeth, gears (worm), hydrodynamics, Winter (H.), Wilkesmann (H.), *2557*
- fatigue, gear teeth, kinematics, surface profiles, wear, Huston (R.L.), Coy (J.J.), *2558*
- circular arc gears, gears, surface profiles, Lingaiah (K.), Ramachandra (K.), *2559*
- fatigue, gears (spur), hardness, surfaces, Flamand (L.), Berthe (D.), (et al.), *2562*
- contact problems, elastic behavior, inequalities, variational methods, Kravchuk (A.S.), Vasilev (V.A.), *3247*
- connected bodies, joints, machine elements, thermoelasticity, Attia (M.H.), Kops (L.), *3989*
- dynamic properties, friction (rolling), rubber, tires, Sakai (H.), *5367*
- deformation (plastic), roughness, Kato (T.), Kato (S.), (et al.), *6182*
- contact problems, elastic bodies, numerical methods, Paul (B.), Hashemi (J.), *7268*
- bolted joints, connections, design, flanges, Jofriet (J.C.), Sze (Y.), (et al.), *7635*
- deflections, elasticity, gear teeth, half space, Terauchi (Y.), Nagamura (K.), *8472*
- fatigue, friction drives, rolling contact, traction, Rohn (D.A.), Loewenthal (S.H.), (et al.), *8473*
- computing techniques, eccentric loading, foundations, Selvadurai (A.P.S.), *10254*
- friction (sliding), hardness, lubrication (hydrodynamic), scoring, viscosity, Drozdov (Yu.N.), Archegov (V.G.), *10688*
- fatigue, grinding, microstructures, rolling contact, Dudragne (G.), Fougeres (R.), (et al.), *12096*

containers, aerodynamic performance, ejectable containers, falling bodies, lift, pitching, Ramachandra (S.M.), Sudhakar (K.), (et al.), *2743*
- paper, strength, stress strain relationships, Urbanik (T.J.), *3555*
- conduction (heat), paper, thermal properties, Bormett (D.W.), *4001*
- flow irregularities, rotating fluids, spin-up, stratified flow, vortices, Greenspan (H.P.), *7674*
- airplanes, ejectable containers, ejectors, falling bodies, separation, trajectories, Maddox (A.R.), *8645*
- particulate flow, rotating shafts, transport phenomena, Abouzeid (A.-Z.M.), Fuerstenau (D.W.), (et al.), *8917*
- analysis, discharges, electrical conductivity, liquids, Golovko (Yu.N.), *10736*

containers (partially filled), coriolis forces, sloshing, spinning bodies, vorticity, El-Raheb (M.), Wagner (P.), *673*
- sloshing, surface waves, tanks, wedge-shaped tanks, Bauer (H.F.), *674*
- hydroelasticity, rectangular container, sloshing, tanks, Bauer (H.F.), *675*
- hydroelasticity, shells (fluid-filled), sloshing, surveys, Dimaggio (F.L.), *676*
- hydroelasticity, shells (cylindrical), shells (fluid-filled), vibration, Perekhrest (V.I.), Ulitin (G.M.), *1610*
- dynamic loads, excitation, fluid-structure interaction, membranes, sloshing, Bauer (H.F.), *4661*
- space vehicles, spacelab, visualization, zero g phenomena, Vreeburg (J.P.B.), Van Den Assem (D.), *5477*
- nonlinear analysis, oscillations, pitching, sloshing, Nakayama (T.), Washizu (K.), *5483*
- eigenvalue problems, hydroelasticity, sloshing, Kondo (H.), *6704*
- finite element techniques, fluid-structure interaction, seismic loading, storage, Liu (W.K.), *7768*
- honeycomb structures, seismic loading, sloshing, Kuriyama (Y.), Fukuda (H.), *7774*
- compressible flow, cylindrical bodies, gravity, laminar flow, Greenwell (R.N.), Wang (C.Y.), *9577*
- nonlinear analysis, pendulum analogy, shells (spherical), sloshing, Sayar (B.A.), Baumgarten (J.R.), *9632*
- boundary elements, finite element techniques, sloshing, Nakayama (T.), Washizu (K.), *11640*
- finite element techniques, seismic loading, sloshing, Aslam (M.), *11652*
- containment, flexible walls, nuclear reactors, toroids, Lu (S.C.H.), Mccauley (E.W.), (et al.), *11674*
- approximations (higher order), nonlinear analysis, sloshing, Lukovskii (I.A.), *11679*
- nonlinear analysis, reservoirs, sloshing, variational methods, Limarchenko (O.S.), *11683*

containment, nuclear reactors, reliability, structure, testing equipment, vessels, Weymouth (L.J.), *488*
- fracture mechanics, lng tankers, natural gas, tanks, Kaufman (J.G.), Bucci (R.J.), (et al.), *1349*
- reinforced concrete, seismic loading, slabs, stiffness, strength, White (R.N.), Perdikaris (P.C.), (et al.), *1462*
- dynamic loads, reactor structures, structural analysis, Jaeger (T.A.) eds., Boley (B.A.), *1465, book*
- liquid metals, magneto fluid dynamics, melting, vessels, Getselev (Z.N.), Martinov (G.I.), *3894*
- discharges, plasma, swirl flow, theory, Boulos (M.I.), Gagne (R.), (et al.), *3898*
- energy transport, plasma, theory, transport phenomena, D'Ambrogio (E.), Tessarotto (M.), *3899*
- diagnostics, inertia, measurements (dynamic), nuclear fusion, Campbell (E.M.), Lane (S.M.), (et al.), *5684*
- cavitation, cooling, damage, nuclear reactors, Jones (A.V.), *8517*
- nuclear fusion, plasma (toroidal), thermonuclear energy, tokamak, Bromberg (L.), Cohn (D.R.), (et al.), *8831*

- currents, heating, helical flow, plasma, Yamagishi (T.), *10757*
- experimental methods, fusio, plasma (toroidal), stabilization, Schumacher (R.W.), Fukao (M.), (et al.), *10760*
- containers (partially filled), flexible walls, nuclear reactors, toroids, Lu (S.C.H.), Mccauley (E.W.), (et al.), *11674*
- equilibrium, plasma (toroidal), pressure, stability theory, Kovrizhnykh (L.M.), Shchepetov (S.V.), *11838*

contamination, air pollution, plumes, prediction, Bouchardy (A.-M.), *4637*
- cascades, deposition, gas turbines, inlets, nozzles, Nealy (D.A.), Timmerman (W.H.), (et al.), *4744*
- discharges, particles, plasma, thrusters, Rudolph (L.K.), Pless (L.C.), (et al.), *5685*
- combustion products, exhaust gases, interferometry, optical techniques, propellants, spectral analysis, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- bubble dynamics, drag coefficient, two phase flow, Ishii (T.), Pei (D.C.T.), *6982*
- discharges, environmental control, estuaries, rivers, water pollution, Smith (R.), *7657*
- dispersion, finite element techniques, lakes, water pollution, Salmon (J.R.), Liggett (J.A.), (et al.), *7661*
- nucleate boiling, pool boiling, Joudi (K.A.), James (D.D.), *7828*
- diffusion, rivers, stochastic processes, Molyneux (J.E.), Witten (A.J.), *10674*
- dispersion, fickian model, rivers, Liu (H.), Cheng (A.H.D.), *10677*
- convection (free), diffusion, fracture, porous media, Nuttall (H.E.), Ray (A.K.), *10829*

Contant (J.-M.), artificial satellites, communication satellites, trajectory optimization, weather satellites, Winkels (H.-M.), (et al.), *7925*

continuous systems, controllability, linear systems, sampled data systems, Gibson (J.A.), Ha (T.T.), *109*
- adaptive systems, control, design, discrete systems, Kazakevich (V.V.), Shcherbina (Yu.V.), *3205*
- discrete systems, identification, iterative methods, least squares, stochastic systems, Vorobeychikov (S.E.), Konev (V.V.), *8163*
- diagnostics, dynamic properties, reliability analysis, Mironovskii (L.A.), *8174*
- discrete systems, routh-hurwitz method, stability theory, time delay systems, Thowsen (A.), *11055*

continuum mechanics, constraints, differential geometry, discrete systems, dynamics, Benenti (S.), Tulczyjew (W.M.), *1*
- matrix methods, tensor methods, Prediger (H.), *18*
- differential equations (partial), integration, micropolar media, potential theory, Constanda (C.), *43*
- contact stresses, friction, lubrication (elastohydrodynamic), rolling contact, wear, Cheng (H.S.) eds., Keer (L.M.), *996, book*
- kinematics, lagrangian formulation, thermodynamics (nonequilibrium), Rougee (P.), *1049*
- bifurcation, stability theory, Ericksen (J.L.), *1050*
- micromechanisms, thermodynamics, viscoelasticity, Morro (A.), *1053*
- elasticity, nonlinear theory, variational methods, Edelen (D.G.B.), *1102*
- biomechanics, flow, fluid mechanics, rheology, Dokumentation Rheologie, *1482, book*
- conservation laws, constitutive equations, fluid mechanics, solid mechanics, Spencer (A.J.M.), *1966, book*
- functional analyis, kinematics, Misicu (M.), *1967*
- cosserat solids, micropolar media, Capriz (G.), Podio-Guidugli (P.), *1969*
- conservation laws, constitutive equations, crystallography, deformation, solid mechanics, Billington (E.W.), Tate (A.), *1973, book*
- elasticity, solid mechanics, structural analysis, Ugural (A.C.), Fenster (S.K.), *2208, book*
- endochronic theory, plasticity, work hardening, Valanis (K.C.), *2231*
- damage, life expectancy, materials processing, materials properties, mathematical models, surveys, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- magneto fluid dynamics, multicomponent flow, plasma, radiation properties, Pai (S-I.), *2896, book*
- mechanics, solid mechanics, waves, Strelkov (S.P.), *3074, book*
- plasticity, tensor methods, Blinowski (A.), *3094*
- composite materials, smoothing of data, Fishman (L.), Mccoy (J.J.), *3276*
- discrete systems, functional analyis, topological techniques, Wozniak (C.), *4123*
- jump conditions, moving surfaces, singular waves, waves, Beda (G.), *4127*
- hydrodynamic stability, non newtonian flow, thermodynamics (nonequilibrium), Fosdick (R.L.), Rajagopal (K.R.), *4128*
- liquid crystals (nematic), nonlocal theory, polar fluids, Demiray (H.), *4139*
- contact problems, fredholm equations, hydrodynamics, volterra equations, Aleksandrov (V.M.), Kovalenko (E.V.), *4167*
- elasticity (linear), energy methods, solid mechanics, Eisenberg (M.A.), *4331, book*
- crystals, micromechanisms, plasticity, Lin (T.H.), Ribeiro (G.), *4351*
- acoustic emission, elastic waves, Pardee (W.J.), *4456*
- conservation laws, fracture, integral methods, mathematical methods, similarity methods, Cherepanov (G.P.), *4489*
- deformation (finite), thermoelasticity (nonlinear), Iesan (D.), *4816*
- elasticity (nonlinear), fluid mechanics, rheology, solid mechanics, Gurtin (M.E.), *4924, book*
- jump conditions, moving surfaces, singular waves, Kraiko (A.N.), *4929*
- elastic dislocations, elasticity, mathematical methods, tensor methods, Kunin (I.A.), *4943*
- beams, elasticity, shells, solid mechanics, Reismann (H.), Pawlik (P.S.), *5069, book*
- constitutive equations, deformation (finite), elasticity (nonlinear), solid mechanics, Gurtin (M.E.), *5080, book*
- anelasticity, creep, metals, viscoplasticity, Rusinko (K.N.), Ivasyuk (V.V.), *5114*
- elastic waves, rubber elasticity, Tokuoka (T.), *5234*
- plastic waves, shear waves, Druianov (B.A.), *5237*
- granular media, mass transfer, Kanatani (K.-I.), *5823*
- granular media, mass transfer, Kanatani (K.-I.), *5825*
- disclinations, dislocations, micromechanics, Kadic (A.), *6036*
- chemical reactions, constitutive equations, phase changes, Tokuoka (T.), *6037*
- conservation laws, variational methods, virtual work methods, Atanackovic (T.M.), *6039*
- entropy, thermodynamics (nonequilibrium), Woods (L.C.), *6040*
- functional analyis, stability theory, thermodynamics (nonequilibrium), Elzanowski (M.), *6041*
- functional analyis, thermodynamics (nonequilibrium), Kopisz (M.), *6042*
- constitutive equations, elasticity (nonlinear), kinematics, Casey (J.), Naghdi (P.M.), *6158*
- computing techniques, crack propagation, fracture, geomechanics, hydraulic fracturing, stress intensity factor, Hanson (M.E.), Shaffer (R.J.), *6434*
- shells, solid mechanics, variational methods, Mason (J.), *7129, book*
- internal state variables, rheology, thermodynamics (nonequilibrium), Pfeifroth (L.), *7133*
- functional analyis, geometrical properties, topological techniques, Banfi (C.), Fabrizio (M.), *7135*
- discontinuities, internal state variables, Matsumoto (E.), *7139*
- crack propagation, fracture mechanics, fracture toughness, j-integral, Nguyen (Q.S.), *7529*
- explosions, fracture, modeling, oil shale, rock mechanics, Grady (D.E.), Kipp (M.E.), *7551*
- conduction (heat), porous media, Hlavacek (M.), *7993*
- deformation, functional analyis, kinematics, motion, Roj (J.), *8084*
- computer programming, computing techniques, structural analysis, Ross (C.T.F.), *8139*
- axiomatic models, plasticity, thermodynamics (nonequilibrium), Lubliner (J.), *8206*
- approximation theory, finite difference methods, lattices, Jaberolanssar (H.), Peddieson (J.) Jr., *9252*
- closure, reynolds stresses, turbulence, Speziale (C.G.), *9612*
- clausius-planck inequality, thermodynamic functions, thermodynamics, Truesdell (C.), *11757*
- clausius-duhem inequality, thermodynamic processes, thermodynamics (irreversible), Esposito (R.), Romano (A.), *11758*
- granular media, incompressible flow, Nunziato (J.W.), Passman (S.L.), (et al.), *12063*

continuum theory, mixture theories, porous media, Vodak (F.), *6*
- fibers, networks, Pipkin (A.C.), *255*
- constitutive relations, space frames, thermoelasticity, Nayfeh (A.H.), Hefzy (M.S.), *522*
- magnetoelastic waves, magnetoelasticity, Maugin (G.A.), Pouget (J.), *1054*
- liquid crystals (nematic), micropolar media, stability theory, Straughan (B.), *1056*
- granular media, thermoelasticity, Jaric (J.), Golubovic (Z.), *4000*
- ferrous metals, magnetoelasticity, waves, Maugin (G.A.), *4140*
- constitutive equations, granular media, micromechanics, Firoozbakhsn (K.), Ahmadi (G.), *5097*
- kinematics, relativity, rheology, Huilgol (R.R.), *6038*
- constitutive equations, granular media, yield criteria, Mullenger (G.), Davis (R.O.), *7291*
- biomechanics, composite materials, discrete systems, mixtures, porous media, Brulin (O.) eds., Hsieh (R.K.T.), *8090, book*
- acoustics, elastoplasticity, Johnson (G.C.), *8328*

Contopoulos (G.), bifurcation, computing techniques, periodic orbits, Michaelidis (P.), *9815*

contraction, axisymmetric flow, nozzles, wind tunnels, Tulapurkara (E.G.), *2768*
- axisymmetric flow, ducts, two dimensional flow, Jordinson (R.), Rodger (J.G.), *3574*
- heart, modeling, muscles, Shoucri (R.M.), *4909*
- laminar flow, noncircular pipes, numerical analysis, separation, steps, Dennis (S.C.R.), Smith (F.T.), *6649*
- compressible flow, turbulence, velocity profiles, wind tunnels, Winter (K.G.), Boyd (C.), *8671*

Contreras (H.), finite element techniques, reliability, stochastic systems, structural analysis, *5030*

control, design, nonlinear systems, van der pol plant, Horowitz (I.), Shur (D.), *116*
- design, linear sequential machines, time optimal systems, Faradzhev (R.G.), *134*
- design, distributed parameters, thermal sciences, Breger (A.M.), Butkovskii (A.G.), (et al.), *139*
- nonlinear systems, observers, Kozeyev (V.A.), *161*
- algorithms, design (optimum), vibration, vibration isolation, De Silva (C.W.), *165*
- nuclear power, optimal control, Haugset (K.), Leikkonen (I.), *170*

- lyapunov's functions, optimization, power plants, Yamashita (K.), Taniguchi (T.), *173*
- cranes, pendulums, Zaremba (A.T.), Sokolov (B.N.), *174*
- adaptive systems, optimal control, pole placement, Wellstead (P.E.), Edmunds (J.M.), (et al.), *186*
- adaptive systems, algorithms, lyapunov's functions, Fradkov (A.L.), *187*
- adaptive systems, linear systems, time invariant systems, Kreisselmeier (G.), *188*
- modal control, satellites, Ganiev (R.F.), Zakrzhevskii (A.E.), (et al.), *192*
- algorithms, design, manipulators, robotics, Malyshev (V.A.), Timofeyev (A.V.), *201*
- robotics, trajectories, Pyatkin (V.P.), Sirotenko (V.Ya.), *202*
- beams, convection, distributed parameters, modal control, observability, phase locked loops, Balas (M.J.), *203*
- automation, discrete systems, Koren (Y.), Masory (O.), *204*
- optimization, process control, rolling, rolling, Dobronravov (D.N.), Kun (L.A.), (et al.), *207*
- manipulators, mechanics, mechanisms, robotics, Morecki (A.), Bianchi, (et al.), *209, book*
- algorithms, robotics, Krutko (P.D.), Popov (Ye.P.), *213*
- algorithms, design, manipulators, robotics, trajectories, Lakota (N.A.), Lisenko (S.A.), (et al.), *214*
- algorithms, design, manipulators, robotics, trajectories, Vereschagin (A.F.), Generozov (V.L.), *216*
- design, man machine systems, Pavlov (V.V.), Yakovlev (O.S.), (et al.), *217*
- boilers, design, mathematical models, power generation, Lin (Y.-H.), Nielsen (R.S.), (et al.), *218*
- hydraulic machinery, shaking tables, Abedi-Hayati (S.), Auslander (D.M.), *220*
- beams (cantilever), modal control, vibration, vibration (flow induced), Horikawa (H.), Dowell (E.H.), (et al.), *228*
- airplane performance, flight path, performance, Ivanov (V.V.), Sirazetdinov (T.K.), *691*
- propellers, wind turbines, Cheney (M.C.), *713*
- design, manipulators, Ivkin (A.M.), Kudryashov, (et al.), *1159*
- airplanes, flight control, simulation, vtol, Tinling (B.E.), Cole (G.L.), *1166*
- eddy currents, temperature, testing equipment, Blitz (J.), Razzak (G.A.), *1419*
- airplane performance, longitudinal stability, swept wings, Dzygadlo (Z.), Szendzielorz (C.), *1621*
- flight tests, helicopters, Sinclair (M.), Morgan (M.), *1629*
- rockets, solid propellants, space vehicles, thrust, Verble (A.J.) Jr., Mccool (A.A.), (et al.), *1770*
- inequalities, optimal control, variational methods, Barbu (V.), *2029*
- probability theory, reliability analysis, Umrikhin (Yu.D.), *2097*
- analytical methods, differential equations (ordinary), Sultanov (I.A.), *2105*
- algorithms, filters, guidance theory, terminal control, Zavadskii (V.K.), *2111*
- automatic control, linear systems, nonlinear mechanics, Chernousko (F.L.), Akulenko (L.D.), (et al.), *2115, book*
- engines, fuel economy, nonlinear programming, Rao (H.S.), Cohen (A.I.), (et al.), *2122*
- adaptive systems, flight control, stol, Nikiforuk (P.N.), Ohta (H.), (et al.), *2157*
- algorithms, guidance, orbit determination, orbit mechanics, planetary entry, Bukharkina (A.P.), Golubev (Yu.F.), *2158*
- aluminum alloys, structural analysis, structures, welded structures, welding, Papazoglou (V.J.), Masubuchi (K.), *2173*
- design, nuclear power, power generation, Frogner (B.), Rao (H.S.), *2176*
- artificial satellites, satellites, space vehicle structures, structural response, Lightner (E.B.), *2178*
- design, jet engines, multivariable systems, turbofan engines, Taiwo (O.), *2179*
- air traffic control, airplanes, algorithms, dynamic programming, Ben-Avraham (O.), Tabak (D.), *2181*
- airplanes, design, external stores, flutter, Nissim (E.), Lottati (I.), *2183*
- design, ergatic control, man machine systems, Pavlov (V.V.), Voronin (A.N.), *2185*
- heating, solar energy, solar heating, Auslander (D.M.), Tomizuka (M.), (et al.), *2187*
- displacement control, piston driven flow, pumps, Yamaguchi (A.), Ishikawa (T.), *2188*
- antennas, artificial satellites, surface profiles, Buyakas (V.I.), Chekulaev (Yu.V.), *2193*
- helicopters, rotors, springs, vibration, Drees (J.M.), Dooley (L.W.), (et al.), *2745*
- space vehicle structures, stability theory, Hughes (P.C.), Abdel-Rahman (T.M.), *2922*
- flexible bodies, space vehicle structures, Asner (B.A.) Jr., Seltzer (S.M.), *2924*
- attitude control, gravimetrics, Debra (D.B.), *2925*
- design, guidance systems, space shuttle, Anderson (W.W.), Groom (N.J.), (et al.), *2927*
- generalized linearization, nonlinear systems, synthesis, Petrov (B.N.), Vasilyev (V.I.), (et al.), *3162*
- design, deterministic control, feedback, nonlinear methods, nonlinear systems, stability theory, Leitmann (G.), *3174*
- design, linear systems, multivariable systems, observers, pole placement, process control, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- algorithms, differential games, Krasovskii (N.N.), *3200*
- adaptive systems, continuous systems, design, discrete systems, Kazakevich (V.V.), Shcherbina (Yu.V.), *3205*
- feedback, plasma, stability theory, Sen (A.K.), *3213*
- design, power generation, regulator problem, turbomachinery, Taiwo (O.), *3217*
- fiber optics, gyroscopes, polarization, Kintner (E.C.), *3223*
- turbomachinery, vibration isolation, Scheithe (W.), Trommer (W.), *3389*
- flight tests, stol, Hindson (W.S.), Hardy (G.H.), (et al.), *3735*
- compressors, cooling, mathematical models, screw compressors, Airila (M.), *3746*
- asymptotic methods, feedback, space vehicle structures, stability theory, Balas (M.J.), *3922*
- boundary conditions, boundary value problems, controllability, parabolic equations, pseudoparabolic equations, White (L.W.), *4205*
- linear systems, multivariable systems, pole placement, regulator problem, Kimura (H.), *4209*
- aggregation, large scale systems, linear systems, model reduction, Gaitsgori (V.G.), Pervozvanskii (A.A.), *4227*
- large scale systems, nonlinear systems, synthesis, Vukobratovic (M.), Stokic (D.), *4242*
- control stability, feedback, linear systems, matrix methods, stability theory, Meilakhs (A.M.), *4246*
- distributed parameters, mobile control, optimal control, Butkovskii (A.G.), Pustylnikova (E.I.), *4261*
- large scale systems, multivariable systems, optimization, Findeisen (W.), Brdys (M.), (et al.), *4289*
- feedback, space vehicle structures, structural response, Balas (M.J.), *4298*
- adaptive systems, stability theory, synthesis, Russell (G.T.), Malcolm (J.M.), *4322*
- dynamic analysis, vibration, Beards (C.P.), *4402, book*
- bearings (magnetic), servomechanisms, Habermann (H.), Liard (G.), *4903*
- bilinear systems, control stability, design, lyapunov's functions, observers, Derese (I.), Noldus (E.), *5040*
- bilinear systems, design, lyapunov's functions, Franke (D.), *5042*
- automatic control, guideways, mass transportation, vehicles, Shladover (S.E.), *5062*
- accelerators, lasers (gasdynamic), vibration, vibrational control, Meerkov (S.M.), *5064*
- adaptive systems, man machine systems, Slutskii (L.I.), *5065*
- error, inspection, manufacturing, nondestructive tests, Malaichuk (V.P.), *5337*
- aerodynamic interference, flexible walls, influence coefficients, wind tunnels, Dowell (E.H.), *5514*
- internal combustion engines, knocking, pressure measurement, spark ignition, Randall (D.W.), Powell (J.D.), *5653*
- combustors, design, gas turbines, Egan (W.J.) Jr., Reilly (R.S.), (et al.), *5654*
- controllable pitch propeller, mathematical models, propellers (marine), Geway (R.P.), De Mulder (E.P.H.M.), (et al.), *5966*
- dynamic analysis, elastic bodies, programmed motion, Zakrzhevskii (A.E.), *6055*
- convergence, digital simulation, runge kutta method, Tuschak (R.), *6100*
- bond graphs, nonlinear theory, simulation, Karnopp (D.), *6122*
- design, feedback, linear systems, multivariable systems, pole placement, Balestrino (A.), Celentano (G.), *6125*
- design, feedback, linear systems, multivariable systems, pole placement, Seraji (H.), *6126*
- feedback, matrix methods, state space techniques, Potter (J.M.), Anderson (B.D.O.), (et al.), *6128*
- linear systems, lyapunov's functions, nonlinear methods, observers, system uncertainty, Leitmann (G.), *6129*
- discontinuities, lyapunov's functions, nonlinear systems, nonlinear theory, stability theory, Stalford (H.), *6131*
- feedback, linear systems, pole placement, Shapiro (E.Y.), Fredricks (D.A.), (et al.), *6141*
- design, drilling, hydraulic machinery, numerical control, Glaser (D.J.), Nachtigal (C.L.), *6148*
- cycles, fluid conveyance, solar collectors, Schiller (S.R.), Warren (M.L.), (et al.), *6822*
- mathematical models, temperature, thermostats, Dulnev (G.N.), Egorov (V.I.), (et al.), *6824*
- modeling, space vehicles, thrusters, Garg (S.), *6852*
- design, propulsion, space vehicles, Finston (R.), Spicer (L.M.), *6853*
- distributed parameters, linear systems, spectral analysis, Azarov (V.L.), Lupichev (L.N.), (et al.), *7236*
- algorithms, differential games, distributed parameters, hyperbolic equations, parabolic equations, position control, Korotkii (A.I.), Osipov (Iu.S.), *7240*
- banach space, functional analyis, functional equations, nonconvex control, Caligaris (O.), Oliva (P.), *7242*
- design, discrete systems, linear systems, observers, Tomizuka (M.), Auslander (D.M.), (et al.), *7251*
- design, position control, regulator problem, robotics, Seyfarth (K.), Hain (E.), *7252*
- design, gas turbines, lyapunov's functions, model reference systems, Monopoli (R.V.), *7256*
- modal control, sensitivity, space vehicle structures, structural response, vibration, Hallauer (W.L.) Jr., Barthelemy (J.-F.M.), *7257*

- beams (flexural), space vehicle structures, structural analysis, Schaechter (D.B.), *7413*
- damping, gyrodynamics, gyroscopic stabilization, space vehicle structures, stabilization, Joshi (S.M.), Groom (N.J.), *7415*
- aerodynamic loads, helicopters, rotors, Mccloud (J.L.) III, *7797*
- airfoils, flutter, incompressible flow, trailing edge, Nissim (E.), Lottati (I.), *7906*
- artificial satellites, guidance systems, maneuverability, tethered satellites, Bschorr (O.), *7930*
- diffusion, estimation, nonlinear systems, Banon (G.), Nguyen (H.T.), *8122*
- feedback, nonlinear systems, second order analysis, sensitivity, Herbert (R.J.), *8182*
- design, linear systems, multivariable systems, optimization, servomechanisms, Davison (E.J.), Ferguson (I.J.), *8168*
- decoupling, design, manipulators, robotics, Freund (E.), Hoyer (H.), *8176*
- dynamic analysis, dynamic properties, feedback, rotating bodies, rotors, vibration, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- dynamic response, elastic bodies, mathematical methods, plates, Leipholz (H.H.E.), *8302*
- flexible bodies, rotating shafts, vibration isolation, Stanway (R.), Burrows (C.R.), *8318*
- airplanes, flight control, lateral stability, longitudinal stability, stability, Etkin (B.), *8646, book*
- space vehicles, stabilization, Yuan (J.S.-C.), *8848*
- dynamics, space vehicles, spinning bodies, Juang (J.N.), Balas (M.J.), *8852*
- algorithms, attainability sets, linear systems, Bushenkov (V.A.), Lotov (A.V.), *9157*
- decoupling, model reduction, multivariable systems, Shieh (L.-S.), Wei (Y.-J.P.), (et al.), *9158*
- feedback, multivariable systems, state space techniques, Preuss (H.-P.), *9159*
- bilinear systems, design, feedback, Derese (I.), Noldus (E.), *9160*
- decoupling, design, linear systems, multivariable systems, nonlinear systems, synthesis, Mercier (O.), *9165*
- feedback, linear systems, spectral analysis, stability theory, transfer functions, Schober (J.), *9166*
- distributed parameters, hyperbolic equations, modal control, optimal control, self-adjoint systems, Meirovitch (L.), Baruh (H.), *9170*
- large scale systems, multivariable systems, optimal control, power generation, Ikeda (M.), Siljak (D.D.), (et al.), *9175*
- design, frequency domain techniques, state space techniques, Hippe (P.), Wurmthaler (C.), *9181*
- oscillations, pulse control, structural analysis, structural design, structural response, vibration, Udwadia (F.E.), Tabaie (S.), *9183*
- digital control, manipulators, robotics, Luh (J.Y.S.), Walker (M.W.), (et al.), *9186*
- design, hydraulic machinery, robotics, suboptimal control, Rossler (J.), *9188*
- manipulators, position control, robotics, servomechanisms, Hopfengartner (H.), *9189*
- design, position control, servomechanisms, state space techniques, Wierschem (T.), *9190*
- design, hydraulic machinery, position control, state space techniques, Wierschem (T.), *9191*
- actuators, design, feedback, pneumatic components, position control, Bender (E.), Kotschenreuther (P.), *9194*
- algorithms, design, manipulators, mechanisms (planes), robotics, Hewit (J.R.), Burdess (J.S.), *9482*
- manipulators, mathematical models, robotics, Totani (T.), Miyakawa (S.), *10011*
- analytical methods, frequency response, oscillations, pulse-frequency, Krasnoselskii (M.A.), Pokrovskii (A.V.), (et al.), *10076*
- air pollution, linear programming, mathematical models, optimization, Kohn (R.E.), *10094, book*
- decay, jets, Davis (M.R.), *10461*
- attitude control, guidance systems, space vehicle structures, vibration, Anderson (R.H.), Haung (C.-C.), (et al.), *10774*
- algorithms, discrete systems, singular perturbations, Rajagopalan (P.K.), Naidu (D.S.), *11043*
- decoupling, design, large scale systems, manipulators, nonlinear systems, Vukobratovic (M.K.), Stokic (D.M.), *11049*
- decoupling, design, digital control, feedback, nonlinear systems, Singh (S.N.), *11050*
- bilinear systems, dead-beat control, discrete systems, regulator problem, Grasselli (O.M.), Isidori (A.), (et al.), *11059*
- approximation methods, relay systems, stochastic systems, Fuller (A.T.), *11063*
- algorithms, dynamic programming, reservoirs, Sniedovich (M.), *11085*
- design, feedback, large scale systems, stability theory, Anderson (B.D.O.), Moore (J.B.), *11089*
- adaptive systems, distributed parameters, stochastic systems, Tzafestas (S.G.), *11092*
- adaptive systems, model reference systems, stability theory, Johnstone (R.M.), Shah (S.L.), (et al.), *11096*
- structural design, structural stability, structures, vibration, vibration isolation, Udwadia (F.E.), Tabaie (S.), *11097*
- design, fluidics, hydraulic machinery, pneumatic components, servomechanisms, Mccloy (D.), Martin (H.R.), *11100, book*
- control surfaces, optimization, telescopes, Mustafaev (M.I.), *11320*
- hydraulic machinery, stability, unsteady flow, Tanaka (Y.), *11749*

control stability, equilibrium, magnetic field, thermonuclear energy, tokamak, Rubin (I.K.), *2903*
- aerodynamic performance, ballistics (exterior), missiles, rockets, Murphy (C.H.), *3926*
- control, feedback, linear systems, matrix methods, stability theory, Meilakhs (A.M.), *4246*
- algorithms, design, feedback, linear systems, stability theory, Tannenbaum (A.), *4249*
- design, feedback, interconnected systems, large scale systems, lyapunov's functions, stability theory, Mahalanabis (A.K.), Singh (R.), *4250*
- bilinear systems, control, design, lyapunov's functions, observers, Derese (I.), Noldus (E.), *5040*
- aerodynamic performance, ballistics (exterior), drag, missiles, Qasrawi (A.M.S.), East (R.A.), *6892*
- projectiles, trajectories, Murphy (C.H.), *7792*
- control surfaces, ocean waves, ship motion, surge, unsteady flow, Haddara (M.R.), *8042*

control surfaces, control stability, ocean waves, ship motion, surge, unsteady flow, Haddara (M.R.), *8042*
- control, optimization, telescopes, Mustafaev (M.I.), *11320*
- airplanes, design, equations of motion, flight control, mathematical models, Paljaruci (G.), *11733*

controllability, continuous systems, linear systems, sampled data systems, Gibson (J.A.), Ha (T.T.), *109*
- nonlinear systems, perturbation theory, Dacka (C.), *117*
- distributed parameters, optimal control, sensitivity, synthesis, temperature, thermal stresses, Poterasu (V.F.), *178*
- optimal control, sensitivity, synthesis, Poterasu (V.F.), *179*
- discrete systems, synthesis, Bakan (G.M.), *180*
- airplane performance, airplanes, Nguyen (L.T.), *694*
- dynamic analysis, nonlinear analysis, observability, Baillieul (J.), *1993*
- large scale systems, observability, structural analysis, Sote (W.), *2086*
- algorithms, linear systems, observability, time invariant systems, Paige (C.C.), *2104*
- faithful property, linear systems, observability, state space techniques, Boretskii (I.V.), Pavlov (V.G.), *3149*
- maneuverability, rudders, ship maneuvers, steering, Van Amerongen (J.), De Goeij (W.F.), (et al.), *4102*
- boundary conditions, boundary value problems, control, parabolic equations, pseudoparabolic equations, White (L.W.), *4205*
- algorithms, linear systems, model reduction, observability, principal component analysis, Moore (B.C.), *4217*
- frequency domain techniques, graph theory, interconnected systems, multivariable systems, observability, Fessas (P.), *4234*
- optimization, state space techniques, Vincent (T.L.), Skowronski (J.M.), *4241*
- identification, nonlinear systems, probability theory, subjective variance functions, Varlaky (P.), Raibman (N.S.), *6137*
- aerodynamic interference, canard, tails, wing body combinations, Agnew (J.W.), Hess (J.R.) Jr., *6724*
- aerodynamic performance, automobiles, crossflow, drag reduction, lift, Gotz (H.), *6725*
- algorithms, helicopters, rotors, Du Val (R.W.), *6731*
- linear systems, time delay systems, Manitius (A.), *9154*
- frequency domain techniques, linear systems, linear theory, observability, Olbrot (A.W.), Zak (S.H.), *10080*
- actuators, design, optimization, oscillations, space vehicle structures, Arbel (A.), *11047*
- dynamic properties, identification, linear systems, observability, structural response, Udwadia (F.E.), *11048*

convection, fluid mechanics, galerkin method, numerical methods, surveys, Hughes (T.J.R.) ed., *95, book*
- diffusion, finite element techniques, heat transfer, Baliga (B.R.), Patankar (S.V.), *96*
- beams, control, distributed parameters, modal control, observability, phase locked loops, Balas (M.J.), *203*
- entrance region, variable fluid properties, variational methods, Pavlovic (M.I.), Milojevic (D.Z.), *731*
- heat transfer, transient effects, Karvinen (R.), *732*
- chandrasekhar number, electro fluid dynamics, magneto fluid dynamics, rayleigh number, Riahi (N.), *760*
- channel flow, emissivity, heat transfer (combined modes), radiation, Sparrow (E.M.), Shah (S.), (et al.), *782*
- heat transfer (combined modes), monte carlo analysis, plates (parallel), radiation, Kobiyama (M.), Taniguchi (H.), (et al.), *783*
- permeability, porous media, Tewari (P.K.), Torrance (K.E.), *955*
- stratified flow, Alautdinov (M.), *980*
- diffusion, finite element techniques, Keramidas (G.A.), *1139*
- diffusion, dilute solutions, laminar flow, Yu (J.S.), *1557*
- pipe flow, spectra, turbulence, turbulence (correlations), Mcconachie (P.J.), *1584*
- eckert number, grashof number, heat transfer, incompressible flow, plane flow, Gupta (A.S.), Popp (I.), (et al.), *1667*

- entrance region, interferometry, nusselt number, secondary flow, Yousef (W.W.), Tarasuk (J.D.), *1668*
- jets, porous walls, Soundalgekar (V.M.), Vighnesam (N.V.), (et al.), *1676*
- heat transfer, integral methods, laminar flow, nusselt number, Hwang (U.P.), *1677*
- boussinesq equation, convection (benard), Legros (J.C.), Platten (J.K.), (et al.), *1686*
- annular flow, entrance region, heat transfer, hydrogen bubble technique, visualization, Ogunba (V.), Barrow (H.), *1690*
- anisotropic media, cylindrical bodies, radiant interchange, solar radiation, Edwards (D.K.), *1695*
- fins, heat transfer, transforms, unsteady flow, Aziz (A.), Na (T.Y.), *1703*
- conduction (heat), convection (free), fins, Sparrow (E.M.), Acharya (S.), *1709*
- conduction (heat), extended surfaces, fins, heat transfer, Sparrow (E.M.), Hsu (C.F.), *1715*
- heat pipes, heat transfer, liquid vapor interface, wick, Frolov (V.F.), Vernikov (E.M.), (et al.), *1717*
- hydrodynamic stability, micropolar media, polar fluids, Lebon (G.), Perez-Garcia (C.), *1975*
- heat, internal flow, space vehicles, vibration, Kamotani (Y.), Prasad (A.), (et al.), *2606*
- buoyant flow, plumes, Afzal (N.), *2674*
- capillary flow, crystals, melting, radiant interchange, Schwabe (D.), Scharmann (A.), *2807*
- channel flow, nusselt number, solar collectors, Mouton (H.), Couanon (J.C.), (et al.), *2808*
- boundary conditions, melting, pcm body, Solomon (A.D.), *2816*
- liquids, magneto fluid dynamics, stability, walls, Kuang (V.Z.), Kan (N.Z.), *2878*
- cylindrical bodies, heat sources, magneto fluid dynamics, numerical analysis, Chukhrov (A.Yu.), *2881*
- earth, mantle, modeling, Dexiang (G.), Yinting (L.), (et al.), *3007*
- finite element methods (hybrid), least squares, viscous flow, Kanarachos (A.), *3144*
- conduction (heat), cylindrical bodies, heat transfer, variable thermal properties, Martinson (L.K.), *3778*
- axial flow, cylindrical bodies, heat transfer, Oosthuizen (P.H.), Rangarajan (N.), *3779*
- boundary layer (thermal), boundary layer (turbulent), heat transfer, plane flow, transient effects, turbulent flow, Hanawa (J.), *3781*
- boundary layer (thermal), heat transfer, plates (parallel), porous media, Merkin (J.H.), *3782*
- cavities, laminar flow, Shiralkar (G.S.), Tien (C.L.), *3783*
- augmentation, fins, heat transfer, laminar flow, tubes, Soliman (H.M.), Chau (T.S.), (et al.), *3786*
- buoyant flow, heat transfer, pipe flow, supercritical flow, turbulent flow, Kakarala (C.R.), Thomas (L.C.), *3790*
- channel flow, porous walls, viscoelastic fluids, Mohapatra (P.), Devi (P.), *3806*
- heat transfer, holography, interferometry, visualization, Few (R.E.), Dullforce (T.A.), *3807*
- boussinesq equation, liquid solid interface, melting, solidification, Povkh (I.L.), Zavgorodnii (P.F.), (et al.), *3819*
- evaporation, heat transfer, interface phenomena, Palmer (H.J.), Makeshri (J.C.), *3849*
- diffusion, pipe flow, plug flow, Bauer (H.P.), *3851*
- boundary layer, friction (skin), laminar flow, plates (vertical), shear stress, Hunt (R.), Wilks (G.), *4696*
- boundary layer (thermal), crossflow, laminar flow, Eichhorn (R.), Hasan (M.M.), *4707*
- crystals, marangoni convection, thermal instability, thermal waves, Chun (C.-H.), *4710*
- bifurcation, boundary value problems, boussinesq equation, perturbation methods, Reiss (E.L.), Tavantzis (J.), *4974*
- channel flow, heat transfer, micropolar media, Migun (N.P.), *5538*
- buoyant flow, cellular motions, closed conduit flow, Melikhov (O.I.), Shcherbak (S.B.), *5539*
- geophysics, geostrophic flow, geostrophic models, rotating fluids, thermal instability, Glukhovskiy (A.B.), Dolzhanskiy (F.V.), *5558*
- heat transfer, Eckert (E.R.G.), *5568*
- film cooling, film flow, heat transfer, plastics, polypropylene film, Shapovalov (V.M.), Tyabin (N.V.), (et al.), *5570*
- gases, heat transfer, radiant interchange, radiation, spectroscopy, Mattick (A.T.), *5585*
- heat transfer, mass transfer, prandtl number, Riahi (N.), *5616*
- electro fluid dynamics, inhomogeneities, nonlinear characteristics, stability theory, Zhakin (A.I.), *5674*
- heat transfer, porous media, Simpkins (P.G.), Blythe (P.A.), *5855*
- earth, mantle, Trubitsyn (V.P.), Vasilyev (P.P.), (et al.), *5882*
- porous media, thermal instability, Sharma (R.C.), *5883*
- boundary layer (atmospheric), mixing layers, turbulence (geophysical), Coulman (C.E.), *5944*
- evaporation, mass transfer, oceanography, Kutalo (A.A.), Chernyavskii (E.B.), *5952*
- diffusion, finite element techniques, one dimensional flow, Varoglu (E.), Finn (W.D.L.), *6112*
- annular flow, dielectrics, electro fluid dynamics, heat transfer, laminar flow, Mizushina (T.), Ogino (F.), (et al.), *6768*
- convection (forced), crossflow, cylindrical bodies, heat transfer, sprays, unsteady flow, Basilico (C.), Jung (G.), (et al.), *6775*
- annular flow, heat transfer (combined modes), laminar flow, Hattori (N.), *6776*
- heat transfer (combined modes), pipe flow, Hieber (C.A.), *6780*
- cavities, channel flow, thermal instability, Unger (J.), *6784*
- hydrodynamic stability, rayleigh number, rotating fluids, shells (spherical), Geiger (G.), Busse (F.), *6787*
- baroclinic waves, geophysics, rotating fluids, Leach (H.), *6788*
- diffusion, finite element techniques, Heinrich (J.C.), *6808*
- nusselt number, solar collectors, solar energy, Malhotra (A.), Garg (H.P.), (et al.), *6821*
- astrophysics, magneto plasma dynamics, models, stability theory, Sankhla (V.D.), Bhatia (P.K.), *6867*
- cylindrical bodies, thermal stresses, thermoelasticity (transient), Satyamurthy (K.), Singh (J.P.), (et al.), *6943*
- atmosphere, atmospheric circulation, currents, gravity, Hagiwara (Y.), *7064*
- friction (skin), heat transfer, reynolds number (critical), tubes, viscous flow, Addlesee (A.J.), *7671*
- aerodynamic heating, heat transfer, surface temperature, thermography, wind tunnels, Balageas (D.L.), Ory (D.), *7816*
- dispersed flow, drops, entrance region, heat transfer, tubes, two phase flow, Rane (A.G.), Yao (S.-C.), *7825*
- diffusion, modal analysis, nonlinear analysis, rayleigh number, Riahi (N.), *7841*
- heat transfer, laminar flow, plates (parallel), power law geometrics, solar collectors, Naidu (G.M.), Agarwal (J.P.), *7864*
- combustion, navier stokes equation, Makhviladze (G.M.), Shcherbak (S.B.), *7888*
- cylindrical bodies, thermal stresses, thermoelasticity (transient), Noda (N.), Sugano (Y.), *7950*
- boussinesq equation, diffusion, nonlinear analysis, Knobloch (E.), Proctor (M.R.E.), *8531*
- diffusion, hydrodynamic stability, nonlinear theory, perturbation methods, Neu (J.C.), *8602*
- buoyancy, eigenvalues, hydrodynamic stability, liquids, surface tension, Rosenblat (S.), Homsy (G.M.), (et al.), *8603*
- dissipation, heat addition, laminar flow, velocity profiles, Jaluria (Y.), *8681*
- annular flow, augmentation, cylindrical bodies, heat exchangers, heat transfer, Dyban (E.P.), Lesnikovskii (A.A.), (et al.), *8682*
- extended surfaces, fins, grashof number, laminar flow, Acharya (S.), Patankar (S.V.), *8684*
- buoyancy, injection, plane flow, Grishin (A.M.), Gruzin (A.D.), (et al.), *8685*
- crossflow, cylindrical bodies, heat transfer, Bennon (W.D.), Incropera (F.P.), *8700*
- heat sources, thermal instability, viscous effects, Gorlei (V.V.), Shenderovskii (V.A.), *8707*
- bounded media, cellular flow, hydrodynamic stability, rotating fluids, Daniels (P.G.), *8710*
- boundary layer (thermal), bounded media, hydrodynamic stability, porous media, stagnation point, vortex flow, Hsu (C.T.), Cheng (P.), *8711*
- pipe flow, reynolds number (critical), thermal instability, El-Hawary (M.A.), *8713*
- heat addition, surface tension, variational methods, Lebon (G.), Perez-Garcia (C.), *8714*
- annular flow, boundary layer (thermal), ekman layer, rotating fluids, thermal instability, Hignett (P.), Ibbetson (A.), (et al.), *8717*
- boussinesq equation, hydrodynamic stability, rotating bodies, rotating fluids, Buhler (K.), Oertel (H.) Jr., *8719*
- critical flow, viscoelastic fluids, Garifullin (F.A.), Zapparov (F.I.), *8724*
- buoyant flow, cavities, cellular flow, thermal plumes, Berdnikov (V.S.), Kirdyashkin (A.G.), *8727*
- boundary layer (thermal), diffusion, mathematical models, Barrett (J.W.), Morton (K.W.), *8749*
- conduction, finite difference methods, heat transfer (combined modes), Griffiths (D.F.), Christie (I.), (et al.), *8750*
- radiant interchange, rotating fluids, thermal instability, Onyegegbu (S.O.), *8752*
- heat transfer (combined modes), radiant interchange, Janata (J.), *8753*
- energy conversion, solar collectors, thermosyphons, Sodha (M.S.), Tiwari (G.N.), *8764*
- cavities, heat transfer, interferometry, thermal measurements, visualization, Sernas (V.), Lee (E.I.), *8769*
- closed conduit flow, solar energy, solar furnaces, Hubbard (M.), Brewer (J.W.), *8770*
- magneto fluid dynamics, oscillatory flow, porous media, theory, Sharma (R.C.), Sharma (K.N.), *8824*
- finite element techniques, flood flow, Jaffre (J.), *8947*
- balloons, Glagolev (Yu.A.), *8995*
- diffusion, finite difference methods, parabolic equations, stability (numerical), Morton (K.W.), *9126*

- boussinesq equation, buoyancy, mixing layers, thermal diffusion, Cushman-Roisin (B.), *9533*
- boussinesq equation, hysteresis, thermal diffusion, Walden (R.W.), Ahlers (G.), *9534*
- channel flow, non newtonian flow, variable fluid properties, Benderskaya (S.L.), Khusid (B.M.), (et al.), *9583*
- annuli, coaxial flow, cylindrical bodies, helicoidal flow, laminar flow, Mojtabi (A.), Caltagirone (J.-P.), *9696*
- fluid injection, heat transfer (combined modes), injection, plates (vertical), Tsuruno (S.), Iguchi (I.), *9697*
- circulation, steam gas power plants, thermal instability, thermal waves, tubes, Unal (H.C.), *9705*
- disks, heat sources, plates (circular), Kolyano (Yu.M.), Semerak (M.M.), (et al.), *9715*
- absorption, convection (free), heat addition, radiant interchange, thermal plumes, Yucel (A.), Bayazitoglu (Y.), *9727*
- blunt bodies, heat transfer (combined modes), hypersonic flow, radiant interchange, reflection, Rolin (M.N.), Soloukhin (R.I.), (et al.), *9728*
- boundary layer, heat transfer, hydrodynamic stability, vortex flow, Moutsoglou (A.), Chen (T.S.), (et al.), *10465*
- hydrodynamic stability, stability theory, Banerjee (M.B.), Katoch (D.C.), (et al.), *10467*
- magneto fluid dynamics, nonlinear materials, prandtl number, Riahi (N.), *10584*
- buoyant flow, cavities, channel flow, heat transfer, laminar flow, Humphrey (J.A.C.), Jacobs (E.W.), *10585*
- energy storage, heat transfer (combined modes), hydrocarbons, reservoirs, storage, transient effects, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*
- finite element techniques, numerical methods, Donea (J.), Giuliani (S.), *10588*
- channel flow, heat transfer (combined modes), plates (parallel), radiant interchange, solar collectors, Liu (C.H.), Sparrow (E.M.), *10610*
- channel flow, heat transfer (combined modes), radiant interchange, scattering, turbulent flow, Popov (Yu.A.), Polovnikov (V.I.), *10611*
- condensation, heat transfer, tube bundles, turbulent flow, Kutateladze (S.S.), Gogonin (I.I.), (et al.), *10622*
- drops, evaporation, heat transfer, Rane (A.), Yao (S.-C.), *10651*
- bubbly flow, drops, mass transfer, Polyanin (A.D.), Sergeev (Yu.A.), *10657*
- adsorption, dispersion, porous media, surfactants, Ramirez (W.F.), Shuler (P.J.), (et al.), *10690*
- diffusion, weighted residual methods, Jensen (O.K.), Finlayson (B.A.), *10694*
- magneto fluid dynamics, plates (vertical), semi infinite media, theory, Soundalgekar (V.M.), Takhar (H.S.), *10750*
- immiscible fluids, nonlinear theory, porous media, Gagneux (G.), *10835*
- heat addition, hydrodynamic stability, porous media, rayleigh number, saturation, Straus (J.M.), Schubert (G.), *11367*
- chemical kinetics, interfaces, liquid liquid interface, surface tension, Dalle Vedove (W.), Sanfeld (A.), *11379*
- cavities, compressible flow, supersonic flow, Shchukin (V.K.), Gortyshov (Yu.F.), (et al.), *11401*
- boundary layer, dispersion, smoke stacks, thermal plumes, Venkatram (A.), *11519*
- diffusion, liquids, mixtures, optical techniques, two component flow, Ruddick (B.R.), *11755*
- boundary layer, diffusion, numerical methods, Kanarachos (A.), *11764*
- combustion, mass transfer, relaxation, Sieniutycz (S.), *11775*
- boilers, experimental results, heat transfer, magneto fluid dynamics, radiation, Im (K.H.), Ahluwalia (R.K.), *11805*
- annular flow, plasma, theory, waves, Shivamoggi (B.K.), *11837*

convection (benard), cavities, heat addition, rayleigh benard instability, rayleigh number, Olson (J.M.), Rosenberger (F.), *578*

- buoyant flow, cellular flow, surface tension, thermal instability, Lebon (G.), Cloot (A.), *757*
- benard-rayleigh problem, cellular flow, thermal excitation, Wauer (J.), *758*
- boussinesq equation, convection, Legros (J.C.), Platten (J.K.), (et al.), *1686*
- insulating materials (thermal), nonlinear theory, rayleigh benard instability, Chapman (C.J.), Proctor (M.R.E.), *2607*
- binary flow, galerkin method, poiseuille flow, thermodynamics (nonequilibrium), Artiz-Cohen (J.A.), Velarde (M.G.), *2801*
- benard problem, bifurcation, singularities, Golubitsky (M.), Schaeffer (D.), *4983*
- buoyant flow, convection (free), radiant interchange, thermal instability, Geting (A.V.), *5555*
- cellular motions, thermal excitation, thermal instability, Eagles (P.M.), *5556*
- boussinesq equation, rayleigh benard instability, rayleigh number, Platten (J.K.), Legros (J.C.), *6786*
- computing techniques, diffusion coefficient, magneto fluid dynamics, penetration, Drobyshevski (E.M.), Kolesnikova (E.N.), (et al.), *6861*
- boussinesq equation, convection (free), heat addition, navier stokes equation, Frick (H.), Clever (R.M.), *10579*
- conductivity, convection (free), heat addition, slabs, thermal instability, Proctor (M.R.E.), *11763*

convection (forced), combustion (turbulent), impact jets, impingement, isothermal processes, jets, thermal measurements, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*

- engines, heat transfer, jets, pipe flow, swirl flow, Caton (J.A.), Heywood (J.B.), *735*
- binary flow, boiling, mixtures, Bennett (D.L.), Chen (J.C.), *743*
- boiling, critical heat flux, water, Katto (Y.), *744*
- boiling, critical heat flux, critical region, Katto (Y.), *745*
- boiling, critical heat flux, critical region, nucleate boiling, Katto (Y.), *746*
- approximation methods, heat exchangers (crossflow), Roetzel (W.), Furst (J.), *784*
- finite difference methods, oscillations, pressure drop, two phase flow, Akyuzlu (K.), Veziroglu (T.N.), (et al.), *947*
- boiling, evaporation, heat transfer, refrigeration, Mishra (M.P.), Varma (H.K.), (et al.), *1669*
- boiling, critical heat flux, heat transfer, helium, transition boiling, Petukhov (B.S.), Zhukov (V.M.), (et al.), *1673*
- heat transfer, nuclear reactors, recirculation, Cho (S.M.), Kane (R.S.), *1687*
- heat transfer, orifices, surface effect, Sparrow (E.M.), Gurdal (U.), *1691*
- cooling towers, evaporation, waste heat, Hane (C.E.), *1906*
- heat transfer, laminar flow, plane flow, transient effects, Hanawa (J.), *2788*
- approximations, boiling, heat transfer, nucleate boiling, Guglielmini (G.), Nannei (E.), (et al.), *2793*
- boiling, bubbly flow, channel flow, critical heat flux, Hebel (W.), Detavernier (W.), (et al.), *2794*
- heat transfer, melting, surface effect, Solomon (A.D.), *2820*
- augmentation, condensation, fins, heat exchangers, Webb (R.L.), *2827*
- climatology, energy storage, heat loss, radiation properties, Leduc (R.), Won (T.K.), *2836*
- concentration, mass transfer, plates, Atimtay (A.), Gill (W.N.), *2849*
- interface phenomena, mass transfer, two phase flow, Schwarz (E.), Waldheim (W.), (et al.), *2993*
- critical heat flux, dispersed flow, drops, heat transfer, turbulent flow, Yao (S.-C.), Rane (A.), *3795*
- boundary layer (atmospheric), boundary layer (thermal), boundary layer (turbulent), Ivanov (L.I.), Ingel (L.Kh.), *4061*
- atmospheric circulation, clouds, convection (free), heat transfer (atmospheric), hydrodynamic stability, Falkovich (A.I.), *4063*
- axial turbines, cooling, gas turbines, surface jets, Repukhov (V.M.), Shvets (I.T.), *4676*
- emissivity, heat transfer, nucleate boiling, Stephan (K.), Auracher (H.), *4700*
- porous media, rotating bodies, Chakrabarti (A.), Gupta (A.S.), *4840*
- leidenfrost phenomenon, transition boiling, water, Ragheb (H.S.), Chang (S.C.), (et al.), *5544*
- ferrous metals, magneto fluid dynamics, suspensions, thermophysical properties, Shulman (Z.P.), Kordonskiy (V.I.), (et al.), *5548*
- concrete, drying, thermal effects, Gritsev (V.M.), Bykov (S.I.), *5573*
- energy storage, freezing, phase changes, Hsu (C.F.), Sparrow (E.M.), *5577*
- convection, crossflow, cylindrical bodies, heat transfer, sprays, unsteady flow, Basilico (C.), Jung (G.), (et al.), *6775*
- chemically reactive flow, plane flow, thermal instability, Eremin (E.A.), Kolesnikov (A.K.), *6785*
- brinkman number, non newtonian flow, pipe flow, Dunwoody (N.T.), Hamill (T.A.), *6789*
- coolers, forced systems, heat exchangers, heat transfer, pressure drop, Gianolio (E.), Cuti (F.), *6813*
- compressible flow, heat transfer, noether theorem, variable thermal properties, Garaev (K.G.), *7823*
- annular flow, cooling, critical heat flux, tube bundles, Katto (Y.), *7833*
- boiling, channel flow, cooling, critical heat flux, heat exchangers, Zeigarnik (Yu.A.), Privalov (N.P.), (et al.), *7834*
- heat transfer, hot film, thermal measurements, transient effects, Malcolm (D.G.), Verma (V.), *7846*
- concrete, energy storage, fins, solar energy, Ortega (J.K.E.), Bingham (C.E.), (et al.), *7863*
- cylindrical bodies, integral methods, navier stokes equation, transient loading, Lin (S.P.), *8683*
- cooling, cylindrical bodies, film boiling, spherical bodies, stagnation point, Epstein (M.), Hauser (G.M.), *8687*
- annular flow, rotating bodies, secondary flow, shells (spherical), Dallman (R.J.), Douglass (R.W.), *8720*
- conduction (heat), heat exchangers, heat transfer (combined modes), pipe flow, slug flow, Vick (B.), Ozisik (M.N.), *8745*
- mixed flow, porous media, stability theory, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *8942*
- channel flow, slots, thermal stresses, turbulent flow, Ryadno (A.A.), Franko (N.V.), *9683*
- channel flow, pipe flow, viscous effects, Nazmeev (Yu.G.), Feifer (L.I.), (et al.), *9684*
- channel flow, conduction, heat transfer (combined modes), nucleate boiling, thermal instability, Humbert (M.), Martin (M.), *9685*
- laminar flow, non newtonian flow, unsteady flow, wedges, Gorla (R.S.R.), *9706*
- external flow, internal flow, laminar flow, non newtonian flow, turbulent flow, viscoelastic fluids, Shenoy (A.V.), Mashelkar (R.A.), *9707*
- boundary layer (thermal), cylindrical bodies, galerkin method, laminar flow, mathematical models, Graebel (W.P.), Hsu (C.C.), *9711*

- heat transfer, separated flow, solar collectors, Sparrow (E.M.), Samie (F.), (et al.), *9736*
- cavities, heat transfer, porous media, viscous effects, Blythe (P.A.), Simpkins (P.G.), *9898*
- boundary layer (atmospheric), heat transfer (atmospheric), Andre (J.-C.), Artaz (M.-A.), *9935*
- currents, environmental control, gravity, heat transfer, Sturm (T.W.), *10406*
- boundary layer (turbulent), heat transfer, shear flow, turbulence, Thomas (L.C.), Ibrahim (M.B.), *10472*
- bubbly flow, heat transfer, pipe flow, two phase flow, Sekoguchi (K.), Nakazatomi (M.), (et al.), *10566*
- blades, gas turbines, heat transfer, thermal loading, Graham (R.W.), *10567*
- boundary conditions, channel flow, micropolar media, microstructural fluids, thermal effects, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *10573*
- boiling, capillary flow, critical heat flux, Koba (A.L.), Kozhelupenko (Yu.D.), (et al.), *10574*
- cooling, heat transfer (atmospheric), solar collectors, wind, Ramsey (J.W.), Charmchi (M.), *10637*
- frost, plates, White (J.E.), Cremers (C.J.), *10660*
- burning rate, heat transfer, mass transfer, solids, Joulain (P.), *10663*
- large displacement, nonlinear characteristics, porous media, saturation, Rudraiah (N.), Srimani (P.K.), *12069*

convection (free), cylindrical bodies, heat, stratified flow, Chashechkin (Yu.D.), Popov (V.A.), *577*

- heat exchangers (crossflow), heat transfer, mass transfer, tube bundles, El-Riedy (M.K.), *728*
- critical heat flux, tube bundles, Fokin (B.S.), Goldberg (Ye.N.), *749*
- buoyant flow, laminar flow, stokes flow, transient effects, Pop (I.), Soundalgekar (V.M.), *752*
- heat transfer, thermal effects, vibration, Dawood (A.S.), Manocha (B.L.), (et al.), *753*
- buoyant flow, heat transfer, nusselt number, turbulent flow, Thomas (L.C.), Wood (M.L.), *754*
- heat transfer, rayleigh number, shells (fluid-filled), Powe (R.E.), Warrington (R.O.), (et al.), *755*
- closed conduit flow, heat transfer, interferometry, Flack (R.D.), Konopnicki (T.T.), (et al.), *756*
- conduction (heat), heat transfer (combined modes), Miyamoto (M.), Sumikawa (J.), (et al.), *764*
- mass transfer, plane surfaces, Arai (N.), Takahashi (S.), (et al.), *818*
- layered media, slots, Wirtz (R.A.), Reddy (C.S.), *819*
- mass transfer, particles, spectroscopy, Govindarao (V.M.H.), Lekshminarayanan (H.), *826*
- acceleration, magneto fluid dynamics, plates (vertical), suction, Raptis (A.A.), Tzivanidis (G.J.), (et al.), *855*
- magneto fluid dynamics, plates (perforated), rotating bodies, slip flow, Vidyanidhi (V.), Raju (G.K.), (et al.), *859*
- infiltration, porous media, saturation, Plumb (O.A.), Huenefeld (J.C.), *958*
- boussinesq equation, nusselt number, unsteady flow, vortices, Oertel (H.), Kessler (R.), *1513*
- geostrophic flow, heat, magneto fluid dynamics, rotating fluids, Soward (A.M.), *1514*
- heat, rayleigh number, shear flow, temperature profile, Yoshizaki (M.), *1515*
- cylindrical bodies, heat transfer, laminar flow, rayleigh number, Chand (J.), Vir (D.), *1679*
- boundary layer (thermal), nusselt number, perturbation methods, porous walls, Cheng (P.), Chang (I.D.), *1680*
- boundary layer (thermal), buoyant flow, closed conduit flow, plane flow, Sparrow (E.M.), Prakash (C.), *1681*
- cellular flow, closed conduit flow, nusselt number, Iyican (L.), Witte (L.C.), (et al.), *1682*
- boundary conditions, channels (closed), conduits, transforms, De Socio (L.M.), Misici (L.), *1683*
- buoyant flow, heat transfer, stratified flow, thermal instability, Chashechkin (Yu.D.), Tupitsyn (V.S.), *1684*
- laminar flow, plates (vertical), Kundu (K.M.), *1688*
- differential equations (ordinary), grashof number, shells (spherical), Singh (S.N.), Chen (J.), *1689*
- conduction (heat), convection, fins, Sparrow (E.M.), Acharya (S.), *1709*
- cylindrical bodies, melting, Bareiss (M.), Beer (H.), *1728*
- cellular flow, mass transportation, Sigrist (L.), Dossenbach (O.), (et al.), *1736*
- boundary layer, polar fluids, similarity methods, Jena (S.K.), Mathur (M.N.), *1978*
- cellular flow, slots, Ruth (D.W.), *2789*
- annular flow, laminar flow, nusselt number, El-Shaarawi (M.A.I.), Sarhan (A.), *2790*
- plates (vertical), similarity methods, Zolotov (N.L.), *2796*
- cooling, heat transfer, nuclear reactors, Agrawal (A.K.) eds., Guppy (J.G.), *2797, book*
- closed conduit flow, heat addition, Flack (R.D.), *2798*
- closed conduit flow, finite difference methods, heat transfer, laminar flow, transient effects, Vasseur (P.), Robillard (L.), *2799*
- cellular flow, channel flow, numerical methods, thermodynamics (nonequilibrium), Luijkx (J.M.), Platten (J.K.), *2800*
- cylindrical bodies, empirical methods, heat addition, Parsons (J.R.) Jr., Mulligan (J.C.), *2802*
- porous walls, rotating disks, rotating fluids, Soundalgekar (V.M.), Pop (I.), *2804*
- concentration, models, solidification, Zavgorodnii (P.F.), Kolesnik (V.I.), (et al.), *2847*
- chemical reactions, gas solid interface, Sotnichenko (L.V.), Shtessel (E.A.), *2851*
- laplace transform, magneto fluid dynamics, oscillatory flow, plates (perforated), viscous flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *2884*
- friction (skin), magneto fluid dynamics, plates, similarity methods, Brar (G.S.), *2885*
- nusselt number, plates (vertical), turbulent flow, Ruckenstein (E.), Felske (J.D.), *3796*
- boundary layer (thermal), heat transfer, laminar flow, plates (vertical), Sokovishin (Yu.A.), Semenov (A.G.), *3798*
- conical bodies, heat addition, laminar flow, Chiou (J.P.), Na (T.Y.), *3799*
- cylindrical bodies, laminar flow, transient effects, Katagiri (M.), Pop (I.), *3800*
- annular flow, grashof number, spherical bodies, stratified flow, Singh (S.N.), Elliott (J.M.), *3801*
- laminar flow, lasers, visualization, Boyd (R.D.), Vest (C.M.), *3831*
- conductivity, energy conversion, radiant interchange, solar collectors, Aranovitch (E.), *3842*
- atmospheric circulation, clouds, convection (forced), heat transfer (atmospheric), hydrodynamic stability, Falkovich (A.I.), *4063*
- friction (skin), plates (parallel), unsteady flow, Rath (R.S.), Jena (G.), *4617*
- boundary layer (thermal), cooling, fiber optics, optical techniques, Kuiken (H.K.), *4695*
- boundary layer (thermal), heat transfer, plates (vertical), Sparrow (E.M.), Faghri (M.), *4697*
- cylindrical bodies, laminar flow, plane flow, Zariffeh (E.K.), Daguenet (M.), *4708*
- cavities, cellular flow, closed conduit flow, critical flow, Simpkins (P.G.), Dudderar (T.D.), *4709*
- ice, melting, models, Wilson (N.W.), Lee (J.J.), *4728*
- edge effects, heat transfer, plane flow, Hatfield (D.W.), Edwards (D.K.), *5549*
- cavities, closed conduit flow, oseen technique, prandtl number, Graebel (W.P.), *5550*
- annuli, heat transfer, pipe flow, prandtl number, Kuehn (T.H.), Goldstein (R.J.), *5551*
- magnetic fluids, magneto fluid dynamics, Seki (M.), Kawamura (H.), (et al.), *5553*
- buoyant flow, convection (benard), radiant interchange, thermal instability, Getling (A.V.), *5555*
- cylindrical bodies, laminar flow, nusselt number, Farouk (B.), Guceri (S.I.), *5565*
- closed conduit flow, coordinate systems, Van Doormaal (J.P.), Raithby (G.D.), (et al.), *5566*
- boundary layer (thermal), heat transfer, integral methods, variational methods, Singh (P.), Bhattacharya (D.K.), *5567*
- axisymmetric flow, pressure vessels, thermal loading, Wung (P.M.), Tauchert (T.R.), *5576*
- laplace transform, magneto fluid dynamics, plates (vertical), stokes flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *5675*
- cooling, currents, heat transfer, lakes, Sturm (T.W.), Kennedy (J.F.), *5924*
- plates (vertical), thermal loading, transient effects, Sammakia (B.), Gebhart (B.), *6763*
- buoyant flow, laminar flow, plates (vertical), Anderson (R.), Bejan (A.), *6778*
- cellular flow, closed conduit flow, Normand (C.), *6781*
- boussinesq equation, conduction, heat transfer, open thermosyphons, rayleigh number, thermosyphons, Penot (F.), Peube (J.-L.), *6790*
- cylindrical bodies, extended surfaces, heat transfer, plates, Sparrow (E.M.), Chrysler (G.M.), *6791*
- cavities, closed conduit flow, laser doppler velocimeters, visualization, Linthorst (S.J.M.), Schinkel (W.M.M.), (et al.), *6792*
- closed conduit flow, nuclear reactors, thermal instability, Zvirin (Y.), Jeuck (P.R.) III, (et al.), *6811*
- cylindrical bodies, interaction, interference, Sparrow (E.M.), Niethammer (J.E.), *7836*
- axisymmetric flow, bodies of revolution, boundary layer (thermal), heat transfer, laminar flow, Lin (F.N.), Chern (S.Y.), *7837*
- bodies (liquid filled), boussinesq fluid, cavities, moving media, perturbation methods, Zarubin (A.G.), Ngo Zui Kan, *7838*
- closed conduit flow, heat transfer, mathematical models, spectral expansion method, Iyican (L.), Bayazitoglu (Y.), (et al.), *7839*
- cavities, laminar flow, unsteady flow, variable thermal properties, Le Quere (P.), Humphrey (J.A.C.), (et al.), *7843*
- cavities, cooling, heat transfer, laminar flow, transient effects, water, Robillard (L.), Vasseur (P.), *7844*
- diffusion, layered media, porous media, Griffiths (R.W.), *7991*
- cloud physics, clouds, meteorology (physical), Pushistov (P.Yu.), Malbakhov (V.M.), (et al.), *8029*
- film boiling, hydrodynamic stability, liquid vapor interface, pipe flow, thermal instability, two phase flow, Sherman (D.C.), Sabersky (R.H.), *8693*

- boiling, critical heat flux, porous walls, tube bundles, Fokin (B.S.), Goldberg (E.N.), *8694*
- channel flow, closed conduit flow, laminar flow, Nansteel (M.W.), Greif (R.), *8701*
- annular flow, cylindrical bodies, three dimensional flow, Ozoe (H.), Shibata (T.), (et al.), *8703*
- buoyant flow, mixing, mixing chambers, thermal instability, unsteady flow, Opanasenko (A.N.), Selivanov (V.M.), (et al.), *8704*
- catalyzed ignition, combustion waves, ignition, Pribytkova (K.V.), Khudyaev (S.I.), (et al.), *8705*
- binary flow, cavities, inclined cavity, liquids, thermal diffusion, Pinyagin (A.Yu.), Pshenichnikov (A.F.), *8706*
- decomposition, exothermic reactions, porous surfaces, Saatdjian (E.), Caltagirone (J.P.), *8721*
- boundary layer, elastico-viscous liquids, oscillatory flow, viscoelastic fluids, Mishra (S.P.), Mohapatra (U.), *8723*
- enclosure flow, finite element techniques, mathematical models, stream function, vorticity, Reddy (J.N.), Satake (A.), *8726*
- cylindrical bodies, external flow, mass transfer, Terron (L.R.), Brunello (G.), *8728*
- heat addition, heat transfer (combined modes), internal sources, radiant interchange, turbulent flow, Cheung (F.B.), Chan (S.H.), (et al.), *8743*
- cylindrical bodies, heat transfer (combined modes), melting, Yao (L.S.), Chen (F.F.), *8748*
- buoyant flow, conductivity, diffusion, heat addition, heat transfer (combined modes), radiant interchange, Epstein (M.), Cheung (F.B.), (et al.), *8751*
- boussinesq equation, heat transfer, insulation, porous media, Brailovskaya (V.A.), Kogan (V.R.), (et al.), *8784*
- anisotropy, diffusion, galerkin method, Kelly (D.W.), Nakazawa (S.), (et al.), *8786*
- combustion, numerical methods, spherical bodies, Potter (J.M.), Riley (N.), *8793*
- heat transfer, layered media, porous media, Masuoka (T.), Yokota (Y.), (et al.), *8940*
- finite element techniques, porous media, Diersch (H.-J.), *8945*
- turbulence (geophysical), Gostintsev (Yu.A.), Sukhanov (L.A.), (et al.), *8992*
- cylindrical bodies, heat transfer, turbulent flow, Na (T.Y.), Chiou (J.P.), *9610*
- capillary flow, closed conduit flow, heat transfer, porous media, thermal instability, vortex flow, Catton (I.) eds., Smith (R.N.), *9682, book*
- artificial satellites, plates (vertical), transition flow, turbulence (transport), turbulent flow, Doan-Kim-Son, Coutanceau (J.), *9695*
- cylindrical bodies, inclined cylinders, Stewart (W.E.) Jr., *9698*
- augmentation, channel flow, extended surfaces, heat transfer, plates (parallel), rayleigh number, Sparrow (E.M.), Prakash (C.), *9699*
- critical flow, grashof number, laminar flow, plates (vertical), temperature, variable thermal properties, Ghajar (A.J.), Parker (J.D.), *9700*
- buoyant flow, hydrodynamic stability, thermal instability, transition flow, Gebhart (B.), Mahajan (R.L.), *9701*
- aquifers, conduction (heat), geothermal reservoirs, heat transfer (combined modes), thermosyphons, Torrance (K.E.), Chan (V.W.C.), *9724*
- absorption, convection, heat addition, radiant interchange, thermal plumes, Yucel (A.), Bayazitoglu (Y.), *9727*
- adsorption, buoyant flow, heat transfer (combined modes), radiant interchange, solar radiation, Fathalah (K.A.), Elsayed (M.M.), *9729*
- extinguishment, flame propagation, Krivulin (V.N.), Kudryavtsev (E.A.), (et al.), *9750*
- combustion, navier stokes equation, Zakarin (E.A.), Kashkarov (V.P.), (et al.), *9779*
- asymptotic behavior, corners, porous media, Liu (C.Y.), Ismail (K.A.R.), *9901*
- clouds, heat transfer (atmospheric), Haman (K.E.), Niewiadomski (M.), *9931*
- boundary layer (atmospheric), clouds, mixing layers, Manton (M.J.), *9932*
- asymptotic methods, boundary layer, buoyant flow, stokes flow, wells, De Socio (L.M.), Gaffuri (G.), (et al.), *10568*
- boussinesq equation, convection (benard), heat addition, navier stokes equation, Frick (H.), Clever (R.M.), *10579*
- heat transfer, laminar flow, tube bundles, Magallon (D.), *10587*
- cylindrical bodies, heat transfer, spherical bodies, viscous effects, Ingham (D.B.), *10589*
- mass transfer, packed beds, porous media, Gabitto (J.F.), Bohm (E.), *10689*
- magneto fluid dynamics, oscillating bodies, plates (vertical), unsteady flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10739*
- magneto fluid dynamics, oscillating bodies, plates (vertical), stokes flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10740*
- contamination, diffusion, fracture, porous media, Nuttall (H.E.), Ray (A.K.), *10829*
- heat addition, porous media, rayleigh number, thermal instability, Horne (R.N.), Caltagirone (J.-P.), *11369*
- boundary layer, curvature, cylindrical bodies, oscillations, spherical bodies, temperature, Srivastava (A.C.), Bhattacharjee (R.C.), *11370*
- heat transfer, laminar flow, stratification, Venkatachala (B.J.), Nath (G.), *11371*
- heat sources, stratified flow, Tupitsyn (V.S.), Chashechkin (Yu.D.), *11514*
- conductivity, convection (benard), heat addition, slabs, thermal instability, Proctor (M.R.E.), *11763*

convergence, collocation, numerical methods, singular integral equations, Tsamasphyros (G.), Theocaris (P.S.), *45*
- design (optimum), mathematical methods, newton method, Watson (L.), Yang (W.H.), *56*
- kepler equation, newton method, numerical methods, orbit mechanics, Broucke (R.), *880*
- euler equations, mathematical methods, reynolds number (high), vorticity, Hald (O.H.), *1121*
- approximations, computing techniques, newton method, Potra (F.A.), *1123*
- approximations, fredholm equations, Vorobev (S.N.), *2014*
- nonlinear programming, optimization, penalty function, Fujimoto (H.), Fujii (S.), (et al.), *2033*
- approximations, integro differential equations, iterative methods, volterra equations, Vata (P.), *2051*
- integration, singular integral equations, Tsamasphyros (G.), Theocaris (P.S.), *2052*
- finite element methods, stiffness matrix, Bergan (P.G.), *2068*
- computing techniques, heat transfer, pade approximation, perturbation methods, Aziz (A.), *3112*
- initial value problems, stability theory, survey, Parter (S.V.), *3125*
- finite element techniques, flexible bodies, geometric nonlinearities, large displacement, Mohr (G.A.), Milner (H.R.), *3142*
- iterative methods, loads, radial loading, Gorodetskii (A.V.), *3273*
- conduction (unsteady), crank-nicolson scheme, mesh generation, stability theory, Jamet (P.), *4181*
- algorithms, iterative methods, optimal control, optimization, Allwright (J.C.), *4997*
- frechet derivative, iterative methods, newton method, Groze (S.), *5010*
- finite element methods (hybrid), structural analysis, Spilker (R.L.), Daugirda (D.M.), *5035*
- computing techniques, fibers, probability, Harlow (D.G.), Phoenix (S.L.), *5138*
- finite difference methods, fluid mechanics, viscous flow, vortex flow, Krause (E.), *5409*
- mathematical methods, noise (random), stochastics, Korostelev (A.P.), *6091*
- computing techniques, laplace transform, Karimbaev (T.D.), Nozhnitskii (Yu.A.), *6093*
- control, digital simulation, runge kutta method, Tuschak (R.), *6100*
- mesh generation, stochastics, Hoffman (R.E.), Guerra (F.M.), (et al.), *6111*
- boundary layer (turbulent), computing techniques, galerkin method, Soliman (M.O.), Baker (A.J.), *6639*
- differentiation, iterative methods, parabolic equations, Heron (B.), *7183*
- algorithms, descent, minimization, Cohen (A.I.), *7193*
- boundary value problems, iterative methods, newton method, Paumier (J.-C.), *7195*
- estimation, galerkin method, norms, parabolic equations, Thomee (V.), *7199*
- mathematical methods, parabolic equations, stability (numerical), Crouzeix (M.), *7201*
- ill posed problems, least squares, mathematical models, minimization, Seidman (T.I.), *8133*
- finite difference methods, mathematical methods, parabolic equations, Heron (B.), *9114*
- finite element techniques, interpolation, mesh generation, Babuska (I.), Szabo (B.), *9128*
- corners, dirichlet problem, finite element methods, lagrange multiplier, Pitkaranta (J.), *9133*
- boundary layer, finite difference methods, finite element techniques, galerkin method, Soliman (M.O.), Baker (A.J.), *9573*
- series, transforms, Jones (B.), *10040*
- linear theory, minimax techniques, Panin (V.M.), *10051*
- finite element techniques, korteweg de vries equation, Arnold (D.N.), Winther (R.), *10064*
- developing flow, ducts (variable area), power law fluids, velocity profiles, Jarzebski (A.B.), Wilkinson (W.L.), *10443*
- algorithms, identification, iterative methods, linear systems, Tsypkin (Y.Z.), Avedyan (E.D.), (et al.), *11098*

convex programming, computing techniques, nonlinear programming, Oelschlagel (D.), Susse (H.), *1108*
- algorithms, gradient techniques, iterative methods, Ilioi (G.), *1118*
- games, iterative methods, Khachiyan (L.G.), Erlikh (A.I.), *2034*
- fractional convex programming, linear systems, optimal control, synthesis, Pestryakov (A.K.), *4229*
- design (minimum weight), shape factors, trusses, Svanberg (K.), *7593*

conveyors, pneumatic transport, transport, two phase flow, Kraus (M.N.), *2982, book*
- dynamic response, particle dynamics, vibration (forced), Kogan (E.A.), *3342*
- belts, plates (circular), shells (cylindrical), De Boer (R.), Kuntzsch (V.), (et al.), *8242*
- granular media, rotating disks, screws, Rademacher (F.J.C.), *8916*

Conway (H.D.), see Kuo (Y.-M.), *245*
- see Thornton (D.R.), *306*

Cook (B.D.), see Cavanagh (E.), *1809*

Cook (G.), see Yen (K.), *4212*

Cook (P.A.), lyapunov's functions, nonlinear theory, stability theory, *3148*

Cook (R.D.), finite element techniques, geometric nonlinearities, material nonlinearities, stiffness matrix, structural analysis, *1127, book*
Cook (R.O.), experimental mechanics, fiber optics, measurements (dynamic), shock, Hamm (C.W.), (et al.), *6320*
Cook (T.L.), acoustic waves, compressible flow, multiphase flow, nonequilibrium flow, numerical methods, rarefied flow, shock waves, Demuth (R.B.), (et al.), *11426*
Cook (T.S.), see Sheldon (G.P.), *2416*
- see Lankford (J.), *7476*

Cooke (C.C.), algorithms, kalman filters, phased array, sensitivity, *11079*
Cooke (C.H.), finite difference methods, stream function, viscous flow, vorticity, *583*
- boundary conditions, computing techniques, slots, walls, *3655*
- compressible flow, finite element techniques, navier stokes equation, shear layer, supersonic flow, unsteady flow, Blanchard (D.K.), *11429*

Cooke (M.H.), see Bridgwater (J.), *6998*
Cookson (R.A.), bearings, damping, flexible bodies, rotors, squeeze films, vibration isolation, Kossa (S.S.), *11340*
coolers, convection (forced), forced systems, heat exchangers, heat transfer, pressure drop, Gianolio (E.), Cuti (F.), *6813*
- absorption, solar energy, Grossman (G.), Bourne (J.R.), (et al.), *7869*
- channel flow, cooling, power generation, spray canals, sprays, Chaturvedi (S.K.), Porter (R.W.), *10642*

Cooley (C.), see Neuzil (C.E.), *5266*
cooling, casting, freezing, rupture, shells, stefan problem, Oki (S.), *440*
- aerodynamics, axial turbines, heat transfer, one dimensional flow, Sirotkin (Ya.A.), *701*
- film cooling, injection, transpiration cooling, Crawford (M.E.), Kays (W.M.), (et al.), *726*
- heat transfer, impact jets, impingement cooling, jets, turbomachinery, Hrycak (P.), *729*
- evaporation, heat transfer, mass transfer, water, Arefyev (K.M.), Averkiyev (A.G.), *802*
- plates (perforated), turbulent flow, Glazkov (V.V.), Gusev (M.D.), (et al.), *817*
- combustion chambers, flames, gas turbines, Sudarev (A.V.), *846*
- digital simulation, plumes, Gaillard (P.), *1574*
- heat transfer, high temperature, hydrodynamics, impingement cooling, sprays, Urbanovich (L.I.), Goryainov (V.A.), (et al.), *1663*
- boiling, film cooling, impingement cooling, sprays, Ishigai (S.), Nakanishi (S.), (et al.), *1664*
- boiling, thermal properties, transition boiling, unsteady flow, Berlin (I.I.), Kalinin (E.K.), (et al.), *1671*
- heat exchangers, nuclear reactors, thermal instability, Proshutinskii (A.P.), Lobachev (A.G.), *1713*
- nuclear reactors, rewetting, transition boiling, Kim (A.K.), Lee (Y.), *1714*
- air conditioning, radiant interchange, solar collectors, Jones (C.B.), Smetana (F.O.), *1722*
- nuclear power, ocean, pumps, Huang (B.J.), *1912*
- difference equations, metals, parabolic equations, Drenska (N.T.), *2037*
- convection (free), heat transfer, nuclear reactors, Agrawal (A.K.) eds., Guppy (J.G.), *2797, book*
- channel flow, heat exchangers, heat transfer, laminar flow, Nikitenko (N.I.), Tsybulenko (E.V.), (et al.), *2829*
- heating, solar collectors, solar distillation, Ward (D.S.), *2834*
- air conditioning, analytical methods, heat exchangers, Sofrata (H.M.), *2838*
- combustors, gas turbines, Sudarev (A.V.), *2871*
- anisotropic media, polymers, shells (cylindrical), shells (thick), thermal stresses, Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- drag, nacelle, wind tunnels, wings, Corsiglia (V.R.), Katz (J.), (et al.), *3731*
- aerodynamic performance, axial turbines, design, gas turbines, Yamamoto (A.), Takahara (K.), (et al.), *3741*
- compressors, control, mathematical models, screw compressors, Airila (M.), *3748*
- duct flow, heat transfer, plates (parallel), roughness, turbulent flow, Ichimiya (K.), Hasegawa (S.), (et al.), *3788*
- energy conservation, energy conversion, energy storage, heating, Diamant (R.M.E.), Kut (D.), *3833, book*
- liquid fuels, rockets, Price (H.G.), *3884*
- axial turbines, convection (forced), gas turbines, surface jets, Repukhov (V.M.), Shveta (I.T.), *4676*
- boundary layer (thermal), convection (free), fiber optics, optical techniques, Kuiken (H.K.), *4695*
- extended surfaces, fins, heat addition, Toth (K.), *4720*
- annular flow, lasers, transient loading, Dulnev (G.N.), Gurev (Yu.L.), (et al.), *5540*
- blades, high pressure, turbomachinery, Holland (M.J.), Thake (T.F.), *5560*
- air conditioning, radiant interchange, scale models, variational methods, Miyagawa (Y.), *5564*
- channel flow, cryogenics, transient effects, Gorbachev (S.P.), Krikunov (A.A.), (et al.), *5571*
- boiling, channel flow, circulation, heat exchangers, thermal instability, Braginskiy (A.M.), Ivanov (L.B.), *5593*
- cooling ponds, power plants, thermal effects, Kvon (V.I.), *5595*
- heat pipes, space vehicles, thermal loading, Vasilev (L.L.), Gil (V.V.), (et al.), *5599*
- heat transfer, internal combustion engines, piston rings, Ustinov (A.N.), Neznaev (A.N.), (et al.), *5648*
- blades, gas turbines, high temperature, water, El-Masri (M.A.), Louis (J.F.), *5657*
- cooling ponds, heat transfer, thermal diffusion, Jain (S.C.), *5904*
- convection (free), currents, heat transfer, lakes, Sturm (T.W.), Kennedy (J.F.), *5924*
- cooling ponds, heat transfer, Jirka (G.H.), Watanabe (M.), *5925*
- channel flow, injection molding, polymers, two dimensional flow, viscoelastic fluids, Isayev (A.I.), Hieber (C.A.), *6656*
- hydrodynamic stability, thermal instability, Kolos (V.P.), Sorokin (V.N.), *6814*
- drops, heat transfer, Mori (Y.H.), Nagai (K.), (et al.), *6825*
- helium, liquid vapor mixture, regulator problem, temperature, valves, Novikov (N.V.), Gorodyskii (N.I.), (et al.), *7575*
- annular flow, convection (forced), critical heat flux, tube bundles, Katto (Y.), *7833*
- boiling, channel flow, convection (forced), critical heat flux, heat exchangers, Zeigarnik (Yu.A.), Privalov (N.P.), (et al.), *7834*
- cavities, convection (free), heat transfer, laminar flow, transient effects, water, Robillard (L.), Vasseur (P.), *7844*
- annular flow, cables, electrical components, joints, thermal effects, Abdel Aziz (M.M.), Riege (H.), *7845*
- cavitation, containment, damage, nuclear reactors, Jones (A.V.), *8517*
- convection (forced), cylindrical bodies, film boiling, spherical bodies, stagnation point, Epstein (M.), Hauser (G.M.), *8687*
- adsorption, energy conservation, latent heat, solar collectors, Peng (C.S.P.), Howell (J.R.), *8763*
- cooling ponds, energy storage, power generation, transient effects, Adams (E.E.), Koussis (A.D.), *9741*
- air conditioning, heating, thermal loading, Urano (Y.), Nanri (H.), (et al.), *9742*
- critical flow, drawing, glass, solidification, Kunitomo (T.), Ebisu (A.), *10596*
- heat pipes, superfluids, Murakami (M.), *10627*
- convection (forced), heat transfer (atmospheric), solar collectors, wind, Ramsay (J.W.), Charmchi (M.), *10637*
- channel flow, coolers, power generation, spray canals, sprays, Chaturvedi (S.K.), Porter (R.W.), *10642*
- axial turbines, cascades, gas turbines, heat transfer, Gorelov (G.M.), Fishbein (V.D.), (et al.), *11748*
- crossflow, evaporation, heat exchangers, regenerators, Maclaine-Cross (I.L.), Banks (P.J.), *11767*

cooling towers, buckling, design, shells (hyperbolic), vibration, Form (J.), Krings (W.), (et al.), *321*
- shells, wind loads, Harnach (R.), Niemann (H.-J.), *1450*
- energy conservation, heat addition, heat exchangers, heat transfer, Cavaseno (V.) eds., Staff Of Chemical Engineering, *1712, book*
- convection (forced), evaporation, waste heat, Hane (C.E.), *1906*
- dynamic analysis, finite element methods, frequency response, vibration (free), Cedolin (L.), Mang (H.A.), (et al.), *2348*
- curvature, imperfection sensitivity, stress analysis, Ellinas (C.P.), Croll (J.G.A.), (et al.), *2540*
- dynamic analysis, vibration (free), Nelson (R.L.), *3381*
- imperfections, reinforced concrete, shells, stress analysis, Kato (S.), Yokoo (Y.), *3552*
- finite element methods, seismic loading, Gran (C.S.), Yang (T.Y.), *4039*
- bifurcation, drops, plumes, vortices, Chen (N.C.J.) Jung (L.), *4058*
- experimental mechanics, shells, wind loads, Niemann (H.J.), Ruhwedel (J.), *4542*
- dynamic response, vibration (free), Nelson (R.L.), *6522*
- reinforced concrete, thermal effects, Orosz (A.), *8452*
- design, shells (hyperbolic), Almasi (J.), *8458*
- buckling, columns, Kovacs (B.), *8459*
- heat exchangers, rotary dry cooling towers, rotating bodies, Valenzuela (J.A.), Glicksman (L.R.), *8755*
- membrane theory, shells (of revolution), thin walled structures, Szalai (J.), *10151*
- evaporation, Ward (G.H.) Jr., *10655*
- evaporation, Gosi (P.), *10656*

Coope (I.D.), algorithms, mathematical programming, numerical methods, optimization, quadratic programming, Fletcher (R.), *11081*
Cooper (C.K.), see Pearce (B.R.), *8032*
Cooper (G.A.), see Ryhming (I.), *11180*
Cooper (K.R.), see Templin (J.T.), *6871*
Cooper (M.G.), binary flow, boiling, bubble dynamics, Stone (C.R.), *12035*
Cooper (P.A.), see Sawyer (J.W.), *10383*
Cooper (R.E.), see Pepper (D.W.), *8584*
Cooperrider (N.K.), see Fries (R.H.), *7151*
Coppa (G.), approximations, boltzmann equation, green function, scattering, Ravetto (P.), *1529*
copper, crack growth, fatigue, fracture, microstructures, stress intensity factor, Mullner (H.), Weiss (B.), *444*
- composite materials, friction, polymers, Savitskii (A.I.), *3046*

- creep, material testing, necking, Baranov (N.A.), Likhachev (V.A.), (et al.), *6430*
- elastic constants, lattices, polycrystalline materials, shear, strain, Gairola (B.K.D.), Kroner (E.), *6468*
- aluminum alloys, delamination, finite element methods, friction (sliding), wear, Ohmae (N.), Tsukizoe (T.), *7089*
- cements, interface cracks, stochastics, weibull statistics, Kittl (P.), Galleguillos (E.), *8225*
- aluminum alloys, crystals, deformation (plastic), dislocations, plasticity, Kolkman (H.J.), *10336*

copper alloys, residual stresses, stress relaxation, x ray techniques, Amin (K.E.), Ganesh (S.), *4510*
- aluminum alloys, dislocations, experimental results, micromechanisms, Cherns (D.), Hirsch (P.), (et al.), *5120*
- disks, machine design, springs, steel, Curti (G.), Orlando (M.), (et al.), *5374*
- aluminum alloys, damping capacity, deformation (plastic), superplastics, Furushiro (N.), Takimoto (J.), (et al.), *6188*
- creep, maraging steel, steel, stress relaxation, titanium, Pollock (J.T.A.), Barton (S.G.), (et al.), *6473*

Cops (A.), see Klein (C.), *909*

Corapcioglu (M.Y.), highways, loads, soils, wheels, Ural (A.N.), *3416*
- see Brutsaert (W.), *5907*

Corda (S.), see Anderson (J.D.) Jr., *3737*

coriolis forces, containers (partially filled), sloshing, spinning bodies, vorticity, El-Raheb (M.), Wagner (P.), *673*
- baroclinic instability, currents, eddies, geostrophic flow, ocean air interaction, Mcwilliams (J.C.), Holland (W.R.), (et al.), *1890*
- hydrodynamic stability, rotating fluids, Gledzer (Ye.B.), Makarov (A.L.), (et al.), *7743*
- atmospheric circulation, Ramenskiy (A.M.), *9933*
- atmospheric circulation, rotating fluids, Zeng (Q.-C.), Ye (D.-Z.), *9936*
- bottom irregularities, oceanography, tides, vorticity, Zimmerman (J.T.F.), *10858*
- currents, oceanography, Kao (T.W.), *10865*
- geostrophic flow, hydrodynamic stability, Bubnov (B.M.), *11528*

Corless (M.J.), adaptive systems, design, dynamic analysis, feedback, Leitmann (G.), *11090*

Corley (H.W.), algorithms, mathematical programming, optimization, pareto optimization, *167*

Corman (D.E.), crack opening displacement, deformation (plastic), j-integral, *3462*

Cornea (I.), dislocations, faults, initiation, modeling, seismic waves, Misicu (M.), (et al.), *10845*

corners, elastic behavior, numerical methods, singular integral equations, stress intensity factor, Theocaris (P.S.), Ioakimidis (N.I.), *478*
- fasteners, finite element methods, holes, stress intensity factor, Grandt (A.F.) Jr., Kullgren (T.E.), *480*
- turbomachinery, turbulent flow, velocity measurement, Mojola (O.O.), *607*
- cracks, diffraction, elastic waves, interference, Achenbach (J.D.), Norris (A.N.), *1305*
- boundary layer, three dimensional flow, transition, Nomura (Y.), Kotake (M.), *1542*
- crack opening displacement, cracks, finite element techniques, singularities, Wait (R.), *2074*
- compressible flow, transonic flow, viscid inviscid flow, Diesperov (V.N.), *2613*
- elasticity (linear), plates, re-entrant corners, stress intensity factor, Theocaris (P.S.), Prassianakis (J.), *3233*
- crack initiation, cracks, plates (reinforced), reliability, Brussat (T.R.), Chiu (S.T.), (et al.), *3443*
- compressible flow, discontinuities, transonic flow, Ivanov (V.A.), Chernov (I.A.), *3638*
- subsonic flow, turbulence, Arnal (D.), Cousteix (J.), *3647*
- fluid mechanics, transition, Barclay (W.H.), Ridha (A.H.), *5427*
- elasticity (linear), inclusions, stress concentration, Gomez (C.), Dundurs (J.), *8186*
- computing techniques, fracture mechanics, singular integral equations, stress intensity factor, Ioakimidis (N.I.), Theocaris (P.S.), *8419*
- modeling, pressure change, vortices, Conlisk (A.T.), Rockwell (D.), *8536*
- lifting bodies, two dimensional flow, variational methods, Djaoua (M.), *8538*
- contact problems, thermal contact resistance, thermoelasticity, Comninou (M.), Dundurs (J.), *9042*
- convergence, dirichlet problem, finite element methods, lagrange multiplier, Pitkaranta (J.), *9133*
- complex variables, crack initiation, holes, stress intensity factor, Hasebe (N.), Ueda (M.), *9403*
- boundary layer, secondary flow, viscous flow, Mojola (O.O.), *9567*
- asymptotic behavior, convection (free), porous media, Liu (C.Y.), Ismail (K.A.R.), *9901*
- boundary layer, curvature, three dimensional flow, Barclay (W.H.), *10429*

Cornwell (L.W.), algorithms, coding, least squares, Kocman (M.G.), (et al.), *5018*

Corotis (R.B.), see Chalk (P.L.), *1432*

Corradi (L.), deformation (plastic), elastoplasticity, finite element methods, plane strain, Gioda (G.), *3260*

Corriga (G.), canals, frequency response, gates, mathematical models, unsteady flow, Sanna (S.), (et al.), *8509*

corrosion, additives, aluminum alloys, lubrication (boundary), wear, Poole (W.), Sullivan (J.L.), *3041*
- electrochemical noise, stress corrosion, Hladky (K.), Dawson (J.L.), *5335*
- fouling, heat exchangers, heat transfer, microbial fouling, precipitation, solidification, Somerscales (E.F.C.) eds., Knudsen (J.G.), *5597, book*
- grain boundaries, stainless steels, ultrasonics, Prikhodko (V.N.), *6493*
- cavitation, erosion, surface effect, vibration, Hoss (S.), Hirth (F.W.), (et al.), *7810*
- computing techniques, materials properties, Jankowski (J.), Juchniewicz (R.), *8381*

corrosion fatigue, fatigue, fretting, metals, survey, Kovalevskii (V.V.), *453*
- fatigue, fretting, surveys, wear, Waterhouse (R.B.) ed., *1358, book*
- airplane structures, aluminum alloys, bonding, laminates, Vogelesang (L.B.), Mariseen (R.), (et al.), *2424*
- elliptical cracks, failure, fatigue, glass, Doremus (R.H.), *5286*
- crack growth, environmental tests, steel, welded joints, Davis (D.A.), Czyryca (E.J.), *6428*
- crack growth, environmental tests, fatigue, Wei (R.P.), Simmons (G.W.), *7477*
- crack growth, heat treatment, steel, Romaniv (O.N.), Voldemarov (A.V.), (et al.), *7493*
- crack growth, microcracks, steel, Romaniv (O.N.), *7494*
- crack growth, hydrogen embrittlement, low cycle fatigue, stress intensity factor, Endo (K.), Komai (K.), (et al.), *7495*
- aluminum alloys, high strength, powder metallurgy, Pickens (J.R.), *8368*
- cavitation, coatings, erosion, Okada (T.), Awazu (K.), (et al.), *9023*

Corsanego (A.), bifurcation, elastic bodies, energy methods, stability theory, Tafanelli (A.), *1244*

Corsiglia (V.R.), cooling, drag, nacelle, wind tunnels, wings, Katz (J.), (et al.), *3731*

Corson (W.D.), ocean waves, surface waves, wave height, Resio (D.T.), *7052*

Corum (J.M.), anelasticity, high temperature, nuclear reactors, structural design, *8196*

Cossalter (V.), see Angrilli (F.), *9512*

cosserat solids, elasticity (nonlinear), micromechanics, Brunk (G.), *3*
- constitutive equations, micropolar media, Cowin (S.C.), Leslie (F.M.), *4*
- continuum mechanics, micropolar media, Capriz (G.), Podio-Guidugli (P.), *1969*
- acceleration waves, shock waves, thermoelasticity (transient), Nistor (I.), *4129*
- anisotropic media, membrane theory, moving surfaces, shells (thin), Murdoch (A.I.), Cohen (H.), *4926*
- bending, plates, plates (annular), Chawla (A.N.), Chaudhary (H.R.), *5159*
- micromechanics, thermoelasticity, Smirnov (V.N.), *5798*
- boundary conditions, conservation laws, micropolar media, Kozak (I.), Szeidl (G.), *7263*
- combined loading, cylindrical bodies, micropolar media, Cheverton (K.J.), Beatty (M.F.), *8182*
- micromechanics, plates, shells, Kayuk (Ya.F.), Zhukovskii (A.P.), *11116*

Cost (T.L.), see Jackson (J.E.) Jr., *1606*
- missile structures, nuclear radiation, x ray techniques, *2977*
- see Weeks (G.E.), *7301*
- see Weeks (G.E.), *7922*

Costa (D.G.), elastic waves, energy splitting, hyperbolic equations, radon transform, transforms, wave equations, Strauss (W.A.), *4165*

Costes (J.), flotation, turbulence (structure), turbulent flow, Airan (C.), (et al.), *7750*

Costolloe (S.P.), see Jost (G.S.), *1408*

Cote-Dunajewski (T.), acoustics, attenuation, ducts, resonance, *9846*

Cotterell (B.), bolted joints, screws, split nuts, *5379*

Cotton (A.P.), see West (J.R.), *11777*

Cotton (F.W.), hydrodynamic stability, poiseuille flow, rotating fluids, Salwen (H.), *8607*

Couenon (J.C.), see Mouton (H.), *2808*

Couchet (G.), propulsion, two dimensional flow, unsteady flow, wing body combinations, *2740*

Couder (Y.), hydrodynamic stability, membranes, shear flow, vortex flow, *3702*

couette flow, hydrodynamic stability, laser doppler velocimeters, taylor vortices, Vasilenko (Yu.G.), Kuznetsov (E.A.), (et al.), *639*
- buoyancy, hydrodynamic stability, stability curve, Kolesov (V.V.), *1576*
- analytical methods, magneto fluid dynamics, plates (parallel), two dimensional flow, Kishan (H.), Sharma (G.C.), *1772*
- annuli, cylindrical bodies, vortex flow, Stuart (J.T.), Diprima (R.C.), *3660*
- buoyancy, pressure gradient, unsteady flow, velocity profiles, Andreichenko (K.P.), Smarun (A.B.), *3668*
- buoyancy, hydrodynamic stability, Kolesov (V.V.), *3698*
- end effects, hydrodynamic stability, taylor number, Hocking (L.M.), Skiepko (J.), *4640*
- hall effect, heat transfer, magneto fluid dynamics, rotating disks, Vidyanidhi (V.), Krishnam Raju (G.), (et al.), *4745*
- constitutive equations, micromechanisms, viscoelastic fluids, Quentrec (B.), *5382*
- constitutive equations, shear flow, viscometry, Goddard (J.D.), *6593*
- heat transfer, rollers, rotating cylinders, slots, Miesch (H.), *6660*
- statistical mechanics, thermodynamics (nonequilibrium), viscosity, Naitoh (T.), Ono (S.), *6749*

- canals, ships, wakes, Kulczyk (J.), *8048*
- experimental methods, unsteady flow, viscometry, Ravey (J.C.), Dognon (M.), (et al.), *8494*
- hydrodynamic stability, rotating bodies, spherical bodies, vortices, Hocking (L.M.), *8605*
- hydrodynamic stability, numerical methods, oscillations, Carmi (S.), Tustaniwskyj (J.I.), *8606*
- bearings (hydrodynamic), friction (solid fluid), torque, viscosity, Pascovici (M.D.), *9025*
- magneto fluid dynamics, plates (parallel), porous walls, unsteady flow, Mishra (S.P.), Muduli (J.C.), *10738*
- annular flow, magneto fluid dynamics, rotating cylinders, stability theory, Antimirov (M.Ya.), Kolyshkin (A.A.), *10746*
- gases, heat transfer, plates (parallel), Bishaev (A.M.), Rykov (V.A.), *11450*
- heat transfer, kinetic theory, porous surfaces, rarefied gases, Khidr (M.A.), Abdel-Gaid (M.A.), *11454*
- hydrodynamic stability, tollmien schlichting waves, transition, waves (azimuthal), Lvov (V.S.), Predtechensky (A.A.), *11487*
- dilute solutions, hydrodynamic stability, polymers, Lhuillier (D.), *11502*
- heat transfer, magneto fluid dynamics, plates (parallel), theory, Karimov (I.K.), Ryadno (A.A.), *11810*

Couli (A.), see Wong (Y.C.), *2267*
- beams (cantilever), beams (composite), buckling, buckling, holes, Alvarez (M.C.), *2292*
- bending, floors, shear walls, slabs, stiffness, Wong (Y.C.), *3553*
- beams (thin section), shear walls, thin walled structures, Low (C.K.), *6211*
- elastoplasticity, shear walls, structural analysis, torsion, Tawfik (S.Y.), *8457*

Coulman (C.E.), boundary layer (atmospheric), convection, mixing layers, turbulence (geophysical), *5944*
- clouds, meteorology (physical), turbulence (geophysical), *8994*

Counselman (C.C.) III, see Cappallo (R.J.), *3913*

counterflow, aerodynamics, finite difference methods, jets, Peck (R.E.), *630*
- hydrodynamic stability, jets, liquids, Entov (V.M.), Yarin (A.L.), *636*
- jets, similarity methods, supersonic flow, Kalinin (V.M.), Melbard (A.M.), *3691*
- tubes, two phase flow, Kalb (C.E.), Smith (J.K.) Jr., *4012*
- channels (closed), turbulent flow, visualization, vortex flow, Humphrey (J.A.C.), Li (S.), *5397*
- cellular motions, circulation, duct flow, Kimura (S.), Bejan (A.), *9703*
- duct flow, film flow, heat transfer, mass transfer, roughness, Fujita (H.), Takahama (H.), (et al.), *10581*

couple stresses, beams (flexural), cylindrical bodies, micropolar media, Craciun (I.), *1057*
- crack branching, crack propagation, stress concentration, stress intensity factor, Itou (S.), *2447*
- elasticity (linear), functional analyis, Martynenko (M.D.), Shipka (I.G.), (et al.), *5077*
- composite materials, elasticity (nonhomogeneous), elasticity (nonlocal), nonhomogeneous media, Chigarev (A.V.), *5096*
- bearings (slider), friction, lubrication (hydrodynamic), non newtonian flow, Ramanaiah (G.), Sarkar (P.), *5986*
- compression, cylindrical bodies, Tzung (F.K.), *6161*
- blood flow, diffusion, non newtonian flow, Soundalgekar (V.M.), Chaturani (P.), *6655*
- micropolar media, polar fluids, rotating bodies, spherical bodies, Lakshmana Rao (S.K.), Iyengar (T.K.V.), *8487*
- poiseuille flow, polar fluids, Chaturani (P.), *8497*
- blood flow, poiseuille flow, Chaturani (P.), Rathod (V.P.), *8577*
- bearings (roller), lubrication (elastohydrodynamic), non newtonian flow, rolling contact, Sinha (P.), Singh (C.), *9033*
- blood flow, mixture theories, particle fluid flow, polar fluids, Chaturani (P.), Upadhya (V.S.), *9060*

couplings, deformation, drives, Fessler (H.), Stewart (R.W.), *2555*
- fluid couplings, oscillations, torque, Uchiyama (K.), Takagi (T.), (et al.), *3572*
- four bar linkage, kinematics, linkages, mechanisms (planes), Hunt (K.H.), Fichter (E.F.), *6562*
- modes, scattering, shallow water, underwater acoustics, Mcdaniel (S.T.), *6902*
- half space, rayleigh waves, scattering, viscoelastic fluids, Angel (Y.C.), Bogy (D.B.), *9338*
- acoustics, spherical bodies, vibration, Reese (J.M.), Thompson (W.) Jr., *11984*

Coupry (G.), modal control, structural analysis, vibration (forced), *6319*

Courtney (S.J.), see Pocock (G.), *4893*

Cousteix (J.), see Arnal (D.), *3647*
- boundary layer (three dimensional), boundary layer (turbulent), separation, singularities, Houdeville (R.), *3652*
- boundary layer (turbulent), flow reversal, return flow, unsteady state, Le Balleur (J.-C.), (et al.), *7703*

Coutanceau (J.), see Doan-Kim-Son, *9695*

Cowan (J.D.), see Ermentrout (G.B.), *9197*

Cowin (S.C.), constitutive equations, cosserat solids, micropolar media, Leslie (F.M.), *4*
- see Van Buskirk (W.C.), *1031*
- dilatancy, granular media, waves, Nunziato (J.W.), *1304*

Cowking (E.W.), bearings (journal), computer aided design, finite difference methods, lubrication (hydrodynamic), reynolds equation, thermal effects, *9964*

Cowles (B.A.), alloys, crack initiation, crack propagation, cyclic testing, fatigue, high temperature, turbines, Sims (D.L.), (et al.), *2494*

Cox (E.P.), ductile fracture, fracture mechanics, fracture toughness, steel, Lawrence (F.V.) Jr., *7527*

Cox (F.W.), see Raible (C.J.), *1762*

Cox (G.M.A.), see Welbourn (D.B.), *3426*

Coy (J.J.), see Huston (R.L.), *2558*
- bearings (ball), experimental methods, film thickness, high speed, lubrication (elastohydrodynamic), Zaretsky (E.V.), *4899*

Craciun (I.), beams (flexural), couple stresses, cylindrical bodies, micropolar media, *1057*

crack arrest, composite materials, crack propagation, polymers, Barnes (C.R.), Rosenfield (A.R.), *455*
- caustics, photography, stress intensity factor, Theocaris (P.S.), Milios (J.), *472*
- composite materials, dynamic loads, interface cracks, stress intensity factor, Theocaris (P.S.), Milios (J.), *475*
- crack initiation, dynamic fracture, fracture mechanics, fracture toughness, Loreim (J.), *498*
- dynamic fracture, impact, shells (cylindrical), surface flaws, Popelar (C.H.), Gehlen (P.C.), (et al.), *1383*
- caustics, crack propagation, dynamic loads, plates, Theocaris (P.S.), Milios (J.), *2451*
- alloys, crack growth, microcracks, steel, Varga (T.), Allertshammer (W.), (et al.), *3432*
- crack opening displacement, dugdale model, dynamic fracture, Achenbach (J.D.), Neimitz (A.), *3471*
- cyclic loading, cyclic testing, fatigue, residual stresses, Romaniv (O.N.), Siminkovich (V.N.), (et al.), *6420*
- bimodulus materials, crack coalescence, crack propagation, discontinuities, Theocaris (P.S.), Milios (J.), *7532*
- composite structures, crack propagation, dynamic fracture, finite difference methods, Williams (J.H.) Jr., Lee (S.S.), (et al.), *8409*
- fracture criteria, fracture toughness, material testing, pipelines, pressure vessels, Hahn (G.T.) eds., Kanninen (M.F.), *8415, book*
- crack branching, crack propagation, dynamic fracture, multiple cracks, Theocaris (P.S.), *9413*
- crack opening displacement, crack propagation, fatigue, Furuya (Y.), Shimada (H.), *10271*

crack branching, couple stresses, crack propagation, stress concentration, stress intensity factor, Itou (S.), *2447*
- biaxial loading, elliptical cracks, failure, Chang (K.J.), *3456*
- computing techniques, interface cracks, penny shaped crack, singular integral equations, Theocaris (P.S.), *7516*
- interface cracks, stress intensity factor, transforms, wiener-hopf technique, Kuliev (V.D.), *8417*
- crack arrest, crack propagation, dynamic fracture, multiple cracks, Theocaris (P.S.), *9413*

crack closure, crack growth, fatigue, material testing, three dimensional formulation, Mcgowan (J.J.), Liu (H.W.), *2412*
- crack opening displacement, crack propagation, fatigue, Lal (K.M.), Le May (I.), *3450*
- aluminum alloys, crack opening displacement, environmental tests, fatigue, Ewalds (H.L.), *5287*
- computing techniques, edge cracks, Penkov (V.B.), Tolokomnikov (L.A.), *8389*
- fatigue, inclusions, Mayes (I.C.), Baker (T.J.), *10273*
- bending, plates, Heming (F.S.) Jr., *10298*

crack coalescence, bimodulus materials, crack arrest, crack propagation, discontinuities, Theocaris (P.S.), Milios (J.), *7532*

crack control, crack initiation, cracking, ductile fracture, stress analysis, Georgiev (M.N.), Morozov (E.M.), *5341*

crack growth, creep rupture, fractographic tests, stress intensity factor, Gladshtein (V.I.), Semenova (T.N.), *441*
- fatigue, fractographic tests, steel, Kunio (T.), Shimizu (M.), (et al.), *442*
- copper, fatigue, fracture, microstructures, stress intensity factor, Mullner (H.), Weiss (B.), *444*
- hysteresis, low cycle fatigue, Radhakrishnan (V.M.), *449*
- biaxial loading, crack initiation, fatigue, life expectancy, Brown (M.W.), Miller (K.J.), *450*
- axial loading, crazing, fractography, Aleshin (V.I.), Kuvshinskii (E.V.), *457*
- griffith cracks, interaction, stress intensity factor, thermoelasticity (transient), Hata (T.), *460*
- griffith cracks, infinite medium, Yatomi (C.), *462*
- crack opening displacement, plane strain, Smith (E.), *467*
- crack propagation, cyclic loading, fatigue, j-integral, Leis (B.N.), Zahoor (A.), *468*
- acoustic emission, detection, Arora (A.), Tangri (K.), *1307*
- airplane structures, fatigue, material testing, prediction, survey, Schijve (J.), *1350*
- experimental results, fatigue, steel, Glinka (G.), Molski (K.), *1354*
- crack tip geometry, creep, Krishnan (V.M.R.), Mutoh (Y.), (et al.), *1357*
- holes, radial loading, stress intensity factor, Brussat (T.R.), *1364*
- brittle fracture, j-integral, Burns (S.J.), *1367*
- fatigue, mixed mode fracture, Sih (G.C.), Barthelemy (B.M.), *1371*

- brittle fracture, j-integral, Lin (I.-H.), Hirth (J.P.), *1372*
- ductile fracture, j-integral, path integrals, steel, Zahoor (A.), Abou-Sayed (I.S.), *1375*
- crack opening displacement, elastoplasticity, stress intensity factor, yield criteria, De Koning (A.U.), *1378*
- crack opening displacement, creep, Astafev (V.I.), *1382*
- fracture, j-integral, path integrals, Kishimoto (K.), Aoki (S.), (et al.), *1388*
- acoustic emission, nondestructive tests, pressure vessels, rupture, Ohtsuka (N.), Nakano (M.), (et al.), *1398*
- aluminum alloys, fatigue, overloads, Wei (R.P.), Fenelli (N.E.), (et al.), *1405*
- fatigue, fracture mechanics, metallic composites, Morley (J.G.), Mccoll (I.R.), *2409*
- crack closure, fatigue, material testing, three dimensional formulation, Mcgowan (J.J.), Liu (H.W.), *2412*
- environmental tests, fatigue, pressure vessels, steel, Ritchie (R.O.), Suresh (S.), (et al.), *2414*
- fatigue, probabilistic design, Tsurui (A.), Igarashi (A.), *2415*
- fatigue, high temperature, low cycle fatigue, Saxena (A.), *2417*
- fatigue, materials properties, reinforced concrete, Lovegrove (J.M.), Salah El Din (A.S.), (et al.), *2420*
- aluminum alloys, crack opening displacement, fatigue, Vogelesang (L.B.), *2423*
- aluminum alloys, cyclic loading, fatigue, Bowen (A.W.), Forsyth (P.J.E.), *2426*
- high temperature, material testing, steel, Saxena (A.), *2427*
- crack opening displacement, fatigue, Schijve (J.), *2428*
- biaxial loading, bifurcation, cracks, Viola (E.), *2436*
- crack tip geometry, elastoplasticity, finite element methods (hybrid), fracture mechanics, Rice (J.R.), Drugan (W.J.), (et al.), *2441*
- energy-release rate, j-integral, plasticity, Holstein (T.), Schmitt (W.), *2445*
- crack retardation, ductile fracture, fracture criteria, j-integral, Woo (C.W.), Kuruppu (M.D.), *2453*
- composite materials, finite element techniques, micromechanisms, thermal effects, Braun (H.), Herrmann (K.), *2456*
- j-integral, reliability, Georgiev (M.N.), Morozov (E.M.), *2462*
- deformation (plastic), impact, runge kutta method, stiffness, testing equipment, Zhitenev (V.V.), Markochev (V.M.), *2495*
- brittle fracture, brittle materials, fracture energy, graphite, Barinov (S.M.), Grevtsev (S.N.), (et al.), *2497*
- alloys, crack arrest, microcracks, steel, Varga (T.), Allertshammer (W.), (et al.), *3432*
- design, fatigue, high temperature, life expectancy, Mcgowan (J.J.), Liu (H.W.), *3436*
- fatigue, foam, material testing, polymers, Noble (F.W.), Lilley (J.), *3437*
- alloys, fatigue, low cycle fatigue, rotors, Shih (T.T.), Donald (J.K.), *3439*
- environmental tests, fatigue, material testing, steel, stress intensity factor, Stewart (A.T.), *3448*
- damage (cumulative), environmental tests, fracture mechanics, metals, Davidson (D.L.), *3449*
- crack propagation, edge cracks, viscoelastic materials, Christensen (R.M.), Wu (E.M.), *3461*
- acoustic emission, rock mechanics, Sano (O.), *3467*
- alloys, fatigue, mixed mode fracture, strain energy, Badaliance (R.), *3469*
- composite materials, crazing, penny shaped crack, stress intensity factor, Mahapatra (R.B.), Satapathy (P.K.), (et al.), *3473*
- creep, fatigue, fracture mechanics, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), *3494*
- creep, fatigue, fracture mechanics, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), (et al.), *3495*
- disks, stress intensity factor, Yarema (S.Ya.), Ivanitskaya (G.S.), *4475*
- alloys, fatigue, James (L.A.), *4476*
- fatigue, probability, random loading, Kozin (F.), Bogdanoff (J.L.), *4481*
- creep rupture, diffusion, stress intensity factor, void growth, Wilkinson (D.S.), *4487*
- finite element techniques, stress intensity factor, Nikishkov (G.P.), Vainshtok (V.A.), *4494*
- crack initiation, crack opening displacement, finite element techniques, Harrop (L.P.), *4503*
- fatigue, grain size, microstructures, steel, Kitsunai (Y.), *5284*
- charpy tests, electrical analysis, steel, Okumura (N.), Venkatasubramanian (T.V.), (et al.), *5293*
- dugdale model, fracture mechanics, griffith cracks, survey, viscoelastic materials, Kaminskii (A.A.), *5301*
- crack initiation, creep, fatigue, notch tests, prediction, Olkin (S.I.), *5331*
- corrosion fatigue, environmental tests, steel, welded joints, Davis (D.A.), Czyryca (E.J.), *6428*
- composite materials, crack initiation, delamination, fracture mechanics, Wang (A.S.D.), Crossman (F.W.), *6436*
- composite materials, crack initiation, delamination, fracture mechanics, material testing, Crossman (F.W.), Warren (W.J.), (et al.), *6437*
- acoustic emission, material testing, x ray techniques, Kuksenko (V.S.), Orlov (L.G.), (et al.), *6438*
- deformation (plastic), fracture toughness, Maslov (L.I.), *6448*
- aluminum alloys, crack resistance, fracture toughness, notch tests, Munz (D.), *6479*
- creep, elasticity (nonhomogeneous), micromechanisms, Venkateswaran (A.), Hasselman (D.P.H.), *7277*
- crack initiation, failure, steel, Reuter (W.G.), Brown (H.L.), (et al.), *7471*
- fracture mechanics, fracture toughness, steel, Radon (J.C.), De Castro (P.M.S.T.), (et al.), *7472*
- corrosion fatigue, environmental tests, fatigue, Wei (R.P.), Simmons (G.W.), *7477*
- elastoplasticity, fatigue, fractographic tests, Kobayashi (H.), Sibuya (E.), (et al.), *7481*
- aluminum alloys, low cycle fatigue, material testing, stress intensity factor, vacuum, Kirby (B.R.), Beevers (C.J.), *7484*
- fatigue, reinforced concrete, Salah El Din (A.S.), Lovegrove (J.M.), *7489*
- corrosion fatigue, heat treatment, steel, Romaniv (O.N.), Voldemarov (A.V.), (et al.), *7493*
- corrosion fatigue, microcracks, steel, Romaniv (O.N.), *7494*
- corrosion fatigue, hydrogen embrittlement, low cycle fatigue, stress intensity factor, Endo (K.), Komai (K.), (et al.), *7495*
- creep, damage, life expectancy, Kachanov (L.), *7497*
- dugdale model, films, micromechanics, optical techniques, polymers, Donald (A.M.), Kramer (E.J.), *7500*
- fracture criteria, inelasticity, thermodynamics, Nikolaevskii (V.N.), *7524*
- acoustic emission, crack propagation, energy density, Mandorini (V.), Ghelardoni (E.), (et al.), *7528*
- crack opening displacement, finite element techniques, fracture, j-integral, microcracks, reinforced concrete, Petersson (P.-E.), *7539*
- crack initiation, experimental mechanics, fracture mechanics, fracture toughness, j-integral, Morozov (E.M.), *7572*
- fracture mechanics, rocks, strength, time dependence, Wilkins (B.J.S.), *8352*
- fatigue, polymers, Radon (J.C.), *8375*
- crack opening displacement, creep, elastic behavior, Pilkington (R.), Smith (E.), *8383*
- aluminum alloys, creep, temperature, Radhakrishnan (V.M.), Mcevily (A.J.), *8384*
- ductile fracture, fatigue, fracture mechanics, fracture toughness, Sih (G.C.) eds., Valluri (S.R.), *8405, book*
- dugdale model, polymers, viscoelastic materials, Kaminskii (A.A.), *8410*
- fracture mechanics, linear theory, viscoelasticity, Mccartney (L.N.), *8413*
- low cycle fatigue, plastics, Lebedeva (M.F.), Aleshin (V.I.), (et al.), *9386*
- correlation, stochastics, stress intensity factor, Dotsenko (A.M.), Denisova (G.B.), *9388*
- fasteners, fatigue, fractographic tests, Mcgee (W.M.), Hsu (T.M.), *9414*
- caustics, crack propagation, elastodynamics, stress intensity factor, Theocaris (P.S.), Papadopoulos (G.A.), *9416*
- crack opening displacement, multiple cracks, Mills (N.J.), Walker (N.), *9417*
- composite materials, computing techniques, finite element techniques, microcracks, Ito (Y.M.), Rosenblatt (M.), (et al.), *9418*
- cyclic testing, fracture toughness, steel, Troshchenko (V.T.), Pokrovskii (V.V.), (et al.), *9431*
- aluminum alloys, brittle fracture, fracture toughness, sheet metal, stress intensity factor, Yablonskii (I.S.), *9432*
- bending, fracture toughness, steel, Mubeen (A.), *9433*
- aluminum alloys, fatigue, quenching, Petrak (G.J.), Ruschau (J.J.), *10272*
- diffraction, fatigue, nondestructive tests, ultrasonics, Sigmond (R.S.), Lien (E.), *10282*
- crack opening displacement, j-integral, Xiao (Y.-G.), Huang (G.-H.), *10286*
- elastoplasticity, fracture criteria, Theocaris (P.S.), Andrianopoulos (N.P.), *10300*
- probability, statistical theory, Schultrich (B.), Posselt (M.), *10306*
- cracking, design, holes, plates (holed), pressure vessels, stress intensity factor, Rooke (D.P.), *10332*
- calibration, finite element methods, fracture toughness, specimen design, stress intensity factor, Beech (J.F.), Ingraffea (A.R.), *10337*

crack initiation, biaxial loading, crack growth, fatigue, life expectancy, Brown (M.W.), Miller (K.J.), *450*

- brittle materials, fracture mechanics, mixed mode fracture, Tirosh (J.), Catz (E.), *456*
- crack arrest, dynamic fracture, fracture mechanics, fracture toughness, Lereim (J.), *498*
- brittle fracture, energy methods, fracture toughness, inhomogeneities, Panckevicius (G.), *1369*
- ductile fracture, yield condition, Saka (M.), Shoji (T.), (et al.), *1380*
- fatigue, fracture mechanics, notch sensitivity, stress intensity factor, Livesey (V.B.), Knott (J.F.), *2408*
- crack propagation, photoelasticity (dynamic), rayleigh waves, Rossmanith (H.P.), Fourney (W.L.), *2465*
- alloys, crack propagation, cyclic testing, fatigue, high temperature, turbines, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- ductile fracture, plasticity, rings, rotating disks, Tomkins (B.), Atkins (A.G.), *3431*
- corners, cracks, plates (reinforced), reliability, Brussat (T.R.), Chiu (S.T.), (et al.), *3443*
- fracture toughness, material testing, steel, Chizhik (A.A.), *4495*
- crack growth, crack opening displacement, finite element techniques, Harrop (L.P.), *4503*

- cracks, fatigue, structural design, Oleinik (N.V.), Medvedev (S.A.), (et al.), *5280*
- aluminum alloys, fatigue, fractographic tests, fretting, wear, Loadbeater (G.), Kovalevskii (V.V.), (et al.), *5290*
- crack growth, creep, fatigue, notch tests, prediction, Olkin (S.I.), *5331*
- crack control, cracking, ductile fracture, stress analysis, Georgiev (M.N.), Morozov (E.M.), *5341*
- cyclic loading, fatigue, fracture, stochastics, Arone (R.), *6416*
- aluminum alloys, fatigue, life expectancy, microcracks, nondestructive tests, Buck (O.), Morris (W.L.), (et al.), *6419*
- composite materials, crack growth, delamination, fracture mechanics, Wang (A.S.D.), Crossman (F.W.), *6436*
- composite materials, crack growth, delamination, fracture mechanics, material testing, Crossman (F.W.), Warren (W.J.), (et al.), *6437*
- crack propagation, fracture criteria, Fischer (K.-F.), *7467*
- ceramics, defects, nondestructive tests, stochastic systems, Evans (A.G.), Meyer (M.E.), (et al.), *7470*
- crack growth, failure, steel, Reuter (W.G.), Brown (H.L.), (et al.), *7471*
- deformation (plastic), frequency response, high cycle fatigue, Lindner (A.), Bajons (P.), (et al.), *7508*
- crack propagation, decomposition, fracture, stochastics, Ichikawa (M.), Tanaka (S.), *7509*
- crack propagation, fatigue, micromechanics, stochastics, Ghonem (H.), *7533*
- crack growth, experimental mechanics, fracture mechanics, fracture toughness, j-integral, Morozov (E.M.), *7572*
- crack propagation, high temperature, thermal loading, Lloyd (G.J.), Wood (D.S.), *8372*
- crack propagation, cyclic loading, fatigue, micromechanics, polymers, Sauer (J.A.), Richardson (G.C.), *8377*
- compression, forming, fracture, friction, metals, Matsuura (Y.), Morimoto (H.), *8432*
- fracture, fracture mechanics, strain rate, Kipp (M.E.), Grady (D.E.), (et al.), *9382*
- cracks, yield condition, Smith (E.), *9383*
- dislocations, fatigue, Tanaka (K.), Mura (T.), *9387*
- crack propagation, ductile fracture, high cycle fatigue, microcracks, Nisitani (H.), Takao (K.-I.), *9389*
- crack opening displacement, j-integral, Smith (E.), *9402*
- complex variables, corners, holes, stress intensity factor, Hasebe (N.), Ueda (M.), *9403*
- elastoplasticity, fatigue, Saanouni (K.), Bathias (C.), *10270*
- dynamic fracture, finite difference methods, griffith cracks, plates (rectangular), Perl (M.), Shmuely (M.), (et al.), *10304*
- brittle materials, cracks, failure, porous media, powders, Barinov (S.M.), Krasulin (Yu.L.), *10308*
- data analysis, gas turbines, low cycle fatigue, prediction, stresses, Doner (M.), Bain (K.R.), (et al.), *10328*
- crack propagation, fatigue, impact, polymers, Takemori (M.T.), *10331*
- beams, crack propagation, cracking, prestressed concrete, Labib (F.), Edwards (A.D.), *10361*

crack opening displacement, finite element techniques, stress intensity factor, three dimensional formulation, Tseng (A.A.), *90*

- concentrated load, fracture angle, singularities, strain energy, stress intensity factor, Gdoutos (E.E.), *458*
- biaxial loading, elasticity (linear), stress intensity factor, Gross (B.), *461*
- crack growth, plane strain, Smith (E.), *467*
- crack tip geometry, finite element techniques, patching, Jones (R.), Callinan (R.J.), *473*
- bimodulus materials, caustics, composite materials, interface cracks, stress intensity factor, Theocaris (P.S.), Stassinakis (C.A.), *474*
- finite element techniques, stress intensity factor, testing equipment, Papaspyropoulos (V.), Ahmad (J.), *477*
- elastoplasticity, j-integral, thermal loading, Aoki (S.), Kishimoto (K.), (et al.), *1374*
- crack growth, elastoplasticity, stress intensity factor, yield criteria, De Koning (A.U.), *1378*
- cracks, j-integral, plasticity, stability, Kumar (V.), Shih (C.F.), *1381*
- crack growth, creep, Astafev (V.I.), *1382*
- creep, finite element techniques, relaxation, Bassani (J.L.), Mcclintock (F.A.), *1387*
- corners, cracks, finite element techniques, singularities, Wait (R.), *2074*
- biaxial loading, estimation, fatigue, Howard (I.C.), *2418*
- aluminum alloys, crack growth, fatigue, Vogelesang (L.B.), *2423*
- crack growth, fatigue, Schijve (J.), *2428*
- cracks, fracture, plastic behavior, plates (weakened), Panasyuk (V.V.), Vitvitskii (P.M.), (et al.), *2440*
- elastoplasticity, fracture mechanics, fracture toughness, residual strength, Schwalbe (K.-H.), *2442*
- crack propagation, energy-release rate, wedges, Yatomi (C.), *2448*
- crack closure, crack propagation, fatigue, Lal (K.M.), Le May (I.), *3450*
- crack propagation, photoelasticity (dynamic), stress intensity factor, Rossmanith (H.P.), *3453*
- deformation (plastic), j-integral, Corman (D.E.), *3462*
- crack arrest, dugdale model, dynamic fracture, Achenbach (J.D.), Neimitz (A.), *3471*
- fracture toughness, material testing, stress intensity factor, surface flaws, weight function, Bar-Tikva (D.), Grandt (A.F.) Jr., (et al.), *3478*
- charpy tests, crack resistance, indentation, notch tests, Belik (A.V.), Dolzhenkov (F.E.), (et al.), *3502*
- fracture mechanics, j-integral, steel, toughness, Dahl (W.), *3503*
- environmental tests, failure, life expectancy, plastics, stress rupture, Shanahan (M.E.R.), Schultz (J.), *4486*
- crack growth, crack initiation, finite element techniques, Harrop (L.P.), *4503*
- j-integral, steel, De Castro (P.M.S.T.), Spurrier (J.), (et al.), *4505*
- finite element techniques, fracture mechanics, singularities, Okabe (M.), *5024*
- aluminum alloys, crack closure, environmental tests, fatigue, Ewalds (H.L.), *5287*
- photoelasticity, plastic flow, steel, stress intensity factor, Bandyopadhyay (S.N.), Singh (N.), (et al.), *5304*
- fracture, multiple cracks, yield condition, Smith (E.), *5305*
- boundary integral methods, edge cracks, elastic behavior, stress intensity factor, variable properties (material), Atkinson (C.), Xanthis (L.S.), (et al.), *6441*
- griffith cracks, orthotropic materials, Misra (J.C.), Mishra (M.), (et al.), *7515*
- elastoplasticity, fracture criteria, j-integral, material testing, Havas (I.), Czoboly (E.), *7526*
- crack growth, finite element techniques, fracture, j-integral, microcracks, reinforced concrete, Petersson (P.-E.), *7539*
- analysis, error, stochastics, stress intensity factor, Rossmanith (H.P.), *7540*
- aluminum alloys, fatigue, high strength, material testing, Davidson (D.L.), Lankford (J.), *8373*
- crack growth, creep, elastic behavior, Pilkington (R.), Smith (E.), *8383*
- asymptotic behavior, elasticity (nonlocal), Atkinson (C.), *8394*
- blunt bodies, fracture criteria, Kuang (Z.-B.), *8395*
- deformation (finite), elliptic equations, hyperbolic equations, Abeyaratne (R.), *8398*
- elastoplasticity, fracture criteria, j-integral, Willoughby (A.A.), Pratt (P.L.), (et al.), *8401*
- creep rupture, j-integral, path integrals, Leckie (F.A.), Mcmeeking (R.M.), *8402*
- cylindrical bodies, dugdale model, edge cracks, Gray (T.G.F.), *8403*
- dislocations, wedges, Maiti (M.), Paramguru (R.), *9396*
- biaxial loading, fracture criteria, stress intensity factor, Chou (C.-T.), Kuo (C.-P.), *9397*
- griffith cracks, stress intensity factor, transforms, Tang (R.J.), Wang (K.), *9398*
- microcracks, stress intensity factor, Mccartney (L.N.), *9399*
- crack initiation, j-integral, Smith (E.), *9402*
- elasticity (nonlinear), finite amplitude, nonlinear analysis, Knowles (J.K.), *9405*
- crack propagation, creep rupture, fracture mechanics, stress intensity factor, Riedel (H.), Rice (J.R.), *9406*
- constitutive relations, elastoplasticity, plane strain, Gao (Y.-C.), *9407*
- elastoplasticity, mixed mode fracture, Gai (Y.-C.), *9408*
- computing techniques, infinite medium, penny shaped crack, stress intensity factor, Mohapatra (R.B.), Parhi (H.), *9415*
- crack growth, multiple cracks, Mills (N.J.), Walker (N.), *9417*
- crack arrest, crack propagation, fatigue, Furuya (Y.), Shimada (H.), *10271*
- crack growth, j-integral, Xiao (Y.-G.), Huang (G.-H.), *10286*
- dynamic response, finite element techniques, stress intensity factor, yield criteria, Betser (A.A.), Kobayashi (A.S.), (et al.), *10302*

crack penetration, crack propagation, fluid-structure interaction, pipes, Emery (A.F.), Perl (M.), (et al.), *3466*

- edge cracks, infinite medium, stress intensity factor, Maiti (M.), Paramguru (R.), *4492*

crack propagation, blast effects, boreholes, brittle materials, numerical analysis, Stecher (F.P.), Fourney (W.L.), *424*

- aluminum alloys, fatigue, heat treatment, life expectancy, Chung (D.W.), Chaturvedi (M.C.), *445*
- aluminum alloys, high cycle fatigue, steel, Hoffelner (W.), *447*
- crack tip geometry, fatigue, strain energy, Bailon (J.-P.), Dickson (J.I.), (et al.), *448*
- composite materials, crack arrest, polymers, Barnes (C.R.), Rosenfield (A.R.), *455*
- elasticity (three dimensional), stress intensity factor, Kassir (M.K.), *465*
- crack growth, cyclic loading, fatigue, j-integral, Leis (B.N.), Zahoor (A.), *468*
- failure, physical properties, Vinokurov (V.A.), Makarov (G.I.), *469*
- dynamic fracture, elastodynamics, shear loading, Bui (H.D.), Ehrlacher (A.), *470*
- composite materials, inclusions, stress intensity factor, Averbukh (A.Z.), *476*
- asymptotic behavior, finite element techniques, stress intensity factor, Bazant (Z.P.), Cedolin (L.), *479*
- experimental methods, measurements, Koval (V.I.), Labedev (V.G.), *1360*
- cracks, fracture criteria, strain energy, Chang (K.J.), *1363*
- constitutive relations, viscoplasticity, work hardening, Aboudi (J.), Achenbach (J.D.), *1377*
- aluminum alloys, fatigue, materials processing, Schulte (K.), Nowack (H.), *1407*
- fatigue, fracture, nuclear reactors, Ermi (A.M.), Bauer (R.E.), (et al.), *2406*
- bearings (roller), cracking, failure, x ray techniques, Maeda (K.), Tsushima (N.), (et al.), *2410*
- estimation, fatigue, Hills (D.A.), Ashelby (D.W.), *2419*

- photoelasticity, stress intensity factor, wiener-hopf technique, Bandyopadhyay (S.N.), Deysarker (H.K.), *2430*
- fracture toughness, plates, torsion, Chow (C.L.), Ngan (K.M.), *2438*
- finite difference methods, j-integral, Early (P.W.), Burns (S.J.), *2439*
- couple stresses, crack branching, stress concentration, stress intensity factor, Itou (S.), *2447*
- crack opening displacement, energy-release rate, wedges, Yatomi (C.), *2448*
- dynamic fracture, elastic waves, finite element techniques, Bilek (Z.), *2449*
- caustics, crack arrest, dynamic loads, plates, Theocaris (P.S.), Milios (J.), *2451*
- cutting, edge cracks, fracture criteria, prediction, Maiti (S.K.), *2460*
- acoustic emission, monitoring, Chelyshev (N.A.), Chervov (G.A.), (et al.), *2464*
- crack initiation, photoelasticity (dynamic), rayleigh waves, Rossmanith (H.P.), Fourney (W.L.), *2465*
- direction, photoelasticity, prediction, Gdoutos (E.E.), *2469*
- alloys, crack initiation, cyclic testing, fatigue, high temperature, turbines, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- fatigue, fracture mechanics, material testing, Shimada (H.), Furuya (Y.), *3433*
- fractography, macroscopic characterization, moisture, polymers, Bretz (P.E.), Hertzberg (R.W.), (et al.), *3434*
- fatigue, low temperature, magnesium alloys, Serdyuk (V.A.), *3438*
- sheet metal, stochastic processes, Borodachev (N.M.), *3440*
- aluminum alloys, griffith cracks, thermodynamics, Izumi (Y.), Fine (M.E.), (et al.), *3441*
- fatigue, plastics, Hyakutake (H.), Hagio (T.), *3442*
- crack closure, crack opening displacement, fatigue, Lal (K.M.), Le May (I.), *3450*
- crack opening displacement, photoelasticity (dynamic), stress intensity factor, Rossmanith (H.P.), *3453*
- crack growth, edge cracks, viscoelastic materials, Christensen (R.M.), Wu (E.M.), *3461*
- elastoplasticity, yield condition, Dean (R.H.), Hutchinson (J.W.), *3464*
- crack penetration, fluidstructure interaction, pipes, Emery (A.F.), Perl (M.), (et al.), *3466*
- stress intensity factor, strips, viscoelasticity (dynamic), wiener-hopf technique, Popelar (C.H.), Atkinson (C.), *3468*
- mixed mode fracture, photoelasticity, stress intensity factor, surface flaws, Smith (C.W.), Peters (W.H.), (et al.), *3479*
- fracture mechanics, photoelasticity (dynamic), wave interactions, Rossmanith (H.P.), Shukla (A.), *3481*
- acoustic emission, fracture, pressure vessels, shear, Finkel (V.M.), Muravin (G.B.), (et al.), *3506*
- bending, fatigue, surface flaws, Mukai (Y.), Matsuno (H.), (et al.), *4482*
- endurance limit, fatigue, stress intensity factor, Davenport (R.T.), Brook (R.), *4484*
- blades, stress intensity factor, thermal fatigue, Getsov (L.B.), Kabelevskii (M.G.), *4817*
- composite materials, micromechanics, polymers, Theocaris (P.S.), Stassinakis (C.A.), *5292*
- biaxial loading, fracture toughness, Gdoutos (E.E.), *5296*
- boundary layer, dynamic fracture, elastoplasticity, perturbation methods, Dunayevsky (V.), Achenbach (J.D.), *5308*
- dynamic fracture, kinetic theory, Krausz (A.S.), *5309*
- fracture mechanics, gas wells, hydraulics, interface cracks, reservoir engineering, Hanson (M.E.), Shaffer (R.J.), (et al.), *5311*
- cracks, fatigue, fractographic tests, Schijve (J.), *6413*
- deformation (plastic), high temperature, low cycle fatigue, Ivanova (V.S.), Gintsler (Ya.), (et al.), *6415*
- computing techniques, continuum mechanics, fracture, geomechanics, hydraulic fracturing, stress intensity factor, Hanson (M.E.), Shaffer (R.J.), *6434*
- cracks, discontinuities, infinite medium, time dependence, Wesolowski (Z.), *6452*
- dynamic analysis, kinetic theory, stress corrosion, Krausz (A.S.), Mshana (J.), (et al.), *6453*
- biaxial loading, stability theory, stress intensity factor, Alpa (G.), Bozzo (E.), (et al.), *6454*
- cracks, directivity pattern, fracture, nondestructive tests, Maslov (L.A.), Arkhinov (V.I.), *6495*
- crack initiation, fracture criteria, Fischer (K.-F.), *7467*
- edge cracks, fatigue, material testing, microcracks, nickel alloys, Lankford (J.), Cook (T.S.), (et al.), *7476*
- fatigue, low temperature, rocks, steel, Mubeen (A.), *7480*
- environmental tests, fatigue, fractography, Grinberg (N.M.), Ostapenko (I.L.), (et al.), *7488*
- crack initiation, decomposition, fracture, stochastics, Ichikawa (M.), Tanaka (S.), *7509*
- cracks, holes, shear, Fuchssteiner (W.), Olsen (O.W.), *7520*
- acoustic emission, crack growth, energy density, Mandorini (V.), Ghelardoni (E.), (et al.), *7528*
- continuum mechanics, fracture mechanics, fracture toughness, j-integral, Nguyen (Q.S.), *7529*
- brittle fracture, fracture, material testing, Nikolaevskii (V.N.), *7530*
- bimodulus materials, crack arrest, crack coalescence, discontinuities, Theocaris (P.S.), Milios (J.), *7532*
- crack initiation, fatigue, micromechanics, stochastics, Ghonem (H.), *7533*
- aluminum alloys, bonded joints, polymers, Mijovic (J.), *7536*
- brittle materials, fracture toughness, notch tests, stress intensity factor, Munz (D.), Bubsey (R.T.), (et al.), *7571*
- singularities, stress intensity factor, Peano (A.), Pasini (A.), *8143*
- composite structures, fibers, fracture mechanics, Mileiko (S.T.), Rabotnov (Yu.N.), *8224*
- fatigue, polymers, Sandt (A.), Hornbogen (E.), *8371*
- crack initiation, high temperature, thermal loading, Lloyd (G.J.), Wood (D.S.), *8372*
- cavities, creep rupture, numerical analysis, steel, Michel (D.J.), *8374*
- crack initiation, cyclic loading, fatigue, micromechanics, polymers, Sauer (J.A.), Richardson (G.C.), *8377*
- creep, dislocations, Ihara (C.), *8382*
- fracture mechanics, fracture toughness, j-integral, Turner (C.E.), *8404*
- brittle materials, damping, dynamic fracture, edge cracks, Brock (L.M.), *8407*
- composite structures, crack arrest, dynamic fracture, finite difference methods, Williams (J.H.) Jr., Lee (S.S.), (et al.), *8409*
- computing techniques, viscoelasticity, Tsai (Y.M.), *8412*
- fracture criteria, inhomogeneities, Sih (G.C.), Chen (E.P.), *8414*
- cracks, dynamic analysis, finite element techniques, Mall (S.), *8421*
- gas wells, hydraulic transport, Evans (R.D.), Carroll (H.B.) Jr., *8925*
- earthquake source, earthquakes, rupture, Miyatake (T.), *8961*
- damage (cumulative), fatigue, stochastic processes, Ihara (C.), Igarashi (A.), *9384*
- crack initiation, ductile fracture, high cycle fatigue, microcracks, Nisitani (H.), Takao (K.-I.), *9389*
- alloys, metallurgy, nucleation, stress corrosion, Chu (W.-Y.), Hsiao (C.-M.), (et al.), *9394*
- brittle fracture, microcracks, Kartashov (E.M.), Bartenev (G.M.), *9400*
- crack opening displacement, creep rupture, fracture mechanics, stress intensity factor, Riedel (H.), Rice (J.R.), *9406*
- acoustic emission, kinetics, nucleation, Kuranov (V.N.), Ivanov (V.I.), (et al.), *9412*
- crack arrest, crack branching, dynamic fracture, multiple cracks, Theocaris (P.S.), *9413*
- caustics, crack growth, elastodynamics, stress intensity factor, Theocaris (P.S.), Papadopoulos (G.A.), *9416*
- crack arrest, crack opening displacement, fatigue, Furuya (Y.), Shimada (H.), *10271*
- composite materials, glass fibers, interlaminar stresses, low temperature, Han (K.S.), Koutsky (J.), *10309*
- crack initiation, fatigue, impact, polymers, Takemori (M.T.), *10331*
- beams, crack initiation, cracking, prestressed concrete, Labib (F.), Edwards (A.D.), *10361*

crack resistance, impact, material testing, strain rate, Bondarovich (L.A.), Zlochevskii (A.B.), (et al.), *1409*
- brittle fracture, material testing, x ray techniques, Georgiev (M.N.), Mezhova (N.Ya.), (et al.), *1415*
- charpy tests, crack opening displacement, indentation, notch tests, Belik (A.V.), Dolzhenkov (F.E.), (et al.), *3502*
- charpy tests, dynamic loads, fracture toughness, steel, strain energy, Basko (E.M.), Makhutov (N.A.), *4519*
- aluminum alloys, crack growth, fracture toughness, notch tests, Munz (D.), *6478*
- fracture, heat treatment, Lazko (V.G.), Lazko (V.E.), (et al.), *7534*
- brittle materials, carbides, fracture toughness, variable loading, Novikov (N.V.), *7570*
- bond characteristics, cracking, reinforced concrete, Somayaji (S.), Shah (S.P.), *7802*
- material testing, steel, Takahashi (H.), Khan (M.A.), (et al.), *10281*

crack retardation, crack growth, ductile fracture, fracture criteria, j-integral, Woo (C.W.), Kuruppu (M.D.), *2453*
- aluminum alloys, fatigue, hold time, metallurgy, Slagle (W.P.), Mahulikar (D.), (et al.), *5310*

crack tip geometry, crack propagation, fatigue, strain energy, Bailon (J.-P.), Dickson (J.I.), (et al.), *448*
- crack opening displacement, finite element techniques, patching, Jones (R.), Callinan (R.J.), *473*
- experimental results, photoelasticity, stress intensity factor, Bakshi (O.A.), Zaitsev (N.L.), (et al.), *482*
- crack growth, creep, Krishnan (V.M.R.), Mutoh (Y.), (et al.), *1357*
- finite element methods (hybrid), fracture, notch sensitivity, singularities, Lin (K.Y.), Tong (P.), *2071*
- crack growth, elastoplasticity, finite element methods (hybrid), fracture mechanics, Rice (J.R.), Drugan (W.J.), (et al.), *2441*
- photoelasticity, stress intensity factor, Rossmanith (H.P.), *2467*
- error, fracture mechanics, photoelasticity, stress intensity factor, Doyle (J.F.), Kamle (S.), (et al.), *5317*
- fracture toughness, plastic flow, pressure vessels, steel, Kotilainen (H.), *6479*
- fracture mechanics, photoelasticity, stress intensity factor, white light, Chiang (F.P.), Asundi (A.), *7555*
- brittle fracture, caustics, fracture mechanics, photoelasticity, surfaces, Theocaris (P.S.), *7556*

- j-integral, nondestructive tests, strain measurement, stresses, ultrasonics, King (R.B.), Herrmann (G.), (et al.), *8425*
- elastodynamics, stress intensity factor, surface flaws, Achenbach (J.D.), Brind (R.J.), *10290*
- fracture, fracture toughness, plane strain, specimen design, Wei (S.), Tingshi (Z.), (et al.), *10338*

cracking, beams (composite), reinforced concrete, shrinkage, slabs, Johnson (R.P.), Allison (R.W.), *2265*
- bearings (roller), crack propagation, failure, x ray techniques, Maeda (K.), Tsushima (N.), (et al.), *2410*
- cracks, fatigue, stochastics, Ford (D.G.), *2422*
- elastoplasticity, finite element techniques, stress concentration, welding, Karppi (R.A.J.), Toyoda (M.), (et al.), *2461*
- reinforced concrete, slabs, Fujii (F.), *2520*
- deflections, plates (circular), reinforced concrete, slabs, Desayi (P.), Muthu (K.U.), *4531*
- experimental methods, flaw detection, instruments, magnetic field, testing equipment, Luz (H.), *5338*
- crack control, crack initiation, ductile fracture, stress analysis, Georgiev (M.N.), Morozov (E.M.), *5341*
- alloys, metals, stress corrosion, Koval (V.P.), Karvatskii (L.M.), (et al.), *6423*
- hydrogen embrittlement, stress corrosion, Popperling (R.), Schwenk (W.), *7490*
- flaw detection, hydrogen embrittlement, steel, Szilard (J.), Haynes (R.), *7561*
- bond characteristics, crack resistance, reinforced concrete, Somayaji (S.), Shah (S.P.), *7602*
- brittle materials, fracture criteria, strength, Bascoul (A.), Maso (J.C.), *8399*
- failure, griffith cracks, random loading, stochastic systems, Smolskii (V.M.), *8411*
- fracture, limit analysis, reinforced concrete, shells, Coenen (J.H.), *8439*
- dams, earthquake effects, embankments, Lane (R.G.T.), *9365*
- crack growth, design, holes, plates (holed), pressure vessels, stress intensity factor, Rooke (D.P.), *10332*
- beams, crack initiation, crack propagation, prestressed concrete, Labib (F.), Edwards (A.D.), *10361*

cracks, boundary value problems, elasticity (linear), potential theory, three dimensional formulation, England (A.H.), *38*
- combined loading, finite element techniques, fracture, stress intensity factor, Ishikawa (H.), *85*
- boundary conditions, finite element methods (hybrid), finite element techniques, Rhee (H.C.), Atluri (S.N.), *88*
- mathematical methods, nonlinear analysis, random excitation, stochastic systems, Wedig (W.), *360*
- diffraction, elastic waves, Harris (J.G.), *402*
- finite element techniques, stress intensity factor, Blackburn (W.S.), Hellen (T.K.), *463*
- bifurcation, griffith cracks, pressure, Aoki (S.), Sakata (M.), *464*
- elasticity (three dimensional), elliptical cracks, Sladek (J.), *466*
- corners, diffraction, elastic waves, interference, Achenback (J.D.), Norris (A.N.), *1305*
- integro differential equations, mathematical methods, orthotropic materials, stefan problem, survey, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *1362*
- crack propagation, fracture criteria, strain energy, Chang (K.J.), *1363*
- biaxial loading, inclusions, rigid bodies, Viola (E.), Piva (A.), *1366*
- elasticity, plates, singular integral equations, Kruger (K.H.), *1373*
- fracture criteria, plasticity, upset forging, Mizuta (A.), Tsuda (O.), (et al.), *1379*
- crack opening displacement, j-integral, plasticity, stability, Kumar (V.), Shih (C.F.), *1381*
- failure, filamentary structures, reinforced bodies, textiles, Pipkin (A.C.), Rogers (T.G.), *1385*
- boundary elements, stress intensity factor, Blandford (G.E.), Ingraffea (A.R.), (et al.), *1386*
- flaw detection, magnetic field, nondestructive tests, Edwards (C.), Palmer (S.B.), *1418*
- corners, crack opening displacement, finite element techniques, singularities, Wait (R.), *2074*
- fatigue, fracture mechanics, gas turbines, powder metallurgy, Sheldon (G.P.), Cook (T.S.), (et al.), *2416*
- cracking, fatigue, stochastics, Ford (D.G.), *2422*
- boundary value problems, elasticity, griffith cracks, Golecki (J.J.), *2429*
- elastic behavior, finite difference methods, j-integral, stress intensity factor, Vailkovskii (S.N.), Kurguzov (V.D.), *2432*
- elasticity (three dimensional), plates (thick), singular integral equations, singularities, Folias (E.S.), *2434*
- biaxial loading, bifurcation, crack growth, Viola (E.), *2436*
- crack opening displacement, fracture, plastic behavior, plates (weakened), Panasyuk (V.V.), Vitvitskii (P.M.), (et al.), *2440*
- axisymmetric loading, concrete, geomechanics, monotonic loading, Chen (E.Y.-T.), Schnobrich (W.C.), *2450*
- shear loading, stress intensity factor, twinning, Kuliev (V.D.), *2457*
- boundary elements, elliptical cracks, plates, time dependence, Mukherjee (S.), Morjaria (M.), *2459*
- reinforced concrete, shear transfer, Bazant (Z.P.), Tsubaki (T.), (et al.), *2519*
- combustion, flame propagation, solid propellants, Kumar (M.), Kovacic (S.M.), (et al.), *2866*
- elasticity (linear), half space, punch problems, Stallybrass (M.P.), *3232*
- elasticity (linear), inclusions, Maiti (M.), Paramguru (R.), *3237*
- elastodynamics, electroelasticity, piezoelectrics, scattering, shear waves, Sabbagh (H.A.), *3240*
- anisotropic media, boundary value problems, plates (weakened), Lyubchak (V.A.), Filshtinskii (L.A.), *3249*
- corners, crack initiation, plates (reinforced), reliability, Brussat (T.R.), Chiu (S.T.), (et al.), *3443*
- hardening, penalty function, Yagawa (G.), Aizawa (T.), (et al.), *3459*
- elastoplasticity, j-integral, Paris (P.C.), Ernst (H.), (et al.), *3463*
- flaw detection, nondestructive tests, pressure vessels, radiography, welded joints, x ray techniques, Ruescher (E.H.), Graber (H.C.), *3507*
- elastic bodies, inclusions, stress concentration, thermal stresses, Rokne (J.), Dhaliwal (R.S.), (et al.), *3990*
- elasticity (linear), plates (weakened), singular integral equations, Borshchuk (E.M.), *4336*
- elliptical cracks, energy density, plates (holed), Simmonds (J.G.), Duva (J.), *4490*
- elastic bodies, elliptical cracks, fracture mechanics, Erzhanov (Zh.S.), Garagash (I.A.), *4493*
- complex variables, edge dislocations, kinked crack, mixed mode loading, singular integral equations, Karihaloo (B.L.), *4500*
- reinforced concrete, stress analysis, Bazant (Z.P.), Taubaki (T.), *4533*
- dielectrics, dispersion, electroelasticity, Farat (K.), *5089*
- concrete, constitutive equations, work hardening, Chen (W.F.), Suzuki (H.), *5117*
- flaw detection, spectral analysis, vibration (nonlinear), Wedig (W.), Brautgam (H.), *5205*
- plates (rectangular), plates (weakened), vibration, Hirano (Y.), Okazaki (K.), *5211*
- crack initiation, fatigue, structural design, Oleinik (N.V.), Medvedev (S.A.), (et al.), *5280*
- beams, bending, stress intensity factor, Panko (I.N.), Yakovchik (V.A.), *5299*
- defects, nondestructive tests, ultrasonics, De Billy (M.), Cohen-Tenoudji (F.), (et al.), *5314*
- failure, pressurized pipes, shells (cylindrical), Kitching (R.), Zarrabi (K.), *6221*
- crack propagation, fatigue, fractographic tests, Schijve (J.), *6413*
- boundary value problems, plates, Chen (Y.-Z.), Chen (Y.-H.), *6444*
- elastoplasticity, finite element methods (hybrid), stress intensity factor, Kuna (M.), Bilek (Z.), (et al.), *6447*
- crack propagation, discontinuities, infinite medium, time dependence, Wesolowski (Z.), *6452*
- computing techniques, discontinuities, elasticity, Ioakimidis (N.I.), *6455*
- elastic behavior, linear systems, nonlinear systems, penalty function, plates, Yagawa (G.), Aizawa (T.), (et al.), *6457*
- computing techniques, elasticity, singular integral equations, Boiko (A.V.), Karpenko (L.N.), *6458*
- caustics, fracture mechanics, stress intensity factor, Rossmanith (H.P.), *6462*
- diffraction, metals, nondestructive tests, surfaces, ultrasonics, Parvatov (G.N.), Popov (A.A.), *6486*
- fatigue, flaw detection, pipes, reflection, threaded joints, Lyapkov (A.A.), Spektorov (I.Sh.), *6494*
- crack propagation, directivity pattern, fracture, nondestructive tests, Maslov (L.A.), Arkhinov (V.I.), *6495*
- fatigue, flaw detection, thermography, Rantsevich (V.B.), *6496*
- magnetoelasticity, plates (weakened), thermomagnetic phenomena, Kudriavtsev (B.A.), Parton (V.Z.), (et al.), *7266*
- elastic waves, scattering, Shindo (Y.), *7431*
- aluminum alloys, fatigue, high cycle fatigue, ultrasonics, Tschegg (E.), Stanzl (S.), *7473*
- columns, eccentric loading, reinforced concrete, Bridge (R.Q.), *7505*
- diffraction, fatigue, nondestructive tests, ultrasonics, Golan (S.), Adler (L.), (et al.), *7513*
- finite element techniques, j-integral, Ranaweera (M.P.), Leckie (F.A.), *7514*
- crack propagation, holes, shear, Fuchssteiner (W.), Olsen (O.W.), *7520*
- elasticity (nonlocal), singularities, Atkinson (C.), *7523*
- buckling, fracture, plates, stability, tension, Dyshel (M.Sh.), *7550*
- flaw detection, time domain techniques, ultrasonics, welded joints, Silk (M.G.), Lidington (B.H.), (et al.), *7583*
- fredholm equations, stress concentration, Stadnik (M.M.), Gorbachevskii (I.Ya.), *8187*
- cyclic loading, fatigue, finite element techniques, plastic behavior, Billardon (R.), Brunet (M.), (et al.), *8370*
- elastic bodies, residual stresses, Guz (A.N.), *8387*
- energy release, fracture mechanics, j-integral, mixed mode fracture, path integrals, Herrmann (A.G.), Herrmann (G.), *8388*
- fracture mechanics, mathematical methods, mathematical models, three dimensional formulation, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *8396*
- bending, fracture criteria, j-integral, pipelines, plasticity, Zahoor (A.), Kanninen (M.F.), *8400*
- computing techniques, stress analysis, stress intensity factor, Kumar (M.), *8418*
- crack propagation, dynamic analysis, finite element techniques, Mall (S.), *8421*
- composite materials, delamination, polymers, Tomashevskii (V.T.), Shalygin (V.N.), (et al.), *9246*

- composite materials, damage, damping capacity, nondestructive tests, Pye (C.J.), Adams (R.D.), *9254*
- diffraction, elastic waves, fracture, lamb problem, Rokhlin (S.I.), *9347*
- cavities, creep, fatigue, metals, micromechanics, surveys, Gittus (J.) ed., *9380, book*
- crack initiation, yield condition, Smith (E.), *9383*
- fracture mechanics, spectroscopy, stress corrosion, torsion, Briggs (A.), Airey (R.), (et al.), *9391*
- ceramics, flaw detection, gas turbines, photoacoustic microscopy, surface flaws, Inglehart (L.J.), Thomas (R.L.), (et al.), *9435*
- acoustic emission, brittle fracture, brittle materials, inclusions, surface waves, Rose (L.R.F.), *9436*
- flaws, fracture mechanics, nozzles, pressure vessels, reactor structures, Atluri (S.N.), Kathiresan (K.), *9463*
- crack detection, fatigue, ultrasonics, Ibrahim (S.I.), Whittaker (V.N.), *10275*
- electrical instruments, nondestructive tests, Dover (W.D.), Collins (R.), *10283*
- computer programming, finite element techniques, pipes, stress intensity factor, three dimensional formulation, Miyazaki (N.), Watanabe (T.), (et al.), *10284*
- boundary value problems, complex variables, dislocations, energy release rate, kinking, Hayashi (K.), Nemat-Nasser (S.), *10289*
- brittle fracture, holes, plates (weakened), singular integral equations, stress intensity factor, Mirsalimov (V.M.), *10291*
- fredholm equations, plates (thick), stress intensity factor, Sladek (J.), Sumec (J.), *10294*
- complex variables, rotating disks, Isida (M.), *10296*
- bending, j-integral, material testing, pipes, stability theory, Wilkowski (G.M.), Zahoor (A.), (et al.), *10301*
- dynamic fracture, singular integral equations, stress intensity factor, twisting, Shindo (Y.), *10305*
- brittle materials, crack initiation, failure, porous media, powders, Barinov (S.M.), Krasulin (Yu.L.), *10308*
- photoelasticity (dynamic), plane stress, scattered light, stress intensity factor, Ross (E.L.), Kaminski (G.), (et al.), *10312*

Craig (M.J.K.), see Scott (R.F.), *416*

Craig (R.R.) Jr., see Johnson (C.P.), *9120*

Crandall (L.), see Roth (W.H.), *9364*

Crandall (S.H.), experimental mechanics, propellers, vibration (forced), Dugundji (J.), *7401*

Crane (R.I.), see Winoto (S.H.), *3658*
- see Ow (C.S.), *7972*

cranes, control, pendulums, Zaremba (A.T.), Sokolov (B.N.), *174*
- design, optimal control, oscillations, Mamalyga (V.M.), *3219*
- structural stability, trucks, Kato (Y.), Ito (H.), *6545*
- bending (plastic), elastoplasticity, girders (plate), Ballio (G.), Poggi (C.), (et al.), *7318*
- aerocrane, flight tests, helicopters, lift, lifting bodies, models, Curtiss (H.C.) Jr., Putman (W.F.), *8650*

Cranfield (R.R.), deaerators, dynamic stability, liquid gas mixture, power plants, storage, tanks, Wilkinson (D.H.), *9625*
- discharges, internal flow, irrotational flow, orifices, weirs, *10390*

Crank (J.), dams, numerical methods, seepage, Ozis (T.), *3003*

crankshafts, diesel engines, noise abatement, vibration (torsional), Ochiai (K.), Nakano (M.), *5652*

cratering, cutting, data analysis, electric spark discharge, geometrical properties, stochastics, Pandit (S.M.), Rajurkar (K.P.), *1348*
- dimensional analysis, impact, satellites, Holsapple (K.A.), Schmidt (R.M.), *9351*

Cravalho (E.G.), see O'Callaghan (M.G.), *3821*

Craven (B.D.), see Teo (K.L.), *1158*

Craven (P.G.), junctions, modes, plates, sound propagation, vibration, Gibbs (B.M.), *11947*

Crawford (A.B.), design (optimum), nonlinear programming, portal frames, roofs, Jenkins (W.M.), *503*

Crawford (D.R.), gravity waves (surface), hydrodynamic stability, nonlinear theory, three dimensional flow, Lake (B.M.), (et al.), *7746*
- dispersion relation, gravity waves (surface), nonlinear analysis, spectra, Lake (B.M.), *11574*

Crawford (M.E.), cooling, film cooling, injection, transpiration cooling, Kays (W.M.), (et al.), *726*

crazing, axial loading, crack growth, fractography, Aleshin (V.I.), Kuvshinskii (E.V.), *457*
- composite materials, crack growth, penny shaped crack, stress intensity factor, Mahapatra (R.B.), Satapathy (P.K.), (et al.), *3473*

creep, axial loading, polymers, torsion, Vilks (U.K.), Tabuns (V.A.), (et al.), *272*
- measurements (dynamic), vibration, Cawley (P.), Adams (R.D.), (et al.), *451*
- material testing, semiconductors, stress relaxation, testing equipment, Kalaidzhan (S.E.), Krivoruchko (S.P.), (et al.), *496*
- concrete, offshore structures, thermal stresses, England (G.L.), *530*
- finite element methods, rocks, thermal loading, Anderson (C.A.), Bridwell (R.J.), *965*
- constitutive equations, internal state variables, thermal fatigue, Mccartney (L.N.), *1187*
- thermoviscoelasticity, viscoelastic materials, Caruthers (J.M.), Cohen (R.E.), *1190*
- dynamic viscoelasticity, polymers, stress strain relationships, Bruller (O.S.), Kleinemeier (B.), *1191*
- alloys, high temperature, thermoviscoelasticity, Nerodenko (L.M.), Dabizha (E.V.), *1192*
- anisotropic media, cylindrical bodies, torsion, Gupta (S.K.), Rana (V.D.), *1194*
- crack growth, crack tip geometry, Krishnan (V.M.R.), Mutoh (Y.), (et al.), *1357*
- crack growth, crack opening displacement, Astafev (V.I.), *1382*
- crack opening displacement, finite element techniques, relaxation, Bassani (J.L.), Mcclintock (F.A.), *1387*
- aluminum alloys, combined loading, Findley (W.N.), Lai (J.S.), *1411*
- material testing, polymers, relaxation, Hayashi (K.), Gozu (K.), (et al.), *1412*
- bolted joints, flammability, metallic constructions, Aribert (J.M.), Riaux (H.), *1437*
- blades, thermal fatigue, turbomachinery, Peschel (W.), Schreieck (R.), *1835*
- composite materials, plastics, polymers, Sokolov (E.A.), Maksimov (R.D.), *2228*
- accelerated testing, life expectancy, material testing, Fraifeld (V.E.), Sorokin (O.V.), *2229*
- cylindrical bodies, stress relaxation, thermoelasticity (transient), Ishikawa (H.), *2974*
- beams (composite), reinforced concrete, viscoelasticity, Lazic (V.B.), Lazic (J.D.), *3251*
- combined loading, pressurized components, shells (cylindrical), Lau (J.H.), Listvinsky (G.K.), *3252*
- cavities, fracture mechanics, grain boundaries, metals, Greenwood (G.W.), *3253*
- data analysis, data extrapolation, refractories, Tsvilyuk (I.S.), Baumshtein (M.V.), *3254*
- crystals, grain boundaries, metals, micromechanisms, Ghahremani (F.), *3255*
- cavities, creep rupture, diffusion, Pharr (G.M.), Nix (W.D.), *3452*
- crack growth, fatigue, fracture mechanics, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), *3494*
- crack growth, fatigue, fracture mechanics, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), (et al.), *3495*
- deformation, springs, stresses, Sritharan (T.), Jones (J.), *3498*
- fractography, steel, tests, Toth (L.), Szabados (E.), (et al.), *3499*
- dispersion hardening, mechanical properties, nickel alloys, tensile strength, Whittenberger (J.D.), *3500*
- bridges, deformation, prestressed concrete, repair, Takafuji (T.), Seki (S.), *3537*
- deformation (finite), viscoelasticity, Arutyunyan (N.Kh.), *4345*
- fuel elements, nonlinear materials, nuclear reactors, Chan (D.P.), Jackson (R.J.), *4346*
- layered media, nonlinear materials, Sumbatian (M.A.), *4347*
- experimental results, polymers, tension, DixonStubbs (P.J.), *4349*
- elastoplasticity, finite element techniques, shells, Levy (A.), *4353*
- dynamic stresses, glass fibers, laminates, Sarkisian (N.E.), Martirosian (M.M.), (et al.), *4359*
- beams, contact problems, elastic foundations, Uvarov (B.V.), *4361*
- deformation maps, fatigue, life expectancy, Priest (R.H.), Ellison (E.G.), *4477*
- life expectancy, thermal fatigue, titanium, Plumbridge (W.J.), *4479*
- high temperature, materials properties, steel, Brovman (M.Ya.), *4488*
- biaxial loading, cavities, compression, modeling, tension, torsion, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- ceramics, glass, high temperature, mechanical properties, Northover (J.P.), Groves (G.W.), *4520*
- deformation (plastic), metals, thermal stresses, thermoelasticity (transient), Morjaria (M.), Mukherjee (S.), *4818*
- internal stresses, metals, micromechanisms, power law geometrics, Argon (A.S.), Takeuchi (S.), *5101*
- composite materials, compression, failure, tension, Gorev (B.V.), Rubanov (V.V.), (et al.), *5103*
- anelasticity, continuum mechanics, metals, viscoplasticity, Rusinko (K.N.), Ivasyuk (V.V.), *5114*
- computing techniques, constitutive equations, plastic behavior, Levy (A.), Pifko (A.B.), *5121*
- fibers, rheology, textiles, Koczy (L.), Fulop (I.), *5137*
- cyclic testing, fatigue, low cycle fatigue, turbines, Kloos (K.H.), Granacher (J.), (et al.), *5282*
- high temperature, microscopy, strain measurement, Kornienko (V.T.), Rekov (A.M.), (et al.), *5320*
- cyclic loading, hardening, strain, stress ratio, stresses, Yoshida (F.), Ohta (I.), (et al.), *5329*
- crack growth, crack initiation, fatigue, notch tests, prediction, Olkin (S.I.), *5331*
- dislocations, grain boundaries, hardening, stainless steels, stress analysis, Harris (M.), Davies (T.J.), *5332*
- statistical continuum mechanics, viscoelasticity (dynamic), Day (W.A.), *6173*
- aging, plasticity, steel, Cho (U.W.), Findley (W.N.), *6174*
- bending (viscoelastic), ceramics, micromechanisms, Cohrt (H.), Grathwohl (G.), (et al.), *6175*
- copper, material testing, necking, Baranov (N.A.), Likhachev (V.A.), (et al.), *6430*
- elastoplasticity, fatigue, life expectancy, structural design, Nikitenko (A.F.), Zaev (V.A.), *6431*

- carbides, dislocations, electron microscopy, high temperature, precipitation, steel, Orlova (A.), Milicka (K.), (et al.), *6472*
- copper alloys, maraging steel, steel, stress relaxation, titanium, Pollock (J.T.A.), Barton (S.G.), (et al.), *6473*
- deformation, ductility, nuclear reactors, testing equipment, tests, Kruglov (A.S.), Fazkullin (V.A.), (et al.), *6498*
- dynamic behavior, muscles, stress strain relationships, Phillips (C.A.), Petrofsky (J.S.), *7108*
- constitutive equations, fracture, nonlinear materials, Barenblatt (G.I.), Botvina (L.R.), *7137*
- finite element techniques, nonlinear analysis, shear, stiffness matrix, Nguyen Dang Hung, *7218*
- constitutive equations, viscoelasticity, Mohamed (F.A.), Ginter (T.J.), *7274*
- experimental results, tensor methods, tubes, Anisimowicz (M.), Sawczuk (A.), *7275*
- boundary value problems, cavities, half space, inclusions, Anderson (C.A.), *7276*
- crack growth, elasticity (nonhomogeneous), micromechanisms, Venkateswaran (A.), Hasselman (D.P.H.), *7277*
- shells (nonhomogeneous), variational methods, Boldyrev (E.I.), Kurshin (L.M.), (et al.), *7278*
- composite materials, cylindrical bodies, pressurized pipes, Hulsurkar (S.), *7283*
- material testing, materials processing, pressure, Gorev (B.V.), Klopotov (I.D.), (et al.), *7457*
- crack growth, damage, life expectancy, Kachanov (L.), *7497*
- constitutive equations, relaxing media, Delph (T.J.), *7956*
- constitutive equations, elastoviscoplasticity, viscoelastic materials, viscoplasticity, Katona (M.G.), *8195*
- cyclic loading, steel, Pokluda (Ya.), Stanek (P.), *8197*
- constitutive equations, crystals, Shesterikov (S.A.), Melnikov (G.P.), (et al.), *8198*
- cyclic loading, low cycle fatigue, metals, Pisarenko (G.S.), Troshchenko (V.T.), (et al.), *8213*
- elastoplasticity, finite strain, pressure vessels, Betten (J.), *8254*
- deep drawing, drawing, forming, interface phenomena, plastics, Ohsawa (H.), Nishimura (H.), *8358*
- crack propagation, dislocations, Ihara (C.), *8382*
- crack growth, crack opening displacement, elastic behavior, Pilkington (R.), Smith (E.), *8383*
- aluminum alloys, crack growth, temperature, Radhakrishnan (V.M.), Mcevily (A.J.), *8384*
- dislocations, steel, Ostrom (P.), Lagneborg (R.), *8385*
- dislocations, grain boundaries, microstructures, steel, Williams (K.R.), *8430*
- cladding, nuclear fuels, nuclear radiation, Wilson (H.W.), Hsieh (H.J.), (et al.), *8883*
- cavities, cracks, fatigue, metals, micromechanics, surveys, Gittus (J.) ed., *9380, book*
- edge dislocations, fracture, sliding, Wirmark (G.), Nilsson (J.-O.), (et al.), *9393*
- deformation, fracture, low cycle fatigue, titanium, Strizhalo (V.A.), *9428*
- deformation, polymer concrete, polymers, Khristova (Ya.), *9451*
- earthquakes, faults, prediction, water levels, Wesson (R.L.), *9906*
- earth, mantle, thermal waves, Birger (V.I.), Kovtunenko (S.M.), *9915*
- deformation, earthquakes, faults, stochastic processes, Andrews (D.J.), *9917*
- bends, plane strain, pressurized pipes, Zverkov (B.V.), Danyushevskii (A.I.), *10153*
- alloys, friction stress, life expectancy, Plumbridge (W.J.), Bartlett (R.A.), *10276*
- lead, models, ratchetting, stress concentration, thermal shock, Hyde (T.H.), Fessler (H.), (et al.), *10333*
- axial loading, metals, Simonian (A.M.), *10335*
- pressure vessels, prestressed concrete, thermal effects, Smith (I.G.), *10357*
- deformation, rock mechanics, time dependence, tunnels, Kaiser (P.K.), Morgenstern (N.R.), *10365*
- equations of state, molecular theory, polymers, thermophysical properties, Ainbinder (S.B.), Tyunina (E.L.), (et al.), *10556*
- deformation, embrittlement, fracture mechanics, microstructures, steel, Carlson (R.L.), Lo (H.C.), *11316*
- dislocations, friction (internal), models, stress relaxation, Mclean (M.), *12093*

creep buckling, experimental methods, tube bundles, vibration (flow induced), Weaver (D.S.), El-Kashlan (M.), *3715*

- columns, reinforced concrete, Bazant (Z.P.), Tsubaki (T.), *6269*

creep rupture, crack growth, fractographic tests, stress intensity factor, Gladshtein (V.I.), Semenova (T.N.), *441*

- cyclic loading, life expectancy, thermoelasticity, Bocek (M.), Hoffmann (M.), *452*
- composite materials, laminates, plasticity, polymers, Brinson (H.F.), Griffith (W.I.), (et al.), *1356*
- high temperature, material testing, nickel alloys, Dwivedi (V.S.), *1410*
- cavities, creep, diffusion, Pharr (G.M.), Nix (W.D.), *3452*
- crack growth, diffusion, stress intensity factor, void growth, Wilkinson (D.S.), *4487*
- brazed joints, soldering, welded joints, Williams (J.A.), *6429*
- cavities, fracture mechanics, grain boundaries, Beere (W.), *7496*
- cavities, crack propagation, numerical analysis, steel, Michel (D.J.), *8374*
- crack opening displacement, j-integral, path integrals, Leckie (F.A.), Mcmeeking (R.M.), *8402*
- damage (cumulative), nonlinear characteristics, Bui-Quoc (T.), Biron (A.), *9392*
- crack opening displacement, crack propagation, fracture mechanics, stress intensity factor, Riedel (H.), Rice (J.R.), *9406*

creeping flow, bingham fluid, oscillatory flow, slots, Sobolik (V.), *1561*

- rarefied gases, spherical bodies, stokes flow, Obayashi (T.), Tougou (H.), *3645*
- drag, non newtonian flow, porous surfaces, power law fluids, Kawase (Y.), Ulbrecht (J.J.), *4567*
- constitutive equations, plastic flow, viscoelastic fluids, White (J.L.), *8086*
- bubble dynamics, non newtonian flow, spherical bodies, viscoelasticity (dynamic), Tiefenbruck (G.), Leal (L.G.), *10412*
- bubble dynamics, drops, frequency response, unsteady flow, Stewart (M.B.), Morrison (F.A.) Jr., *11362*
- heat transfer, nuclear waste, singularities, spherical bodies, viscous flow, Krenk (S.), *11363*

Creff (R.), see Andre (P.), *6764*

- heat transfer, pipe flow, pulsatile flow, turbulent flow, unsteady flow, Andre (P.), (et al.), *8615*

Cremers (C.J.), see White (J.E.), *10660*

Creswell (G.A.), see Ellis (J.F.), *5704*

Crichlow (H.B.), see Tiab (D.), *960*

Crisfield (M.A.), iterative methods, numerical methods, snap-through, *4401*

Crisp (J.N.), see Rolle (K.C.), *10564*

critical flow, dripping flow, drops, reynolds number (small), Dunskii (V.F.), Nikitin (N.V.), *1512*

- models, two phase flow, Isbin (H.S.), *1854*
- nuclear reactors, two phase flow, Wallis (G.B.), *2990*
- cavities, cellular flow, closed conduit flow, convection (free), Simpkins (P.G.), Dudderar (T.D.), *4709*
- cylindrical bodies, drag coefficient, roughness, strouhal number, vortex shedding, wakes, Achenback (E.), Heinecke (E.), *6621*
- finite element techniques, spillways, variational methods, O'Carroll (M.J.), *7654*
- critical heat flux, nuclear reactors, two phase flow, Levy (S.), Abdollahian (D.), *8692*
- boiling, critical heat flux, dispersed flow, film flow, two phase flow, Andreyev (P.A.), Borishanskiy (V.M.), (et al.), *8695*
- convection, viscoelastic fluids, Garifullin (F.A.), Zapparov (F.I.), *8724*
- convection (free), grashof number, laminar flow, plates (vertical), temperature, variable thermal properties, Ghajar (A.J.), Parker (J.D.), *9700*
- condensation, heat exchangers (crossflow), tube bundles, Rabas (T.J.), *10578*
- cooling, drawing, glass, solidification, Kunitomo (T.), Ebisu (A.), *10596*
- films, shear flow, viscous buckling, viscous flow, Suleiman (S.M.), Munson (B.R.), *11378*
- basins, channel flow, rotating bodies, weirs, Shen (C.Y.), *11614*

critical heat flux, nuclear reactors, nucleate boiling, pool boiling, Theofanous (T.G.), *738*

- nucleate boiling, nucleation, surface effect, surface flaws, Messina (A.D.), Park (E.L.) Jr., *740*
- boiling, channel flow, roughness, surface effect, Styrikovich (M.A.), Leontev (A.I.), (et al.), *742*
- boiling, convection (forced), water, Katto (Y.), *744*
- boiling, convection (forced), critical region, Katto (Y.), *745*
- boiling, convection (forced), critical region, nucleate boiling, Katto (Y.), *746*
- flashing, friction (internal), pipe flow, pressure drop, thermodynamics (nonequilibrium), void fraction, Miropolskiy (Z.L.), Shneyerova (R.I.), (et al.), *747*
- convection (free), tube bundles, Fokin (B.S.), Goldberg (Ye.N.), *749*
- biomechanics, cryogenics, film boiling, heat transfer, nucleate boiling, Belyakov (V.P.), Budrik (V.V.), *750*
- boiling, convection (forced), heat transfer, helium, transition boiling, Petukhov (B.S.), Zhukov (V.M.), (et al.), *1673*
- annular flow, boiling, two phase flow, Boltenko (E.A.), Peskov (O.L.), (et al.), *1674*
- boiling, rupture, transition boiling, two phase flow, Borchevkin (Yu.S.), Korolkov (B.P.), *1675*
- boilers, dryout, helical flow, pipe flow, pressure drop, tubes, two phase flow, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
- boiling, bubbly flow, channel flow, convection (forced), Hebel (W.), Detavernier (W.), (et al.), *2794*
- boiling, pool boiling, Tolubinskii (V.I.), Kichigin (A.M.), (et al.), *2795*
- boiling, heat transfer, impact jets, impingement cooling, jets, water, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- boiling, dispersed flow, drops, impact jets, impingement cooling, Monde (M.), *3793*
- convection (forced), dispersed flow, drops, heat transfer, turbulent flow, Yao (S.-C.), Rane (A.), *3795*
- energy conversion, heat transfer, refrigeration, thermosyphons, Savchenkov (G.A.), Kunakov (V.G.), *3836*
- nuclear power, nuclear reactors, safety, thermal loading, Hochreiter (L.E.) eds., Sozzi (G.L.), *4693, book*
- boiling, channel flow, Katto (Y.), *4701*
- boiling, drops, entrainment, film flow, Ueda (T.), Inoue (M.), (et al.), *4702*

- darcy flow, freezing, packed beds, porous media, tubes, Okada (M.), *10597*
- elastic behavior, tube bundles, vibration (flow induced), Tangemann (H.), *10766*
- statistical design, tube bundles, vibration (flow induced), viscous flow, Katinas (V.I.), Lukosevicius (K.K.), (et al.), *10767*
- dynamic stability, tube bundles, vibration (flow induced), Chen (S.S.), Jendrzejczyk (J.A.), *11647*
- dynamic stability, fluid-structure interaction, tube bundles, vibration (flow induced), Tanaka (H.), Takahara (S.), *11655*
- cooling, evaporation, heat exchangers, regenerators, Maclaine-Cross (I.L.), Banks (P.J.), *11767*
- flutter, shells (cylindrical), thin walled structures, Paidoussis (M.P.), Wong (D.T.-M.), *11841*

Crossman (F.W.), see Wang (A.S.D.), *6436*
- composite materials, crack growth, crack initiation, delamination, fracture mechanics, material testing, Warren (W.J.), (et al.), *6437*

Crostack (H.A.), laminates, nondestructive tests, testing equipment, transducers (ultrasonic), ultrasonics, Deutsch (V.), (et al.), *7560*

Crouzeix (M.), convergence, mathematical methods, parabolic equations, stability (numerical), *7201*

Crouzet-Pascal (J.), see Garnet (H.), *6109*

Crowe (C.T.), see Lee (J.), *8891*

Cruickshank (J.O.), impact jets, oscillations, plates, reynolds number (small), viscous buckling, Munson (B.R.), *9526*

crushing, comminution, dynamic behavior, Krogh (S.R.), *12054*
- crystals, impact, Kampfen (Y.), Tobler (W.), *12056*

Cruz (J.L.), see Brey (J.J.), *6750*

cryogenics, biomechanics, critical heat flux, film boiling, heat transfer, nucleate boiling, Belyakov (V.P.), Budrik (V.V.), *750*
- diamond, high pressure, testing equipment, thermophysical properties, Bundy (F.P.), Dunn (K.J.), *2500*
- injectors, transonic flow, wind tunnels, Mignosi (A.), Faulmann (D.), (et al.), *3763*
- buoyant flow, geysering, pipe flow, Shugan (I.V.), Bosykh (L.A.), *4703*
- automatic control, simulation, wind tunnels, Thibodeaux (J.J.), Balakrishna (S.), *5063*
- ejectors, injection systems, wind tunnels, Blanchard (A.), Dor (J.-B.), (et al.), *5515*
- helium, thermal excitation, Sergeev (S.I.), Popov (O.M.), (et al.), *5532*
- boiling, capillary flow, gasification, porous surfaces, Orlov (V.K.), Savelev (V.N.), *5543*
- channel flow, cooling, transient effects, Gorbachev (S.P.), Krikunov (A.A.), (et al.), *5571*
- exergy analysis, low temperature, thermodynamic properties, thermodynamics, Brodyanskii (V.M.), Semenov (A.M.), *8679*
- cavitation, ogives, thermodynamic properties, variable area flow, venturi, Billet (M.L.), Holl (J.W.), (et al.), *10396*

crystallography, propagation velocity, ultrasonics, Yatsyk (S.I.), Krasavin (V.V.), *500*
- conservation laws, constitutive equations, continuum mechanics, deformation, solid mechanics, Billington (E.W.), Tate (A.), *1973, book*

crystals, elasticity (nonlinear), molecular theory, phase changes, Parry (G.P.), *2*
- floating zone, melting, Da-Riva (I.), Meseguer (J.), *813*
- compression, kinematics, metals, Havner (K.S.), *1204*
- failure, fatigue, overloads, Chu (S.N.G.), Li (J.C.M.), *1404*
- dynamic plasticity, shear loading, strain rate, Chiem (C.Y.), Duffy (J.), *2236*
- alloys, cyclic loading, fatigue, stress strain relationships, Wilhelm (M.), *2241*
- dynamic properties, piezoelectrics, shock, single crystals, Novitskii (E.Z.), Korotchenko (M.V.), (et al.), *2499*
- capillary flow, convection, melting, radiant interchange, Schwabe (D.), Scharmann (A.), *2807*
- scattering, sound propagation, ultrasonics, Grigorev (O.A.), Shermergor (T.D.), *2930*
- diamond, dispersion relation, elastic constants, micropolar media, Minagawa (S.), Arakawa (K.), (et al.), *3079*
- creep, grain boundaries, metals, micromechanisms, Ghahremani (F.), *3255*
- deformation, metals, plasticity, Berveiller (M.), *3268*
- beryllium, failure, material testing, Papirov (I.I.), Stoev (P.I.), (et al.), *3472*
- elastic waves, elastodynamics, Olemskoi (A.I.), *4122*
- continuum mechanics, micromechanisms, plasticity, Lin (T.H.), Ribeiro (G.), *4351*
- convection, marangoni convection, thermal instability, thermal waves, Chun (C.-H.), *4710*
- shock waves, solid mechanics, Klimenko (V.Yu.), Dremin (A.N.), *4931*
- cauchy problem, characteristic methods, hyperbolic equations, refraction, Uhlmann (G.A.), *4978*
- elastic constants, finite strain, Milstein (F.), *5085*
- freezing, heat transfer, mass transfer, Wheeler (A.A.), *5613*
- brittle fracture, ductile fracture, grain boundaries, metallurgy, molybdenum alloys, Denisyuk (V.A.), Drachinskii (A.S.), (et al.), *6432*
- ductile fracture, forming, fracture mechanics, lattices, Chang (Y.W.), Asaro (R.J.), *6433*
- korteweg de vries equation, lattices, one dimensional waves, particle dynamics, Askar (A.), *7140*
- ceramics, flaws, grinding, polycrystalline materials, strength, Rice (R.W.), Mecholsky (J.J.), (et al.), *7469*
- constitutive equations, creep, Shesterikov (S.A.), Melnikov (G.P.), (et al.), *8198*
- composite materials, glass fibers, hardness, indentation, Miyata (N.), Jinno (H.), *8219*
- deformation (plastic), dislocations, micromechanics, stress concentration, Kulagina (V.V.), Dudarev (E.F.), (et al.), *8416*
- aluminum alloys, copper, deformation (plastic), dislocations, plasticity, Kolkman (H.J.), *10336*
- acceleration, body force convection, cylindrical bodies, heat transfer, mass transfer, Feonychev (A.I.), *10595*
- differential equations (partial), sine-gordon equation, standing waves, Seeger (A.), Wesolowski (Z.), *10935*
- crushing, impact, Kampfen (Y.), Tobler (W.), *12056*

Csanady (G.T.), currents, ekman layer, mixing layers, ocean air interaction, rotating fluids, Shaw (P.T.), *8033*

Csonka (P.), finite difference methods, membrane theory, shells, theory, *5156, book*

Cuffel (R.F.), see Parthasarathy (S.P.), *9852*

Cuk (P.E.), beam columns, buckling, buckling (torsional), torsion, Trahair (N.S.), *6246*

Culea (D.), see Tudose (C.), *1819*

Culick (F.E.C.), higher order theories, nonlinear waves, rockets, solid propellants, *7425*
- see Magiawala (K.R.), *10793*

Culie (J.-P.), see Cailletaud (G.), *3998*

culverts, locks, valve loss, valves, Pickering (G.A.), *3602*
- discharges, head, pipe flow, scale models, Sassy (L.), *5387*

Cumberbatch (E.), see Varley (E.), *5084*

Cummings (A.), barriers, ducts, sound propagation, *1806*
- ducts, sound propagation, walls, *10786*

Cundall (P.), see Marti (J.), *10183*

Cunningham (A.J.), boundary layer, nonuniform flow, shock tubes, Ogram (G.L.), (et al.), *715*

Cunningham (J.), see Aly (S.), *2857*

Curle (N.), asymptotic behavior, boundary layer, computing techniques, laminar flow, pressure gradient, separation, *3653*

Curle (S.N.), boundary layer, cylindrical bodies, laminar flow, *6636*

Curnier (A.R.), bearings (slider), elastoplasticity, finite element methods, iterative methods, lubrication (elastohydrodynamic), Taylor (R.L.), *10894*

Curran (J.H.), see Bawden (W.F.), *4028*

currents, circulation, wave interactions, Leibovich (S.), *666*
- baroclinic instability, coriolis forces, eddies, geostrophic flow, ocean air interaction, Mcwilliams (J.C.), Holland (W.R.), (et al.), *1890*
- oceanography, shear flow, Smart (J.H.), *1891*
- bottom irregularities, oceanography, Kozlov (V.F.), Ten (E.V.), *1893*
- coastal engineering, sediment transport, surf, Walton (T.E.) Jr., *2590*
- bottom irregularities, geostrophic flow, oceanography, Kozlov (V.F.), Kropinova (N.A.), (et al.), *3016*
- ocean air interaction, oceanography, Muzylev (S.V.), Felzenbaum (A.I.), *3024*
- mooring, ship motion, stability theory, wind, Sorheim (H.-R.), *3032*
- cylindrical bodies, gravity waves, hydrodynamic pressure, Vinje (T.), *3719*
- hydrodynamic stability, oceanography, Hughes (R.L.), *4047*
- eddies, meandering, oceanography, upwelling, Chew (F.), *4051*
- irrotational flow, ship motion, slender bodies, Triantafyllou (M.S.), *4101*
- beaches, coastal engineering, ocean waves, sediment transport, Horikawa (K.), *4578*
- caustics, gravity waves, nonlinear analysis, Chin (W.C.), *4656*
- ocean air interaction, oceanography, turbulence (geophysical), Nihoul (J.C.J.), *4852, book*
- beaches, surface waves, Kirby (J.T.) Jr., Dalrymple (R.A.), (et al.), *4853*
- ocean air interaction, oceanography, Cane (M.A.), *4861*
- breakers, gravity waves (internal), internal waves, oceanography, spectra, thermocline, Eriksen (C.C.), *4871*
- jets, oceanography, Mcwilliams (J.C.), *4873*
- circulation, eddies, oceanography, Holland (W.R.), *4874*
- circulation, eddies, hydrodynamic stability, oceanography, Haidvogel (D.B.), Holland (W.R.), *4875*
- circulation, heat transfer, oceanography, Sarkisyan (A.S.), Rzheplinskiy (O.G.), *4879*
- circulation, oceanography, Stengel (K.C.), *4882*
- coasts, oceanography, Barannik (V.A.), *4884*
- nonhomogeneous media, sound propagation, underwater acoustics, Newhall (B.K.), Jacobson (M.J.), (et al.), *5728*
- dispersion, surface waves, turbulence (geophysical), water pollution, Ergin (A.), *5903*
- circulation, oceanography, vorticity, Bryden (H.L.), *5918*
- circulation, hydrodynamic stability, oceanography, Holland (W.R.), Haidvogel (D.B.), *5920*
- circulation, heat transfer, ocean air interaction, oceanography, Bye (J.A.T.), Veronis (G.), *5922*
- convection (free), cooling, heat transfer, lakes, Sturm (T.W.), Kennedy (J.F.), *5924*

- atmospheric circulation, boundary layer (atmospheric), Shnaidman (V.A.), *5939*
- gravity waves (finite depth), nonlinear analysis, sloping bottom, Christoffersen (J.B.), Jonsson (I.G.), *6697*
- cylindrical waves, dynamic stability, fluid-structure interaction, Lee (T.S.), *6702*
- charged particles, diagnostics, plasma, saturation, Benilov (M.S.), Tirskii (G.A.), *6858*
- analysis, experimental results, magneto fluid dynamics, power generation, Pan (Y.-C.), Doss (E.D.), *6863*
- channel flow, estuaries, rotating fluids, Nof (D.), *7053*
- boundary layer (atmospheric), ice, icebergs, oscillations, surface flow, Mcphee (M.G.), *7055*
- atmosphere, atmospheric circulation, convection, gravity, Hagiwara (Y.), *7064*
- cyclones, oceanography, Yamagata (T.), *8027*
- ekman layer, ocean air interaction, rotating fluids, Pearce (B.R.), Cooper (C.K.), *8032*
- ekman layer, mixing layers, ocean air interaction, rotating fluids, Csanady (G.T.), Shaw (P.T.), *8033*
- finite amplitude, floating bodies, gravity waves (surface), Flierl (G.R.), *8620*
- articulated surfaces, fluid-structure interaction, nonlinear analysis, offshore structures, Jain (R.K.), Kirk (C.L.), *8627*
- ocean air interaction, oceanography, rossby waves, spectra, wind-wave interaction, Willebrand (J.), Philander (S.G.H.), (et al.), *9000*
- bottom irregularities, energy dissipation, gravity waves (shallow water), Christoffersen (J.B.), Jonsson (I.G.), *9626*
- convection (forced), environmental control, gravity, heat transfer, Sturm (T.W.), *10406*
- containment, heating, helical flow, plasma, Yamagishi (T.), *10757*
- coasts, hydrodynamic stability, oceanography, Collings (I.L.), Grimshaw (R.), *10856*
- hydrodynamic stability, rossby waves, Hall (R.E.), *10857*
- coriolis forces, oceanography, Kao (T.W.), *10865*
- inertial waves, ocean air interaction, oceanography, oscillations, thermocline, Pollard (R.T.), *10867*
- capillary waves, gravity waves (surface), hydrodynamic stability, Voronovich (A.G.), Lobanov (E.V.), (et al.), *11590*

Curry (R.L.), see Sowell (E.F.), *956*

Curtet (R.), cavities, structure, turbulent flow, Normandin-Berne (M.), *10458*

Curti (G.), copper alloys, disks, machine design, springs, steel, Orlando (M.), (et al.), *5374*

Curtis (D.M.), see Berger (B.S.), *4959*

Curtiss (H.C.) Jr., aerocrane, cranes, flight tests, helicopters, lift, lifting bodies, models, Putman (W.F.), *8650*

curvature, dynamic analysis, kinematics, mathematical methods, Veldkamp (G.R.), *1060*
- cooling towers, imperfection sensitivity, stress analysis, Ellinas (C.P.), Croll (J.G.A.), (et al.), *2540*
- closure, mixing layers, reynolds stresses, turbulence, turbulence model, Gibson (M.M.), Rodi (W.), *2691*
- grids, interferometry, twisting, Subramanian (G.), Arunagiri (R.), *3486*
- design, gears, gears (hypoid), gears (spiral), surface profiles, synthesis, Litvin (F.L.), *4555*
- differential geometry, kinematics, mechanical analysis, mechanisms, motion, three dimensional formulation, Mccarthy (J.M.), Roth (B.), *6061*
- boundary layer (turbulent), structure, Ramaprian (B.R.), Shivaprasad (B.G.), *9561*
- boundary layer, corners, three dimensional flow, Barclay (W.H.), *10429*
- boundary layer, convection (free), cylindrical bodies, oscillations, spherical bodies, temperature, Srivastava (A.C.), Bhattacharjee (R.C.), *11370*

curve fitting, computer programming, dynamic response, interpolation, linear systems, Collings (A.G.), Saunders (L.R.), *2050*
- fatigue, high temperature, life expectancy, weibull statistics, Hasegawa (N.), Hirose (M.), (et al.), *5283*
- asymptotic methods, equilibrium, scour, sediment transport, Blaisdell (F.W.), Anderson (C.L.), (et al.), *7659*

curved bars, buckling, Panayotounakos (D.E.), Theocaris (P.S.), *339*
- beams (composite), biharmonic equation, orthotropic materials, Von Roth (W.), Epple (A.), *2248*

curved surfaces, boundary layer, separation, shock waves (normal), Bohning (R.), *600*
- collocation, condensation, extended surfaces, isothermal processes, Panchal (C.B.), Bell (K.J.), *807*
- deflections, holography, moire methods, Gilbert (J.A.), Herrick (J.W.), *1394*
- shear flow, turbulence (structure), Townsend (A.A.), *2699*
- buoyant flow, duct flow, laminar flow, recirculation, Chilukuri (R.), Humphrey (J.A.C.), *3785*
- asymptotic behavior, cylindrical waves, Hollinger (F.), *5246*
- acoustic waves, rayleigh waves, resonance, ultrasonics, Lapin (A.D.), *6335*
- coordinate systems, generation, poisson equation, two dimensional flow, Visbal (M.), Knight (D.), *7683*
- membranes, strain analysis, Benati (M.), *8244*
- cable supported structures, finite element techniques, nonlinear structures, Jayaraman (H.B.), Knudson (W.C.), *9144*
- fundament, shells (shallow), structural analysis, Tepavitcharov (A.), Ljutzkanov (D.), (et al.), *9271*
- boundary layer, heat transfer, hydrodynamic stability, taylor instability, Kohama (Y.), Kobayashi (R.), *11527*

cushioning materials, buildings, foundations, stress analysis, structural support, thermoplasticity, Klepikov (S.N.), Khorunzhii (V.I.), *5361*

Cushman-Roisin (B.), boussinesq equation, buoyancy, convection, mixing layers, thermal diffusion, *9533*

Cuthbertson (R.D.), combustion products, diesel engines, exhaust gases, particle fluid flow, Stinton (H.C.), (et al.), *1763*

Cuthrell (R.E.), acoustic emission, hydrogen embrittlement, inorganic materials, materials properties, Randich (E.), *3451*

Cuti (F.), see Gianolio (E.), *6813*

Cutler (V.C.), see Lawnicki (J.J.), *7638*

Cutrone (M.B.), combustion products, combustors, gas turbines, hybrid fuels, Hilt (M.B.), (et al.), *11785*

Cutter (W.A.), see Leonards (G.A.), *418*

cutting, jets, rocks, water, Rehbinder (G.), *431*
- abrasion, metals, microstructures, wear, Ramalingam (S.), Wright (P.K.), *435*
- arcs, heat transfer, plasma, Hinds (B.K.), De Almeida (S.M.), *436*
- tool wear, wear, Sewailem (M.R.), *1010*
- chip formation, contact stresses, elastic behavior, Childs (T.H.C.), *1347*
- cratering, data analysis, electric spark discharge, geometrical properties, stochastics, Pandit (S.M.), Rajurkar (K.P.), *1348*
- friction, wear, Childs (T.H.C.), Kinsella (F.H.), *1929*
- chip formation, materials properties, Hastings (W.F.), Mathew (P.), (et al.), *2401*
- crack propagation, edge cracks, fracture criteria, prediction, Maiti (S.K.), *2460*
- extrusion, forming, materials properties, plastic flow, Shaw (M.C.), *3420*
- machinery, numerical control, optimization, Cirp Annals 1981, *4468, book*
- lubricants (liquid), metals, Bhattacharyya (S.K.), Jetley (S.K.), *5992*
- life expectancy, suspensions, tools, Andreeva (I.A.), Bryukhanova (L.S.), (et al.), *6410*
- deformation, dynamic analysis, fracture mechanics, glass fibers, reinforced plastics, Inoue (H.), Ido (M.), *6449*
- adhesion, diffusion, magnetic field, tool wear, wear, Muju (M.K.), Ghosh (A.), *8055*
- interfaces, temperature, thermocouples, tools, Bhatia (S.M.), Pandey (P.C.), (et al.), *8065*
- blades, compliance, turbines, Mamaev (V.S.), Dmitriev (S.N.), (et al.), *8364*
- mathematical models, rock mechanics, Abdel Moneim (M.E.), Castillo (E.A.), (et al.), *8365*
- chatter, dynamic analysis, mathematical methods, vibration (forced), De Canniere (J.), Van Brussel (H.), (et al.), *9325*
- steel, tool wear, tools, turning, Sewailem (M.R.), Mobarak (I.M.), *9376*
- abrasion, chip formation, grinding, tool wear, Kita (Y.), Ido (M.), (et al.), *9377*
- design, gears, kinematics, Mitome (K.), *9471*
- elastic bodies, elastic waves, lasers, supersonic flow, Borzykh (A.A.), *10242*
- forming, grinding, metrology, optimization, *10268*

cutting (three dimensional), mathematical models, numerical control, optimization, Davis (R.P.), Wysk (R.A.), (et al.), *3220*

Cveticanin (L.J.), balancing, flexible bodies, machine design, rotors, variable mass, vibration, *8476*

cybernetics, markov processes, mathematical methods, Kalashnikov (V.V.), *2024*
- algorithms, biomathematics, differential games, pattern recognition, Yablonskij (S.V.), *9152, book*
- algorithms, optimal control, optimization, pursuit, search, trajectories, Vereshchagin (A.F.), Medvedev (V.S.), (et al.), *9184*

cycles, compression, dies, powder metallurgy, tableting, Carstensen (J.T.), Toure (P.), *2404*
- design, gas turbines, heat engines, thermodynamic processes, Harman (R.T.C.), *2870, book*
- heat exchangers, solar energy, thermodynamic processes, Johnston (A.M.), O'Sullivan (C.H.), *4724*
- heat pumps, mixtures, Rojey (A.), Meyer (C.), (et al.), *5591*
- helium, power generation, solar energy, turbomachinery, Duban (P.), *5603*
- chemically reactive flow, energy transport, heat pumps, thermodynamic processes, Abelson (H.I.), Horowitz (J.S.), *6752*
- control, fluid conveyance, solar collectors, Schiller (S.R.), Warren (M.L.), (et al.), *6822*

cyclic loading, complex variables, correspondence principle, viscoelasticity (dynamic), Dasgupta (G.), *264*
- creep rupture, life expectancy, thermoelasticity, Bocek (M.), Hoffmann (M.), *452*
- crack growth, crack propagation, fatigue, j-integral, Leis (B.N.), Zahoor (A.), *468*
- relaxation, tests, torsion, wires, Kuznetsov (B.I.), *494*
- heating, polymers, thermal effects, thermal explosions, vibration, Meinkohn (D.), *929*
- nonlinear mechanics, thermoviscoelasticity, viscoelasticity (dynamic), Gumenyuk (B.P.), Karnaukhov (V.G.), *1188*
- elastoplasticity, structural analysis, work hardening, Williams (D.P.), Topper (T.H.), *1201*

- fatigue, plastics, Bucknall (C.B.), Stevens (W.W.), *1202*
- endurance limit, fatigue, life expectancy, precipitation hardening, softening, Lee (J.K.), Bhat (S.P.), (et al.), *1353*
- fracture mechanics, missiles, welding, Hrisafovic (N.), Ledey (J.P.), *1384*
- elastoplasticity, shakedown structures, work hardening, Megahed (M.M.), *2238*
- failure, fatigue, Hashin (Z.), *2240*
- alloys, crystals, fatigue, stress strain relationships, Wilhelm (M.), *2241*
- elastoplasticity, nonlinear materials, statically indeterminate structures, structural analysis, Erofeev (V.I.), Kondeikin (P.I.), *2242*
- fracture mechanics, fracture toughness, steel, Troshchenko (V.T.), Prokopenko (A.V.), (et al.), *2421*
- aluminum alloys, crack growth, fatigue, Bowen (A.W.), Forsyth (P.J.E.), *2426*
- birefringence, elastoviscoplasticity, photoelasticity, polymers, Nishitani (T.), Koike (Y.), *2466*
- fatigue, life expectancy, random loading, strength, Kruk (B.Z.), Kuzmenko (V.A.), (et al.), *2527*
- deformation, high temperature, low cycle fatigue, Zhitkyavichene (V.P.), Medeksha (G.G.), *3269*
- analytical methods, bond characteristics, reinforced concrete, Tassios (T.P.), Yannopoulos (P.J.), *3530*
- beams, bending, residual stresses, strain measurement, Troshchenko (V.T.), Zhabko (N.I.), *4512*
- brittle materials, composite materials, experimental mechanics, shells (spherical), Amelyanovich (K.K.), Podgornyi (L.N.), *4547*
- plasticity, stress strain relationships, work hardening, Esin (A.), *5119*
- creep, hardening, strain, stress ratio, stresses, Yoshida (F.), Ohta (I.), (et al.), *5329*
- offshore structures, piles, Dawson (T.H.), *5365*
- constitutive equations, geophysics, strain rate, Hueckel (T.), *6180*
- ductility, plastic behavior, shells (cylindrical), Mozharovskii (N.S.), Bobyr (N.I.), *6186*
- drainage, soils, Zienkiewicz (O.C.), Chang (C.T.), (et al.), *6387*
- crack initiation, fatigue, fracture, stochastics, Arone (R.), *6416*
- crack arrest, cyclic testing, fatigue, residual stresses, Romaniv (O.N.), Siminkovich (V.N.), (et al.), *6420*
- bending, fatigue, steel, Gavrilov (D.A.), *6470*
- alloys, bending, iron, shape factors, testing equipment, thermal fatigue, Pryakhin (V.A.), Ivanova (L.P.), *6474*
- probabilistic design, reliability analysis, springs, My Dao Thien, Massoud (M.), *6518*
- membranes, stress strain relationships, tissues, Vito (R.P.), Macmanus (R.K.), (et al.), *7112*
- beams (flexural), concrete, reinforced concrete, Thompson (K.J.), Park (R.), *7290*
- composite materials, strength, thermal loading, Mukherjee (M.K.), *7300*
- beams (flexural), flexural loading, plastic behavior, Lyubarov (B.I.), *7319*
- fatigue, fracture, inhomogeneities, microcracks, Getman (A.F.), *7487*
- blades, chemical reactions, high temperature, surface flaws, Kosygin (E.P.), Verkhovodov (P.A.), *7492*
- fracture, stochastics, Troshchenko (V.T.), Sosnovskii (L.A.), *7537*
- blast effects, fatigue, panels, plaster panels, shear loading, vibration, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- creep, steel, Pokluda (Ya.), Stanek (P.), *8197*
- constitutive equations, pressure vessels, stress strain relationships, Drucker (D.C.), Palgen (L.), *8212*
- creep, low cycle fatigue, metals, Pisarenko (G.S.), Troshchenko (V.T.), (et al.), *8213*
- dynamic loads, dynamic stability, shells (conical), Masselas (C.), Dalamangas (A.), (et al.), *8273*
- dynamic stability, shells (cylindrical), Shirakawa (K.), *8274*
- composite materials, fatigue, fibers, fracture criteria, Hashin (Z.), *8369*
- cracks, fatigue, finite element techniques, plastic behavior, Billardon (R.), Brunet (M.), (et al.), *8370*
- crack initiation, crack propagation, fatigue, micromechanics, polymers, Sauer (J.A.), Richardson (G.C.), *8377*
- aluminum alloys, deformation, macroscopic characterization, metallography, microstructures, Wang (Z.G.), Ke (T.S.), *8429*
- impact, soils, tools, Spektor (M.), *10248*
- ocean bed, pore pressure, soils, Martin (G.R.), Lam (I.), (et al.), *10253*
- acoustic emission, high cycle fatigue, steel, Hamel (F.), Bailon (J.P.), (et al.), *10318*
- constitutive relations, liquefaction, sand, strain softening, Tatsuoka (F.), Silver (M.L.), *11177*

cyclic testing, experimental methods, low cycle fatigue, random loading, Makhutov (N.A.), Zatsarinnyi (V.V.), (et al.), *491*

- sand, shear strength, strength, Tatsuoka (F.), Silver (M.L.), (et al.), *1316*
- sand, shear strength, strength, stress strain relationships, Tatsuoka (F.), Silver (M.L.), (et al.), *1317*
- clay, shear strength, stress strain relationships, Matsui (T.), Ohara (H.), (et al.), *2378*
- alloys, crack initiation, crack propagation, fatigue, high temperature, turbines, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- frames, inelasticity, offshore structures, seismic loading, Popov (E.P.), Mahin (S.A.), (et al.), *2535*
- experimental mechanics, plates, vibration, Clarkson (B.L.), Pope (R.J.), *5210*
- creep, fatigue, low cycle fatigue, turbines, Kloos (K.H.), Granacher (J.), (et al.), *5282*
- sand, saturation, shear stress, Ishihara (K.), Yamazaki (F.), *6379*
- soils, triaxial tests, Kokusho (T.), *6381*
- elastic constants, freezing, soils, Czajkowski (R.L.), Vinson (T.S.), *6389*
- crack arrest, cyclic loading, fatigue, residual stresses, Romaniv (O.N.), Siminkovich (V.N.), (et al.), *6420*
- compression, powders, tablets, Toure (P.), Puisieux (F.), (et al.), *7466*
- crack growth, fracture toughness, steel, Troshchenko (V.T.), Pokrovskii (V.V.), (et al.), *9431*
- high temperature, low cycle fatigue, steel, strain softening, Gardiner (T.), *10329*

cyclones, boundary layer, ocean air interaction, Bhattacharyya (P.), *3026*

- atmospheric circulation, weather forecasting, Shakins (N.P.), *4062*
- boundary layer, computing techniques, laminar flow, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7704*
- boundary layer (turbulent), computing techniques, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7705*
- currents, oceanography, Yamagata (T.), *8027*
- annular flow, cylindrical bodies, internal flow, inviscid fluid, velocity profiles, vortex flow, Martynov (Yu.V.), *9523*
- atmospheric circulation, meteorology (physical), Pinus (N.Z.), Kapitanova (T.P.), *12076*

cylindrical bodies, fourier series, neumann problem, potential theory, semi infinite media, Beliaev (S.Iu.), Kuzmin (Iu.N.), *44*

- bonded joints, reinforced bodies, torsion, Kuo (Y.-M.), Conway (H.D.), *245*
- plastic behavior, rate sensitivity, torsion, work hardening, Meguid (S.A.), *277*
- crossflow, experimental results, plastic flow, Mizushina (T.), Usui (H.), (et al.), *551*
- stokes flow, two dimensional flow, walls, Jeffrey (D.J.), Onishi (Y.), *572*
- oscillating bodies, secondary flow, visualization, Tatsuno (M.), *575*
- blunt bodies, oscillations, vortex shedding, Graham (J.M.R.), *576*
- convection (free), heat, stratified flow, Chashechkin (Yu.D.), Popov (V.A.), *577*
- navier stokes equation, oscillating bodies, secondary flow, two dimensional flow, Kubo (S.), Kitano (Y.), *581*
- boundary layer, incompressible flow, non newtonian flow, separated flow, Shvets (Yu.I.), Vishnevskii (V.K.), *603*
- boundary roughness, roughness, surface flow, Buresti (G.), *604*
- diffraction, flow irregularities, gravity waves, nonlinear waves, Miloh (T.), *667*
- blades, film cooling, gas turbines, heat transfer, leading edge, thermal measurements, Mirhosseini (A.), Barrow (H.), *733*
- ablation, stability (numerical), Parks (P.B.), *795*
- heat transfer, incompressible flow, mass transfer, Raptis (A.A.), Tzivanidis (G.J.), *814*
- hydromagnetic stability, liquids, perturbations, waves, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *851*
- bounded media, magneto fluid dynamics, oscillatory flow, viscoelastic fluids, Varshneya (N.K.), *854*
- strakes, suppression, vortex shedding, Zdravkovich (M.M.), *868*
- acoustics, resonance, scattering, spherical bodies, Flax (L.), Dragonette (L.R.), (et al.), *907*
- beams (flexural), couple stresses, micropolar media, Craciun (I.), *1057*
- elasticity (nonhomogeneous), inclusions, screw dislocations, Toya (M.), *1176*
- anisotropic media, creep, torsion, Gupta (S.K.), Rana (V.D.), *1194*
- plane strain, strain rate, work hardening, Lee (Y.S.), Patel (M.R.), (et al.), *1200*
- design (optimum), plates, safety, Patnaik (S.N.), Srivastava (N.K.), *1430*
- kinetic theory, rarefied flow, rarefied gases, Abdel-Gaid (M.A.), Khidr (M.A.), (et al.), *1528*
- base flow, wakes, Morel (T.), *1573*
- drag coefficient, gravity waves (surface), submerged bodies, virtual mass, wave loads, Koterayama (W.), *1594*
- ducts, pressure measurement, wave loads, wavemakers, Knott (G.F.), Flower (J.O.), *1636*
- external flow, heat transfer, hot wire, reattachment, separated flow, shear flow, Ota (T.), Kon (N.), (et al.), *1665*
- convection (free), heat transfer, laminar flow, rayleigh number, Chand (J.), Vir (D.), *1679*
- anisotropic media, convection, radiant interchange, solar radiation, Edwards (D.K.), *1695*
- convection (free), melting, Bareiss (M.), Beer (H.), *1728*
- cavities, diffusion, mass transportation, porous media, Gipson (G.S.), Thoma (R.L.), *1729*
- finite element techniques, singularities, stress analysis, Solecki (J.S.), Swedlow (J.L.), *2073*
- cavities, stress analysis, Kawakami (T.), Nakahara (I.), (et al.), *2212*
- bearings, contact stresses, rings, Kosova (N.V.), Atopov (V.I.), (et al.), *2223*
- approximations, dynamic response, El-Raheb (M.), Babcock (C.D.) Jr., *2338*
- holes, photoelasticity (three dimensional), stress concentration, Stanley (P.), Day (B.V.), *2468*
- drag, grids, piers, piles, reynolds stresses, submerged bodies, Ball (D.J.), Hall (C.D.), *2585*
- oscillating bodies, secondary flow, visualization, Tatsuno (M.), *2604*
- boundary layer, laminar flow, similarity methods, Stock (H.W.), *2626*

- shear layer, vortex shedding, Stansby (P.K.), *2676*
- crossflow, heat exchangers (crossflow), heat transfer, Zhukauskas (A.), Zhiugzhda, *2786, book*
- convection (free), empirical methods, heat addition, Parsons (J.R.) Jr., Mulligan (J.C.), *2802*
- liquid metals, magneto fluid dynamics, theory, velocity profiles, Bashtovoi (V.G.), *2880*
- convection, heat sources, magneto fluid dynamics, numerical analysis, Chukhrov (A.Yu.), *2881*
- boundary layer, differential equations (partial), magneto fluid dynamics, transport, Venkatachala (B.J.), Nath (G.), *2886*
- liquid metals, magneto fluid dynamics, turbulence, two dimensional flow, Alemany (A.), Moreau (R.), (et al.), *2893*
- duct flow, magneto fluid dynamics, pumps, theory, Kapusta (A.B.), Shamota (V.P.), *2894*
- acoustic waves, vibration (flow induced), vortex shedding, Okamoto (S.), Hirose (T.), (et al.), *2931*
- anisotropic media, thermal stresses, thermoelasticity (steady), Misra (J.C.), Achari (R.M.), *2964*
- creep, stress relaxation, thermoelasticity (transient), Ishikawa (H.), *2974*
- beams (flexural), elasticity (three dimensional), Kasano (H.), Oshima (H.), (et al.), *3230*
- magnetoelasticity, thermoelasticity (transient), thermomagnetic phenomena, Maruszewski (B.), *3238*
- elastoplasticity, expansion, finite strain, strain softening, Berest (P.), Nguyen (M.D.), *3262*
- finite difference methods, internal flow, navier stokes equation, rotating disks, Schultz (D.H.), Shah (V.L.), *3621*
- elliptical bodies, oscillating bodies, secondary flow, vortex shedding, Tatsuno (M.), *3626*
- free boundary, gravity waves (surface), two dimensional flow, walls, Boucher (G.), *3631*
- bubble dynamics, impulse, unsteady flow, velocity profiles, visualization, Nagata (H.), Matsui (T.), (et al.), *3633*
- annuli, couette flow, vortex flow, Stuart (J.T.), Diprima (R.C.), *3660*
- gravity waves (surface), scattering, submerged bodies, Leppington (F.G.), Siew (P.F.), *3717*
- currents, gravity waves, hydrodynamic pressure, Vinje (T.), *3719*
- conduction (heat), convection, heat transfer, variable thermal properties, Martinson (L.K.), *3778*
- axial flow, convection, heat transfer, Oosthuizen (P.H.), Rangarajan (N.), *3779*
- annular flow, axial flow, heat transfer, Rath (R.S.), Bastia (S.N.), *3787*
- convection (free), laminar flow, transient effects, Katagiri (M.), Pop (I.), *3800*
- mass transfer, power law fluids, spherical bodies, Kumar (S.), Tripathi (P.K.), (et al.), *3857*
- compressible flow, damping, oscillating bodies, rods, wave absorbers, Lin (W.H.), Chen (S.S.), *3931*
- elastic bodies, scattering, ultrasonics, Welton (P.J.), De Billy (M.), (et al.), *3950*
- deformation (finite), thermoelasticity (steady), Kamiya (N.), Kameyama (E.), *3982*
- floating bodies, free boundary, heaving, singular integral equations, singularities, Ursell (F.), *4099*
- axisymmetric loading, elasticity (three dimensional), Yoshino (T.), Utsugi (S.), *4333*
- elasticity (nonhomogeneous), nonhomogeneous media, torsion, Chakravorty (J.G.), *4340*
- drag, linear theory, membranes, navier stokes equation, Hughes (B.D.), Pailthorpe (B.A.), (et al.), *4584*
- vortex shedding, wakes, Oberkampf (W.L.), Owen (F.K.), (et al.), *4638*
- crossflow, oscillating bodies, Zavolzhenskii (M.V.), Terskov (A.Kh.), *4664*
- elliptical bodies, oscillating bodies, unsteady flow, visualization, Hansen (S.B.), Taneda (S.), *4684*
- convection (free), laminar flow, plane flow, Zariffeh (E.K.), Daguenet (M.), *4708*
- heat transfer, laminar flow, rotating cylinders, tubes, Woods (J.L.), Morris (W.D.), *4711*
- aerodynamic interference, flutter, wakes, Tsui (Y.T.), Tsui (C.C.), *4752*
- aerodynamic loads, crossflow, gust loads, So (R.M.C.), Savkar (S.D.), *4755*
- acoustic waves, diffraction, Veksler (N.D.), *4775*
- scattering, submerged bodies, surface waves, Dragonette (L.R.), *4786*
- scattering, waves, Goel (G.C.), Jain (D.L.), *4803*
- anisotropic media, rayleigh ritz method, thermoelasticity (steady), Kalam (M.A.), *4819*
- boundary conditions, fredholm equations, perturbation methods, potential theory, Rosenfeld (A.M.), Timsit (R.S.), *4957*
- conformal mapping, plates, Shirakura (M.), *4989*
- contact problems, elasticity (linear), rolling contact, Martirosyan (Z.A.), *5092*
- damping, hydrodynamics, inertia, vibration, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5232*
- dissipation, oscillating bodies, vibration, viscous effects, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5233*
- impact, plastic flow, Klee (K.-D.), Wriggers (P.), *5248*
- channel flow, drag coefficient, floating bodies, free boundary, froude number, Zein (S.A.A.), *5388*
- missiles, numerical methods, shock waves, supersonic flow, three dimensional flow, turbulent flow, Hung (C.M.), Chaussee (D.S.), *5413*
- asymptotic behavior, boundary layer, existence theorems, gortler series, uniqueness, yawing, Schwierz (K.-P.), *5426*
- turbulent flow, wakes, Sreenivasan (K.R.), *5449*
- pressure distribution, shear flow, transition flow, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *5453*
- inertia, oscillatory flow, virtual mass, Stansby (P.K.), *5482*
- convection (free), laminar flow, nusselt number, Farouk (B.), Guceri (S.I.), *5565*
- gravity gradient, solar radiation, space vehicle structures, thermal effects, Furukawa (M.), *5702*
- compression, couple stresses, Tzung (F.K.), *6161*
- elasticity (linear), green function, stress concentration, Hasegawa (H.), *6162*
- contact problems, rolling, Soong (T.-C.), Li (C.), *6168*
- axial loading, forging, friction (solid solid), Hartley (P.), Sturgess (C.E.N.), (et al.), *6254*
- half space, interface phenomena, sh waves, Gamer (U.), *6331*
- half space, reflection, torsional waves, Wada (H.), *6353*
- penetration, plates, Sagomonyan (A.Ya.), *6362*
- impact, nuclear reactors, Bignon (P.G.), Riera (J.D.), *6363*
- clay, penetration, Dayal (U.), Allen (J.H.), (et al.), *6364*
- complex variables, irrotational flow, two dimensional flow, walls, Petrila (T.), *6614*
- critical flow, drag coefficient, roughness, strouhal number, vortex shedding, wakes, Achenback (E.), Heinecke (E.), *6621*
- friction, rotating bodies, spherical bodies, viscous flow, Greenstein (T.), Zocco (J.G.), *6623*
- boundary layer, laminar flow, Curle (S.N.), *6636*
- fluid-structure interaction, submerged bodies, tube bundles, Westermo (B.D.), *6703*
- axial waves, fluid-structure interaction, prestressed structures, Bagno (A.M.), *6709*
- heat addition, heat transfer, injection, porous walls, suction, Patnaik (A.), *6760*
- heat transfer, hypersonic flow, leading edge, shock waves, swept wings, Zemlyanskii (B.A.), Shmanenkova (G.A.), *6767*
- convection, convection (forced), crossflow, heat transfer, sprays, unsteady flow, Basilico (C.), Jung (G.), (et al.), *6775*
- external flow, heat transfer (combined modes), laminar flow, separated flow, Yao (L.S.), Chen (F.F.), *6777*
- convection (free), extended surfaces, heat transfer, plates, Sparrow (E.M.), Chrysler (G.M.), *6791*
- conduction (heat), linear theory, materials possessing memory, tubes, Fetecau (C.), *6797*
- freezing, melting, phase changes, Lunardini (V.J.), *6800*
- compressible flow, dynamic behavior, magneto fluid dynamics, optimal control, Pavlov (E.G.), *6857*
- equilibrium, magneto fluid dynamics, modes, pressure gradient, Lortz (D.), Nuhrenberg (J.), *6860*
- liquid metals, magneto fluid dynamics, nonlinear systems, pumps, Fireteanu (V.), *6865*
- acoustic waves, diffraction, Karpenko (V.V.), *6933*
- fluids, thermal stresses, Nabarro (F.R.N.), *6941*
- convection, thermal stresses, thermoelasticity (transient), Satyamurthy (K.), Singh (J.P.), (et al.), *6943*
- anisotropic media, composite materials, thermal stresses, thermoelasticity (steady), Iesan (D.), *6952*
- elasticity (three dimensional), saint venant principle, torsion, Khatiashvili (G.M.), *7259*
- composite materials, creep, pressurized pipes, Hulsurkar (S.), *7283*
- elastoplasticity, half space, rolling, Zarka (J.), Frelat (J.), *7295*
- elastoplasticity, forming, pressurized pipes, Riedel (D.), *7344*
- end effects, reynolds number (small), wakes, Slaouti (A.), Gerrard (J.H.), *7732*
- oscillating bodies, separated flow, vibration (self excited), vortex shedding, Vales (N.G.), *7793*
- convection (free), interaction, interference, Sparrow (E.M.), Niethammer (J.E.), *7836*
- bars, cavities, conduction (heat), shape factors, Naghdi (A.K.), *7847*
- conduction (heat), internal flow, lasers, unsteady flow, Lakusta (K.V.), *7850*
- heat transfer, phase changes, pipes, stefan problem, underground, variable thermal properties, Lunardini (V.J.), *7854*
- absorption, particles, radiant interchange, radiation properties, Felske (J.D.), Lee (K.M.), *7860*
- absorption, emissivity, radiant interchange, radiation properties, Young (S.J.), *7861*
- chemical kinetics, chemical reactions, Kapila (A.K.), Matkowsky (B.J.), *7878*
- magneto fluid dynamics, pressure gradient, suspensions, transforms, Gupta (S.C.), Agarwal (M.C.), *7896*
- acoustic waves, bodies of revolution, scattering, Junger (M.C.), *7940*
- convection, thermal stresses, thermoelasticity (transient), Noda (N.), Sugano (Y.), *7950*
- boundary value problems, elasticity (nonlinear), saint venant principle, Horgan (C.O.), Knowles (J.K.), *8181*

- combined loading, cosserat solids, micropolar media, Cheverton (K.J.), Beatty (M.F.), *8182*
- composite materials, elastic constants, polymers, strength, textiles, Dumont (J.P.), *8220*
- axisymmetric loading, elasticity (linear), Zlatin (A.N.), *8247*
- boundary conditions, elastic foundations, vibration (forced), vibration (torsional), Wada (H.), *8322*
- edge cracks, interface cracks, penny shaped crack, stress intensity factor, Fan (Y.-X.), Fan (T.-Y.), (et al.), *8386*
- crack opening displacement, dugdale model, edge cracks, Gray (T.G.F.), *8403*
- closed conduit flow, non newtonian flow, Kazakia (J.Y.), Rivlin (R.S.), *8485*
- complex variables, inviscid fluid, plates, porous surfaces, Capodanno (P.), *8521*
- complex variables, inviscid fluid, plates, porous surfaces, Petrila (T.), *8522*
- blunt bodies, strouhal number, vortex shedding, Awbi (H.B.), *8535*
- compressible flow, conformal mapping, two dimensional flow, Sakurai (A.), Arai (T.), *8544*
- diffraction, elastic bodies, floating bodies, gravity waves (surface), Kudryavtsev (E.P.), *8625*
- damping, gravity waves (surface), submerged bodies, virtual mass, Sabuncu (T.), Calisal (S.), *8630*
- gravity waves (surface), submerged bodies, wave loads, Koterayama (W.), *8632*
- diffusion, solids, thermal excitation, unsteady flow, Lamvik (M.), *8678*
- annular flow, augmentation, convection, heat exchangers, heat transfer, Dyban (E.P.), Lesnikovskii (A.A.), (et al.), *8682*
- convection (forced), integral methods, navier stokes equation, transient loading, Lin (S.P.), *8683*
- convection (forced), cooling, film boiling, spherical bodies, stagnation point, Epstein (M.), Hauser (G.M.), *8687*
- convection, crossflow, heat transfer, Bennon (W.D.), Incropera (F.P.), *8700*
- annular flow, convection (free), three dimensional flow, Ozoe (H.), Shibata (T.), (et al.), *8703*
- convection (free), external flow, mass transfer, Terron (L.R.), Brunello (G.), *8728*
- conduction (heat), hardening, heat addition, inverse problems, mathematical models, Glasko (V.B.), Kulik (N.N.), (et al.), *8734*
- crossflow, ice mechanics, melting, solidification, Cheng (K.C.), Inaba (H.), (et al.), *8739*
- convection (free), heat transfer (combined modes), melting, Yao (L.S.), Chen (F.F.), *8748*
- heat transfer, mathematical methods, solidification, Beckett (P.M.), *8775*
- mass transfer, permeability, porous media, Swarup (S.), *8785*
- thermal stresses, thermoelasticity (transient), Koizumi (T.), Ishikawa (O.), (et al.), *8871*
- rolling, stress concentration, thermal stresses, thermoelasticity (transient), Takeuti (Y.), Ishida (R.), *8876*
- beam columns, elasticity (nonlinear), elasticity (three dimensional), Musaev (D.A.), *9291*
- bridges, piers, scour, Jain (S.C.), *9518*
- annular flow, cyclones, internal flow, inviscid fluid, velocity profiles, vortex flow, Martynov (Yu.V.), *9523*
- annular flow, asymptotic methods, rotating cylinders, singularities, Conlisk (A.T.), Walker (J.D.A.), *9535*
- eddies, finite difference methods, reynolds number (small), Smith (F.T.), *9540*
- asymptotic methods, film flow, liquid vapor interface, plates, Salem (A.), Trad (A.), *9542*
- boundary layer (three dimensional), measurements, pressure gradient, turbulence, Fernholz (H.H.), Vagt (J.-D.), *9563*
- compressible flow, containers (partially filled), gravity, laminar flow, Greenwell (R.N.), Wang (C.Y.), *9577*
- roughness, shear, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *9594*
- convection (free), heat transfer, turbulent flow, Na (T.Y.), Chiou (J.P.), *9610*
- boundary layer, interaction, shock waves, Gvozdeva (L.G.), Bazhenova (T.V.), (et al.), *9641*
- boundary layer, critical heat flux, drops, trajectories, two phase flow, Lu (C.C.), Heyt (J.W.), *9690*
- annuli, coaxial flow, convection, helicoidal flow, laminar flow, Mojtabi (A.), Caltagirone (J.-P.), *9696*
- convection (free), inclined cylinders, Stewart (W.E.) Jr., *9698*
- boundary layer (thermal), convection (forced), galerkin method, laminar flow, mathematical models, Graebel (W.P.), Hsu (C.C.), *9711*
- separated flow, smoothing splines, supersonic flow, Bespalov (A.M.), Zhdanov (V.V.), (et al.), *9712*
- analytical methods, biot number, conduction (heat), heisler charts, spherical bodies, unsteady flow, Sha (W.C.), Ganic (E.N.), *9714*
- elasticity (linear), vessels, Duthie (G.), White (G.C.), (et al.), *10163*
- collapse, holes, stress concentration, Montague (P.), Horne (M.R.), *10168*
- plastic waves, rods, Swegle (J.W.), Ting (T.C.T.), *10233*
- interface cracks, multiple cracks, stress intensity factor, torsion, Shibuya (T.), Koizumi (T.), (et al.), *10293*
- elastoplasticity, pressure vessels, Aggarwal (S.K.), Nayak (G.C.), *10368*
- diffraction, nonlinear waves, offshore structures, shallow water, Rahman (M.), Chakravartty (I.C.), *10393*
- hydrodynamic stability, vortex shedding, vortex streets, Yamamoto (K.), Watanabe (K.), (et al.), *10403*
- internal flow, navier stokes equation, rotating disks, torque, Bertela (M.), Gori (F.), *10404*
- annular flow, nonlinear theory, rossby waves, rotating cylinders, Davey (M.K.), *10410*
- crossflow, navier stokes equation, numerical methods, viscous flow, vorticity, Kravchenko (V.I.), *10413*
- diffraction, fluid-structure interaction, gravity waves, Alliney (S.), *10476*
- cables, submerged bodies, suppression, vibration (flow induced), vortex shedding, Every (M.J.), King (R.), (et al.), *10488*
- damping, heat exchangers, tube bundles, Chen (S.-S.), *10490*
- aerodynamic loads, incompressible flow, inviscid fluid, lift, Yarmitskii (A.G.), *10500*
- convection (free), heat transfer, spherical bodies, viscous effects, Ingham (D.B.), *10589*
- conduction (heat), heat addition, transient effects, Beck (J.V.), *10592*
- acceleration, body force convection, crystals, heat transfer, mass transfer, Feonychev (A.I.), *10595*
- channel flow, extended surfaces, fins, heat transfer, Vanfossen (G.J.), *10621*
- axial flow, flexible bodies, oscillations, resonance, slender bodies, Paidoussis (M.P.), Issid (N.T.), (et al.), *10765*
- shells (stiffened), vibration (forced), Malyutin (I.S.), Nedbai (A.Ya.), *11135*
- collapse, pressure vessels, shakedown structures, Tooth (A.S.), Jones (N.), *11336*
- boundary layer, convection (free), curvature, oscillations, spherical bodies, temperature, Srivastava (A.C.), Bhattacharjee (R.C.), *11370*
- asymptotic methods, drag, porous media, viscous flow, Verma (P.D.), Vyas (H.K.), *11390*
- compressible flow, fluid-structure interaction, internal flow, shock waves, Dubrovskaya (L.I.), Kim (A.V.), (et al.), *11410*
- drag, hydrodynamics, kinetic theory, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11453*
- diffraction, flow irregularities, gravity waves (surface), Miles (J.W.), *11572*
- characteristic methods, fluid-structure interaction, numerical methods, Takeuchi (K.), Spencer (A.C.), *11625*
- damping, scale models, vibration (flow induced), Mulcahy (T.M.), *11626*
- gravity waves (surface), irrotational flow, submerged bodies, unsteady flow, Chaplin (J.R.), *11633*
- ballistics, ricochet, rotating cylinders, water, water surface, Bai (Y.L.), Johnson (W.), *11652*
- damping, floating bodies, virtual mass, Yeung (R.W.), *11654*
- oscillating bodies, virtual mass, wave generation, Wang (S.), *11668*
- floating bodies, gravity waves (finite depth), virtual mass, waves (long), Sayer (P.), *11681*
- scattering, submerged bodies, underwater acoustics, Numrich (S.K.), Varadan (V.V.), (et al.), *11900*
- sound generation, transducers, Guz (A.N.), Ryabukha (Yu.N.), (et al.), *11914*
- ducts, sound propagation, Fagerlund (A.C.), Chou (D.C.), *11926*
- boundary value problems, oscillating bodies, sound fields, Rubanov (I.L.), *11951*
- acoustic measurements, scattering, spherical bodies, Quentin (G.J.), De Billy (M.), (et al.), *11974*
- acoustics, fluids, scattering, Bennett (C.L.), Mieras (H.), *11986*

cylindrical waves, acoustic waves, diffraction, soils, sound propagation, Hebault (D.), Filippi (P.), *1808*

- compressional waves, explosions, nuclear fusion, plasma, Kaliski (S.), *2902*
- scattering, transducers, ultrasonics, Foster (F.S.), Arditi (M.), (et al.), *3962*
- layered media, rocks, White (J.E.), Tongtaow (C.), *5241*
- asymptotic behavior, curved surfaces, Hollinger (F.), *5246*
- elastic bodies, free boundary, reflection, Kasiak (M.), Wlodarczyk (E.), *6354*
- currents, dynamic stability, fluid-structure interaction, Lee (T.S.), *6702*
- acoustics, impedance, Rdzanek (W.), *6896*
- magnetoelastic waves, thermal waves, thermoelasticity (transient), Chian (C.T.), Moon (F.C.), *6945*
- elastic waves, surface waves, Pardee (W.J.), *8329*
- hydroelasticity, oscillatory flow, vibration (flow induced), Sarpkaya (T.), *8834*
- cavities, elastic waves, interaction, Ulyanov (V.D.), *9349*
- green function, moving media, sound generation, Tanaka (K.), Ishii (S.), *9847*
- blast waves, explosions, isothermal processes, similarity methods, Lerche (I.), *11827*
- nonlinear waves, sound propagation, spherical waves, Scott (J.F.), *12004*

Czajkowski (R.L.), cyclic testing, elastic constants, freezing, soils, Vinson (T.S.), *6389*

Czarnecki (S.), absorption, attenuation, barriers, noise abatement, *916*

- acoustic waves, barriers, diffraction, transmission, wave energy, Engel (Z.), (et al.), *3933*
- feedback, noise (aerodynamic), orifices, sound generation, Czechowicz (M.), (et al.), *7938*
- plates (circular), sound generation, vibration, *11952*

Czechowicz (M.), see Czarnecki (S.), *7938*

Czoboly (E.), see Havas (I.), *7526*

Czyryca (E.J.), see Davis (D.A.), *6428*

D

D'Amario (L.A.), interplanetary probes, optimization, orbit correction, orbit transfer, trajectory optimization, Byrnes (D.V.), (et al.), *5707*

D'Ambrogio (E.), containment, energy transport, plasma, theory, transport phenomena, Tessarotto (M.), *3899*

D'Ambrosio (U.), existence theorems, functional analyis, integro differential equations, nonlinear analysis, Krivocheine (L.E.), (et al.), *4981*

D'Anna (A.), mixtures, suspensions, viscoelastic waves, waves, De Socio (L.M.), (et al.), *4130*

D'Asdia (P.), see Braga (F.), *9443*

Da Cunha (D.M.), navier stokes equation, stagnation point, stream function, unsteady flow, vorticity, Nee (V.W.), *3625*

Da Prat (G.), petroleum deposits, porous media, reservoir engineering, Cinco-Ley (H.), (et al.), *8922*

Da Prato (G.), see Barbu (V.), *3187*

Da-Riva (I.), crystals, floating zone, melting, Meseguer (J.), *813*

Dabizha (E.V.), see Nerodenko (L.M.), *1192*

Dacka (C.), controllability, nonlinear systems, perturbation theory, *117*

Dadras (P.), stress analysis, stress strain relationships, upset forging, *7454*

Dagkesamanskii (N.D.), see Abramov (A.Kh.), *2100*

Daguenet (M.), see Zariffeh (E.K.), *4708*

- see Jimenez (J.), *8595*

Dahan (C.), helicopters, noise, rotors, Gratieux (E.), *11994*

Dahan (M.), anisotropic media, penny shaped crack, shear stress, stress intensity factor, *459*

- see Predeleanu (M.), *4348*

Dahl (W.), crack opening displacement, fracture mechanics, j-integral, steel, toughness, *3503*

- see Krabiel (A.), *8886*

Dahle (E.A.), capsizing, failure, ocean waves, rolling motion, ship design, ship motion, stability, Kjaerland (O.), *5964*

Daidola (J.C.), ditching, dynamic stability, helicopters, impact, ocean, Graham (D.A.), (et al.), *5368*

Daigle (G.A.), acoustic waves, impedance, interface phenomena, jets, sound propagation, turbulence (geophysical), *5784*

Daiguji (H.), cascades, galerkin method, two dimensional flow, unsteady flow, Shirahata (H.), *5448*

- cascades, finite difference methods, transonic flow, Nozaki (A.), *7730*
- see Shirahata (H.), *10451*
- blunt bodies, finite difference methods, flow obstructions, navier stokes equation, unsteady flow, Kobayashi (S.), *11385*

Dainis (A.), dynamic analysis, human body, kinematics, *6010*

Dalamangas (A.), see Massalas (C.), *8273*

Dale (A.K.), see Crolla (D.A.), *2350*

Dalke (D.D.), calibration, data acquisition, force, measurements (dynamic), tension, transducers (load), *9426*

Dalle Vedove (W.), chemical kinetics, convection, interfaces, liquid liquid interface, surface tension, Sanfeld (A.), *11379*

Dallman (R.J.), annular flow, convection (forced), rotating bodies, secondary flow, shells (spherical), Douglass (R.W.), *8720*

Dalrymple (R.A.), see Kirby (J.T.) Jr., *4853*

Dalton (C.), axisymmetric flow, bodies of revolution, boundary layer, drag reduction, inverse method, Zedan (M.F.), *9941*

Daly (K.C.), failure, inertial guidance, isolation, statistical theory, Gai (E.), (et al.), *7927*

Daly (K.J.), optical techniques, Smith (J.D.), *485*

Daly (P.), see Helps (J.D.), *1084*

damage, bubble dynamics, cavitation flow, leading edge, modeling, propellers (marine), Stinebring (D.R.), Holl (J.W.), (et al.), *708*

- bones, stress analysis, stress concentration, Brown (T.D.), Way (M.E.), (et al.), *1035*
- buildings, clay, nonhomogeneous soils, swell, Slavin (M.E.), *1321*
- aortic valve, blood, prosthetic devices, shear stress, Figliola (R.S.), Mueller (T.J.), *1960*
- continuum mechanics, life expectancy, materials processing, materials properties, mathematical models, surveys, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- boron, composite materials, fatigue, laminates, stiffness, O'Brien (T.K.), Reifsnider (K.L.), *2493*
- metals, plastic flow, viscoplasticity, Nicholson (D.W.), *3078*
- dynamic analysis, fatigue, random excitation, structural analysis, Kenny (R.A.), Chandra (S.), *3445*
- axial loading, imperfections, offshore structures, tubes, Taby (J.), Moan (T.), (et al.), *3557*
- acoustic emission, elastic waves. microcracks, Rice (J.R.), *6355*
- acoustic emission, laminates, Michan (R.), Prathap (G.), *6356*
- fatigue, fracture mechanics, material testing, time dependence, Biegler (K.K.), Sandor (B.I.), *6412*
- fatigue, hardening, interaction, steel, Chaboche (J.-L.), Kaczmarek (H.), (et al.), *7482*
- crack growth, creep, life expectancy, Kachanov (L.), *7497*
- aluminum alloys, electric resistance, material testing, steel, Cailletaud (G.), Policella (H.), (et al.), *7504*
- cavitation, containment, cooling, nuclear reactors, Jones (A.V.), *8517*
- circumnavigation, probability theory, solar system, tides, Ziglina (I.N.), *8838*
- composite materials, cracks, damping capacity, nondestructive tests, Pye (C.J.), Adams (R.D.), *9254*
- laminates, stress concentration, thermography, vibration, Henneke (E.G.) II, *10135*

damage (cumulative), life expectancy, reliability, Bolotin (V.V.), *508*

- fatigue, life expectancy, material testing, random loading, Berezovszkij (A.M.), Balter (I.I.), (et al.), *3447*
- crack growth, environmental tests, fracture mechanics, metals, Davidson (D.L.), *3449*
- fatigue, random loading, Shefer (L.A.), Ezhov (V.G.), (et al.), *3542*
- locomotives, spectral analysis, stochastic processes, suspension systems, Garivaltis (D.S.), Garg (V.K.), (et al.), *4485*
- cavitation, erosion, prediction, Hammitt (F.G.), De (M.K.), *5978*
- composite materials, delamination, flaws, structural stability, Bolotin (V.V.), Zebelyan (Z.Kh.), (et al.), *6241*
- fatigue, fracture, life expectancy, Kuliev (V.D.), Kaplun (A.B.), *7486*
- low cycle fatigue, micromechanics, nuclear radiation, De Vries (M.I.), Tjoa (G.L.), (et al.), *7501*
- brittle materials, materials properties, Huy Duong Bui, Ky Dang Van, (et al.), *7517*
- design, fatigue, machine elements, Proshkovets (I.), Voitishek (Ya.), *7634*
- fissured systems, fracture, spectral analysis, surveys, Fras (G.), Pons (J.C.), (et al.), *8951*
- crack propagation, fatigue, stochastic processes, Ihara (C.), Igarashi (A.), *9384*
- creep rupture, nonlinear characteristics, Bui-Quoc (T.), Biron (A.), *9392*
- failure, markov processes, Bogdanoff (J.L.), Kozin (F.), *10031*
- empirical methods, fatigue, life expectancy, prediction, titanium, Adams (J.H.), *10327*

Damerell (P.S.), boussinesq equation, buoyant flow, thermosyphons, Schoenhals (R.J.), *5552*

damping, differential equations (ordinary), nonlinear mechanics, Caristi (G.), Invernizzi (S.), *24*

- dynamic stability, vibration, Schneider (J.), *362*
- dynamic response, vibration isolation, Hundal (M.S.), *390*
- dynamic response, tubes, two phase flow, virtual mass, Carlucci (L.N.), *391*
- arch dams, hydraulic jump, jets, radiating flow, Petrillo (A.), Ranieri (M.), (et al.), *561*
- poiseuille flow, unsteady flow, vibration, viscous effects, Korner (M.), *616*
- asymptotic behavior, dynamics, oscillations, Philos (C.G.), Staikos (V.A.), *1080*
- biodynamics, nonlinear mechanics, oscillations, Bojadziev (G.N.), *1092*
- dynamic behavior, vibration, Inosov (S.V.), *1285*
- optimization, structural design, vibration, Brotchie (J.F.), *1287*
- buoys, oscillating bodies, wave loads, Cavaleri (L.), Mollo-Christensen (E.), *1607*
- bottom irregularities, internal waves, Yermakov (S.A.), *1889*
- chain links, chains, dynamic analysis, matrix methods, Eiber (A.), Schiehlen (W.), *1983*
- dynamic properties, random loading, Kameswara Rao (C.V.S.), *2319*
- optimization, vibration (self excited), vibration isolation, Rowbottom (M.D.), *2323*
- dynamic behavior, rotors, vibration isolation, Kravtsova (E.V.), Poznyak (E.L.), *2356*
- tube bundles, vibration (flow induced), virtual mass, Weaver (D.S.), El-Kashlan (M.), *2712*
- bearings (journal), lubrication (hydrodynamic), surface profiles, whirling shafts, Garner (D.R.), Lee (C.S.), (et al.), *3052*
- bearings, dynamic stability, rotors, Lund (J.W.), *3053*
- distributed systems, dynamic analysis, vibration, Beskos (D.E.), Boley (B.A.), *3347*
- dynamic response, optimization, Oledzki (A.), *3348*
- dissipation, dynamic response, mathematical models, Pisarenko (G.S.), Boginich (O.E.), *3362*
- experimental mechanics, thin films, vibration (forced), Fox (M.J.H.), Whitton (P.N.), *3387*
- coatings, dynamic response, tubes, vibration (free), Vinogradov (B.D.), Chernoberevskii (V.V.), *3388*
- design, drag, dynamic response, fluid-structure interaction, offshore structures, Fish (P.R.), Dean (R.B.), (et al.), *3559*
- design, rotors, squeeze films, Simandiri (S.), Hahn (E.J.), *3576*
- boundary layer, liquids, oscillations, slip flow, u-shaped tube, Kozlov (L.F.), Nikitina (G.D.), *3661*
- compressible flow, cylindrical bodies, oscillating bodies, rods, wave absorbers, Lin (W.H.), Chen (S.S.), *3931*
- friction (skin), rolling motion, roughness, ship motion, Myrhaug (D.), *4098*
- bearings (journal), bearings (tilted pad), dynamic behavior, vibration, Springer (H.), *4111*
- bearings (ball), bearings (roller), stiffness, Walford (T.L.H.), Stone (B.J.), *4114*
- optimal control, rotating bodies, time optimal systems, Zubov (V.I.), *4271*
- beams (cantilever), fibers, laminates, reinforced bodies, Plunkett (R.), *4357*
- turbines, vibration (forced), Matveev (V.V.), *4407*

- dynamic analysis, optimization, vibration isolation, Thompson (A.G.), *4440*
- compressional waves, ducts (variable area), oscillatory flow, Yanko (A.K.), Korolev (P.V.), *4658*
- crossflow, tube bundles, Chen (S.S.), Jendrzejczyk (J.A.), *4662*
- absorption, noise abatement, statistical theory, Maidanik (G.), *4807*
- anelasticity, finite element methods, material testing, viscoelasticity (dynamic), Vasilenko (N.V.), *5105*
- coatings, experimental mechanics, tubes, vibration, Zeinetdinova (R.Z.), Naumkina (N.I.), (et al.), *5194*
- beams, structural response, vibration (free), Narayanan (S.), Verma (J.P.), (et al.), *5203*
- dynamic response, rotating bodies, vibration (forced), Matveev (V.V.), Zinkovskii (A.P.), *5214*
- optimization, vibration (torsional), Holzweibig (F.), Liebig (S.), *5231*
- cylindrical bodies, hydrodynamics, inertia, vibration, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5232*
- flutter, loads, optimization, Claudon (J.-L.), Sunakawa (M.), *5342*
- oscillations, relaxation, vibration (self excited), Levin (A.I.), *6066*
- galerkin method, mathieuhill equation, stability theory, Pedersen (P.), *6069*
- dynamic analysis, particle dynamics, vibration (nonlinear), Gershman (M.D.), *6273*
- dynamic properties, vibration (nonlinear), Peleg (K.), *6274*
- dynamic analysis, many body systems, structural response, Bremer (H.), *6278*
- beams (cantilever), experimental mechanics, vibration (free), Kerlin (R.L.), *6288*
- beams (timoshenko), vibration (free), Irie (T.), Yamada (G.), (et al.), *6290*
- structural response, vibration (forced), Wood (W.L.), *6316*
- attenuation, piezoelectric devices, vibration, Bondarenko (A.A.), Kutsenko (G.V.), (et al.), *6324*
- bending, fatigue, material testing, metals, Weissmann (G.F.), *6421*
- dynamic behavior, experimental results, framed structures, multistory frames, wind loads, Lam (L.C.H.), Lam (R.P.), *6529*
- dynamic response, inertia, offshore structures, Eatock Taylor (R.), Duncan (P.E.), *6540*
- artificial satellites, flexible bodies, gravitational stabilization, lyapunov's functions, Hablani (H.B.), Shrivastava (S.K.), *6886*
- dynamic effects, textiles, twisting, yarn, Lord (P.R.), Stuckey (W.C.), *7313*
- beams (cantilever), dynamic stresses, vibration (forced), Kume (Y.), Hashimoto (F.), (et al.), *7375*
- control, gyrodynamics, gyroscopic stabilization, space vehicle structures, stabilization, Joshi (S.M.), Groom (N.J.), *7415*
- dynamic response, plasticity, plates, Kumar (A.), Hegde (M.), *7426*
- experimental methods, friction (internal), metals, strain, Hooker (R.J.), Mead (D.J.), *7587*
- diffusion, oscillations, shock tubes, Srinivas (K.), Gururaja (J.), *7682*
- aerodynamic loads, airfoils, oscillating bodies, subsonic flow, Salmond (D.J.), *7904*
- bearings, earthquake resistant structures, rubber, Derham (C.J.), Thomas (A.G.), *8016*
- dynamic behavior, elastomers, Klingenberg (R.), *8278*
- cavities, dynamic response, friable media, vibration (viscoelastic), Briskin (E.S.), *8286*
- mechanical systems, vibration, Ottl (D.), *8287*
- brittle materials, crack propagation, dynamic fracture, edge cracks, Brock (L.M.), *8407*
- design, dynamic loads, gears (spur), runge kutta method, stiffness, Kasuba (R.), Evans (J.W.), *8471*
- cylindrical bodies, gravity waves (surface), submerged bodies, virtual mass, Sabuncu (T.), Calisal (S.), *8630*
- aerodynamic interference, blades, cascades, oscillating bodies, separated flow, turbomachinery, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- optimal control, space frames, space structures, space vehicle structures, stability theory, Joshi (S.M.), Groom (N.J.), *8850*
- modeling, seismic loading, structures, Singh (M.P.), *8966*
- heaving, ship motion, surface effect, virtual mass, Kim (C.H.), Tsakonas (S.), *9014*
- bearings (journal), lubrication (hydrodynamic), rotors, stiffness, vibration (self excited), Michalopoulos (D.), Dimarogonas (A.), *9020*
- design (optimum), frequency domain techniques, stochastic systems, Reznikov (L.M.), Fishman (G.M.), *9179*
- dynamic analysis, mathematical methods, vibration (free), Inman (D.J.), *9301*
- dynamic properties, eigenvalues, vibration (torsional), Doughty (S.), *9323*
- heat transfer, liquid solid interface, rayleigh waves, solid solid interface, Van Der Sluijs (J.C.A.), Van Der Sluijs (M.J.), *9339*
- films, liquid metals, magneto fluid dynamics, surfactants, Gogosov (V.V.), Naletova (V.A.), (et al.), *9790*
- acoustic measurements, machinery, vibration, Koss (L.L.), Moffatt (J.A.), *9851*
- bubble dynamics, dilute solutions, polymers, Mccomb (W.D.), Ayyash (S.), *9884*
- bearings (journal), squeeze films, vibration, viscoelasticity, Tichy (J.A.), *9955*
- bearings (thrust), film thickness, inertia, lubrication (hydrostatic), stiffness, Prabhu (T.J.), Ganesan (N.), *9956*
- dynamic analysis, hysteresis, vibration (forced), Fabries (M.), *10192*
- dynamic response, shells (cylindrical), vibration (forced), Leissa (A.W.), Iyer (K.M.), *10213*
- bearings (thrust), experimental methods, stiffness, vibration (forced), Schwanecke (H.), *10219*
- bearings (thrust), design, ship design, stiffness, vibration, Vassilopoulos (L.), *10375*
- cylindrical bodies, heat exchangers, tube bundles, Chen (S.-S.), *10490*
- spinning bodies, stability theory, Buratti (A.), Fusco (G.), *10777*
- nonlinear theory, rolling motion, ship motion, Cardo (A.), Francescutto (A.), (et al.), *10877*
- distributed parameters, modal control, numerical methods, Meirovitch (L.), Baruh (H.), *11061*
- oscillations, vibration, vibration isolation, Alley (T.L.), *11082*
- dynamic analysis, rotating shafts, vibration (forced), Muller (A.A.), *11140*
- critical speed, dynamic analysis, rotating shafts, vibration (forced), Yanabe (S.), *11143*
- bearings (journal), turbomachinery, vibration (forced), vibration isolation, Beskletnyi (M.E.), Igumentsev (E.A.), *11147*
- bearings, flexible bodies, rotors, squeeze films, vibration isolation, Cookson (R.A.), Kossa (S.S.), *11340*
- gravity waves (solitary), viscous effects, Segur (H.), *11567*
- cylindrical bodies, scale models, vibration (flow induced), Mulcahy (T.M.), *11626*
- cylindrical bodies, floating bodies, virtual mass, Yeung (R.W.), *11654*
- floating bodies, gravity waves (surface), virtual mass, Falnes (J.), *11675*
- articulated structures, dynamic stability, pipe flow, vibration (flow induced), Sugiyama (Y.), Noda (T.), *11685*
- bodies (liquid filled), dynamic stability, rotors, Hendricks (S.L.), *11688*
- blades, flapping, helicopters, Peters (D.A.), Gaonkar (G.H.), *11736*
- blades, flapping, helicopters, rotors, Gaonkar (G.H.), Peters (D.A.), *11737*
- airplanes, computer aided design, gust loads, power spectral density, yawing, Noback (R.), Blaauboer (C.), *11843*
- ducts, sound fields, vibration, walls, Loh (H.-T.), Reethof (G.), *11928*

damping capacity, aluminum alloys, machinability, materials properties, metallic composites, Deonath, Narayan (R.), (et al.), *5123*
- aluminum alloys, copper alloys, deformation (plastic), superplastics, Furushiro (N.), Takimoto (J.), (et al.), *6188*
- dynamic analysis, offshore structures, random loading, wave loads, Vandiver (J.K.), *6536*
- composite materials, cracks, damage, nondestructive tests, Pye (C.J.), Adams (R.D.), *9254*
- composite materials, inclusions, viscoelastic materials, Kligman (R.L.), Madigosky (W.M.), (et al.), *9341*
- anisotropic media, elastic waves, propagation, Tarabrin (G.T.), *11167*
- design, masts, oscillations, viscous effects, wind loads, Etkin (B.), Hansen (J.S.), *11842*

dams, displacement, earth dams, settlements, Katzenbach (R.), Breth (H.), *521*
- earthquake effects, hydrodynamic pressure, Housner (G.W.), *971*
- earthquake effects, finite element methods, Priscu (R.), Stematiu (D.), (et al.), *972*
- embankments, granular media, mine tailings, mining, Highter (W.H.), Tobin (R.F.), *2387*
- numerical methods, seepage, Crank (J.), Ozis (T.), *3003*
- earthquakes, hydrodynamic pressure, Yang (C.Y.), Chiarito (V.), *7044*
- earthquake engineering, experimental mechanics, vibration (forced), Severn (R.T.), Jeary (A.P.), (et al.), *7608*
- numerical methods, seepage, Botezatu (N.C.), *7983*
- cracking, earthquake effects, embankments, Lane (R.G.T.), *9365*
- blankets, design, Gill (M.A.), *9456*
- design, membranes, Goel (M.C.), Singhal (M.M.), *9457*
- earthquake effects, finite element techniques, pressure, reservoirs, Saini (S.S.), *9614*
- fail safe design, failure, optimization, reliability analysis, Bhattacharjee (M.C.), *10087*
- dynamic analysis, earthquake effects, vibration (nonlinear), Dungar (R.), *10199*
- hydrodynamic pressure, seismic loading, soil structure interaction, Chopra (A.K.), Gupta (S.), *10849*
- dam-failure, failure, gravity waves (shallow water), wave interactions, Marshall (G.), Menendez (A.N.), *11564*
- dam breaks, modeling, wave interactions, Chen (C.L), Armbruster (J.T.), *11613*
- bodies (liquid filled), finite element techniques, fluid-structure interaction, Altinisik (D.), Karadeniz (H.), (et al.), *11649*

Dan (Y.), see Etsion (I.), *7628*

Dan-Zhi (C.), combustion chambers, gas turbines, scale models, *5641*

Dandliker (R.), holography, interferometry, sensitivity, speckle interferometry, strain measurement, *11314*

Dang (V.-D.), heat addition, heat transfer, peclet number, plates (parallel), power law fluids, *5563*

Daniel (B.R.), see Meyer (W.L.), *900*

Daniel (I.M.), see Schramm (S.W.), *7557*

Daniel (W.J.T.), eigenvalue problems, finite element techniques, fluid-structure interaction, modal analysis, *2716*

Daniels (P.G.), bounded media, cellular flow, convection, hydrodynamic stability, rotating fluids, *8710*
- see Smith (F.T.), *9569*

Danielyan (Yu.S.), freezing, kinetics, soils, Yanitskii (P.A.), *11774*
Danilevich (B.B.), see Zheleznyakov (G.V.), *4045*
Danilina (A.N.), see Afanasev (V.N.), *2137*
Danilov (N.S.), see Volkov (V.I.), *5829*
Danilov (V.L.), gravitational prospecting, hydrodynamics, inverse problems, potential theory, Shulman (I.I.), *2995*
- filtration, porous media, *5900*

Danilov (Yu.M.), approximations, boundary value problems, compressible flow, difference operator, differential operator, least squares, subsonic flow, *11433*
Danilova (E.M.), avalanches, landslides, modeling, snow, Eglit (M.E.), *1331*
Dantsyg (A.Ya.), see Labendik (V.P.), *11799*
Danyushevskii (A.I.), see Zverkov (B.V.), *10153*
Dapena (J.), human body, kinematics, motion, simulation, *6009*
Darai (A.), see Arscott (F.M.), *37*
Darbyshire (J.), see Williams (R.G.), *5481*
darcy flow, multiphase flow, porous media, Wright (R.J.), Dawe (R.A.), *2997*
- biomechanics, channel flow, channels, river beds, roughness, vegetation, Kouwen (N.), Li (R.-M.), *4569*
- filtration, hydrodynamics, oil removal, underground, Rasulov (M.A.), *4968*
- conduction (unsteady), diffusion, half space, mass transfer, Nilson (R.H.), *8778*
- heat transfer, mass transfer, porous media, Vafai (K.), Tien (C.L.), *8782*
- boundary integral methods, three dimensional flow, Lennon (G.P.), Liu (P.L.-F.), (et al.), *8950*
- porous media, singularities, Lafe (O.E.), Montes (J.S.), (et al.), *9905*
- crossflow, freezing, packed beds, porous media, tubes, Okada (M.), *10597*
- ekman layer, porous media, Verma (A.K.), *10830*
- filtration, immiscible fluids, porous media, Mircea (O.T.), *10837*

Darevskaya (E.V.), dynamic analysis, plates (rectangular), vibration (free), *9312*
Darkazalli (G.), see Eftekhar (J.), *7848*
Darkov (A.) ed., matrix methods, mechanics, structural analysis, *2529, book*
Darrozes (J.-S.), see Michelet (G.), *7143*
Dartnell (L.M.), see Wilkinson (D.H.), *12102*
Das (B.M.), clay, foundations, scale models, *1314*
Das (K.P.), see Dysthe (K.B.), *1589*
Das (M.M.), see Barr (D.I.H.), *7651*
- see Pai (S.I.), *10864*

Das (S.), earthquakes, fracture mechanics, modeling, time dependence, Scholz (C.H.), *10846*
Das (T.K.), see Niyogi (P.), *8548*
Das Gupta (A.), aquifers, coasts, finite element techniques, infiltration, porous media, Arbhabhirama (A.), *8971*
Das Gupta (R.), design, large scale systems, multivariable systems, observers, Fairman (F.W.), *11046*
Das Talukder (N.K.), mechanical analysis, rolling, shaping, straighteners, Johnson (W.), *3425*
Daschner (W.), see Worndle (R.), *1203*
Dasgupta (A.K.), see Soundalgekar (V.M.), *3589*
Dasgupta (G.), complex variables, correspondence principle, cyclic loading, viscoelasticity (dynamic), *264*
- finite element techniques, foundations, soil structure interaction, substructuring, *1881*

Dasgupta (S.), see Hildebrandt (A.F.), *4725*
Dash (G.C.), friction (skin), poiseuille flow, porous surfaces, suction, viscoelastic fluids, Behera (S.C.), *3569*
- duct flow, entrance region, fluid injection, viscoelastic fluids, Behera (S.C.), *7723*

Dash (S.M.), exhaust gases, jets, numerical methods, plumes, shock waves, supersonic flow, Thorpe (R.D.), *4590*
Dassios (G.), scattering, sound fields, surface barrier, *10796*
- acoustic waves, ellipsoids, scattering, *11979*

Dassonville (G.), aquifers, diffusion, infiltration, Emsellem (Y.), *7050*
data acquisition, flow measurement, hot wire, velocity measurement, Lehmann (B.), *1640*
- balloons, meteorology, weather forecasting, Dushkin (P.K.), Belov (A.I.), (et al.), *4090*
- climatology, Izrael (Yu.A.), *4091*
- meteorology, oceanography, Bogatyr (B.N.), *4094*
- aerodynamic performance, digital analog computation, wind tunnels, Whitfield (J.D.), Pate (S.R.), (et al.), *4689*
- lasers, scattering, velocity measurement, Hirleman (E.D.), *7815*
- attitude control, guidance theory, spinning bodies, tumbling bodies, Hubert (C.), *7920*
- calibration, force, measurements (dynamic), tension, transducers (load), Dalke (D.D.), *9426*

data analysis, binary search trees, coding, computer programming, Stephenson (C.J.), *67*
- cratering, cutting, electric spark discharge, geometrical properties, stochastics, Pandit (S.M.), Rajurkar (K.P.), *1348*
- computer programming, dynamic response, fortran program, statistical theory, Maine (R.E.), *2055*
- alloys, relaxing media, stress relaxation, viscoelastic materials, Povolo (F.), *2230*
- composite materials, failure, reliability, triaxial loading, Wetherhold (R.C.), *2245*
- classification, mathematical methods, Plotkin (A.A.), *3128*
- computer programming, imaging systems, real time solution, spectra, Meredith (B.D.), Kelly (W.L.) IV, *3129*
- creep, data extrapolation, refractories, Tsvilyuk (I.S.), Baumshtein (M.V.), *3254*
- algorithms, measurements, systems, Walter (P.L.), *3489*
- computing techniques, interferometry, two dimensional flow, Ben-Dor (G.), Whitten (B.T.), (et al.), *3760*
- laser doppler velocimeters, turbulent flow, Schnettler (A.), *3761*
- meteorology, Gruza (G.V.), Kachurina (L.R.), (et al.), *4085*
- laser doppler velocimeters, particulate flow, sampling, Edwards (R.V.), *4686*
- injection systems, piston driven flow, pumps, Turcoiu (T.), Apostolescu (N.), *5503*
- computing techniques, flight control, stochastic processes, Maine (R.E.), Iliff (K.W.), *6885*
- ocean waves, spectra, stochastic processes, surface waves, Long (R.B.), *7058*
- fourier transform, frequency domain techniques, random excitation, vibration, Bendat (J.S.), *7175*
- conduction (heat), conjugate gradient method, inverse problems, minimum discrepancy method, steepest descent method, Alifanov (O.M.), Rumyantsev (S.V.), *7859*
- design, offshore structures, structural analysis, substructuring, Hatlestad (B.), Mellingen (K.), *8461*
- calibration, flow measurement, pitot tube, three dimensional flow, velocity measurement, Nishimura (H.), *8573*
- lasers, stress strain relationships, velocimeters, Duffey (T.A.), Karpp (R.R.), (et al.), *9422*
- existence theorems, finite element techniques, galerkin method, navier stokes equation, penalty function, Sani (R.L.), Gresho (P.M.), (et al.), *10072*
- estimation, fatigue, statistical theory, strength, Nishijima (S.), *10323*
- crack initiation, gas turbines, low cycle fatigue, prediction, stresses, Doner (M.), Bain (K.R.), (et al.), *10328*
- ocean air interaction, wind-wave interaction, Talagrand (O.), *12081*
- nondestructive tests, surveys, ultrasonics, Fu (L.S.), *79999*

data reduction, calibration, flow measurement, Sievert (G.), *9674*
Datta (A.B.), finite difference methods, flow reversal, manifolds, Majumdar (A.K.), *7725*
Datta (P.K.), analog simulation, plates (holed), tension, vibration (nonlinear), *10206*
Datta (S.), elasticity (nonhomogeneous), inclusions, inhomogeneities, torsion, Kanwal (R.P.), *246*
- integral methods, navier stokes equation, plates, rotating disks, viscous flow, *7670*

Datta (S.K.), see Shah (A.H.), *9345*
Datta-Barua (M.), see Shieh (L.S.), *4222*
Dattaguru (B.), see Ghosh (S.P.), *5316*
Daugirda (D.M.), see Spilker (R.L.), *5035*
Daunene (S.A.), see Daunis (M.A.), *1352*
Daunis (M.A.), deformation, life expectancy, low cycle fatigue, resistance, welded joints, Daunene (S.A.), *1352*
- deformation, fracture, welded joints, welding, Brazhenas (A.P.), *6567*

Davenport (R.T.), crack propagation, endurance limit, fatigue, stress intensity factor, Brook (R.), *4484*
Davey (M.K.), annular flow, cylindrical bodies, nonlinear theory, rossby waves, rotating cylinders, *10410*
Davidson (D.L.), crack growth, damage (cumulative), environmental tests, fracture mechanics, metals, *3449*
- aluminum alloys, crack opening displacement, fatigue, high strength, material testing, Lankford (J.), *8373*

Davidson (J.W.), earthquake effects, reliability design, Felton (L.P.), (et al.), *7034*
Davidson (P.B.), beams, dynamic response, vibration isolation, Vance (O.L.), *8292*
Davies (A.M.), galerkin method, ocean air interaction, oceanography, *9927*
Davies (D.R.), see Dawkins (R.A.), *7699*
Davies (H.G.), beams, random excitation, vibration (random), Wahab (M.A.), *4412*
Davies (J.C.), see Gibbs (B.M.), *5778*
Davies (J.M.), composite materials, failure, floors, slabs, Fisher (J.), *6229*
Davies (P.O.A.L.), acoustic measurements, ducts, sound fields, Bhattacharya (M.), (et al.), *5779*
Davies (R.A.), see Clement (R.M.), *5689*
Davies (T.H.), chains, kinematics, networks, theory, *5373*
Davies (T.J.), see Harris (M.), *5332*
Davini (C.), structural stability, theory, Guidugli (P.P.), *2287*
- portal frames, stability theory, structural stability, *3319*

Davino (R.M.), annular flow, axial compressors, blades, boundary layer, mixing, wakes, Lakshminarayana (B.), *10522*
Davis (C.S.), inequality constraints, numerical analysis, optimization, penalty function, *1106*

Davis (D.A.), corrosion fatigue, crack growth, environmental tests, steel, welded joints, Czyryca (E.J.), *6428*

Davis (E.H.), clay, excavation, soil mechanics, structural stability, tunnels, Gunn (M.J.), (et al.), *6526*

- see Poulos (H.G.), *10250, book*

Davis (G.B.), fissures, fluid mechanics, porous media, rock mechanics, Hill (J.M.), *9889*

Davis (H.T.), see Guerrero (M.I.), *10553*

Davis (M.R.), see Hoang (K.), *1863*

- control, decay, jets, *10461*
- see Thang (N.T.), *12029*

Davis (P.K.), coal, particulate flow, pipelines, suspensions, viscometry, Muchmore (C.B.), (et al.), *3594*

Davis (R.O.), failure, granular media, strength, Mullenger (G.), *417*

- see Mullenger (G.), *7291*
- energy methods, liquefaction, sand, seismic loading, Berrill (J.B.), *9922*

Davis (R.P.), cutting (three dimensional), mathematical models, numerical control, optimization, Wysk (R.A.), (et al.), *3220*

Davis (R.T.), compressible flow, navier stokes equation, numerical methods, viscous flow, Rubin (S.G.), *11432*

Davis (R.W.), channel flow, flumes, free boundary, inviscid fluid, surface profiles, velocity profiles, Deutsch (S.), *560*

Davis (S.H.), see Grotberg (J.B.), *3060*

- see Olmstead (W.E.), *7666*

Davis (S.S.), airfoils, oscillating bodies, scale effects, transonic flow, *1784*

- flexible walls, laser doppler velocimeters, transonic flow, wind tunnels, *9680*

Davison (E.J.), design, heat exchangers, multivariable systems, process control, regulator problem, Taylor (P.A.), (et al.), *1163*

- adaptive systems, design, linear systems, multivariable systems, process control, tracking, *4236*
- control, design, linear systems, multivariable systems, optimization, servomechanisms, Ferguson (I.J.), *8168*

Davoli (P.), constant velocity couplings, kinematics, shafts, splines, transmissions, *6556*

Davy (J.L.), acoustics (architectural), reverberation, transfer functions, *10799*

Davydov (L.M.), condensation, nonequilibrium effects, water, Pirumov (U.G.), *810*

Davydov (Yu.M.), compressible flow, navier stokes equation, numerical methods, reynolds number (high), *5422*

Davydovskaya (N.I.), design, diagnostics, process control, reliability analysis, *2114*

Dawe (D.J.), see Roufaeil (O.L.), *2335*

Dawe (R.A.), see Wright (R.J.), *2997*

Dawkins (R.A.), boundary layer (atmospheric), boundary layer (turbulent), mass transfer, surface flow, surface flow, turbulence (transport), Davies (D.R.), *7699*

Dawood (A.S.), convection (free), heat transfer, thermal effects, vibration, Manocha (B.L.), (et al.), *753*

Dawson (J.L.), see Hladky (K.), *5335*

Dawson (P.H.), fatigue, friction (rolling), friction (sliding), rolling contact, *9946*

Dawson (T.H.), ocean bed, ocean waves, surface waves, *4868*

- cyclic loading, offshore structures, piles, *5365*

Day (B.V.), see Stanley (P.), *2468*

Day (W.A.), creep, statistical continuum mechanics, viscoelasticity (dynamic), *6173*

- energy density, functional analyis, stresses, traction, *7132*
- energy density, slabs, thermoelasticity (transient), *8879*

Dayal (U.), clay, cylindrical bodies, penetration, Allen (J.H.), (et al.), *6364*

De (M.K.), see Hammitt (F.G.), *5978*

De (R.K.), see Chattopadhyay (A.), *9342*

De (S.), mathematical methods, seismic waves, *5880*

De Almeida (S.M.), see Hinds (B.K.), *436*

De Bernardinis (B.), see Dhanak (M.R.), *5398*

De Billy (M.), see Welton (P.J.), *3950*

- cracks, defects, nondestructive tests, ultrasonics, Cohen-Tenoudji (F.), (et al.), *5314*
- see Quentin (G.J.), *11974*

De Boer (R.), belts, conveyors, plates (circular), shells (cylindrical), Kuntzsch (V.), (et al.), *8242*

De Canniere (J.), chatter, cutting, dynamic analysis, mathematical methods, vibration (forced), Van Brussel (H.), (et al.), *9325*

De Castro (P.M.S.T.), crack opening displacement, J-integral, steel, Spurrier (J.), (et al.), *4505*

- see Radon (J.C.), *7472*

De Doncker (E.), see Roose (D.), *6094*

De Feijter (J.A.), shear waves, solutions (material), surface waves, viscoelastic fluids, Benjamins (J.), *1489*

De Gee (A.W.J.), see Begelinger (A.), *9037*

De Goeij (W.F.), see Van Amerongen (J.), *4102*

De Grande (G.), hot wire, reynolds stresses, turbulence, Kool (P.), *6694*

De Hoog (E.R.), approximation theory, boundary value problems, infinite medium, Weiss (R.), *3099*

De Irassar (P.V.), see Laura (P.A.A.), *10204*

De Jonckheere (R.), see Laderman (A.J.), *9548*

De Jong (J.E.), see Nagtegaal (J.C.), *2232*

De Jonge (R.M.), see Verhaart (H.F.A.), *8909*

De Josselin De Jong (G.), multifluid flow, three dimensional flow, vortex flow, *7979*

- collapse, limit analysis, slopes, soils, stability, *9361*

De Kee (D.), see Barrett (A.J.), *8504*

De Koning (A.U.), crack growth, crack opening displacement, elastoplasticity, stress intensity factor, yield criteria, *1378*

De Koning (W.L.), discrete systems, maximum principle, optimal control, sampled data systems, stochastic processes, *175*

De Lafontaine (J.), artificial satellites, oblateness, orbit decay, reentry, upper atmosphere, *6883*

De Luca (L.), combustion instability, frequency response, solid propellants, thermal waves, *8799*

De Marsily (G.), see Matheron (G.), *11776*

De Mey (G.), conduction (heat), floors, green function, heat sources, heating, *1700*

De Miguel (E.), see Karadi (G.M.), *7982*

De Mulder (E.P.H.M.), see Geway (R.P.), *5966*

De Neef (T.), blunt bodies, shock waves, supersonic flow, Moretti (G.), *6713*

De Oliveira (J.C.F.), bifurcation, existence theorems, functional equations, hopf bifurcation, *4153*

De Oliveira (P.), design (minimum weight), design (optimum), plates, rupture, *6505*

De Paiva (H.A.R.), see Neth (V.W.), *9446*

De Pater (A.D.), dynamic response, kinematics, railroads, wheels, *4941*

De Roo (P.), fracture mechanics, fracture toughness, notch tests, Marandet (B.), *4491*

De Rooij (J.G.), see Hoek (P.J.), *7877*

De Sa (S.), kinematics, mathematical methods, mechanisms, motion, Roth (B.), *9091*

- kinematics, mathematical methods, matrix methods, mechanisms, motion, Roth (B.), *9092*

De Saint Victor, pipe flow, simulation, unsteady flow, viscoelastic fluids, Ly (D.P.), (et al.), *11506*

De Saxce (G.), see Nguyen Dang Hung, *5093*

De Silva (C.W.), algorithms, control, design (optimum), vibration, vibration isolation, *165*

- beams (thin section), beams (torsional), Wormley (D.N.), *2258*

De Smedt (R.), acoustics, numerical methods, scattering, screens, *11987*

- rings, screens, sound propagation, transmission, *11988*

De Socio (L.M.), boundary conditions, channels (closed), conduits, convection (free), transforms, Misici (L.), *1683*

- bubble dynamics, ducts, dust, stochastic processes, two phase flow, Gaffuri (G.), (et al.), *1840*
- see D'Anna (A.), *4130*
- asymptotic methods, boundary layer, buoyant flow, convection (free), stokes flow, wells, Gaffuri (G.), (et al.), *10568*

De Souza (V.C.M.), rayleigh method, shells (orthotropic), shells (spherical), vibration (free), Croll (J.G.A.), *8316*

De Vathaire (M.), abrasion, indentation, plastic flow, ploughing, wear, Delamare (F.), (et al.), *3035*

De Vor (R.E.), see Schomer (P.D.), *1814*

De Vriend (H.J.), see Kalkwijk (J.P.T.), *1494*

De Vries (M.I.), damage (cumulative), low cycle fatigue, micromechanics, nuclear radiation, Tjoa (G.L.), (et al.), *7501*

De Wit (R.), dugdale model, fracture criteria, fracture mechanics, pipelines, welded structures, Smith (J.H.), *7531*

De Witt (K.J.), see Fhts (P.B.) Jr., *773*

De Zwaan (A.P.), see Kupras (L.K.), *995*

Dean (D.J.), conduction (heat), heat addition, heat transfer, numerical methods, *5579*

Dean (D.L.), bridges, modeling, structural analysis, Ramsay (R.T.), *3543*

Dean (D.P.), see Duncan (J.P.), *1958*

Dean (R.B.), see Fish (P.R.), *3559*

Dean (R.G.), see Sharma (J.N.), *11663*

Dean (R.H.), crack propagation, elastoplasticity, yield condition, Hutchinson (J.W.), *3464*

Dean (T.A.), see Abdel-Rahman (A.R.O.), *5274*

Deavenport (R.L.), see Dinapoli (F.R.), *5767*

Deaves (D.M.), boundary layer (atmospheric), structures, wind, wind loads, wind turbines, *4604*

Deb (S.R.), computer programming, elastoplasticity, finite element techniques, prandtl-reuss relations, Barman (S.), (et al.), *4203*

Debailleux (C.), bearings (hydrostatic), laminar flow, lubrication (hydrostatic), optimization, stiffness, Flamme (J.M.), *12095*

Debchaudhury (A.), see Gasparini (D.A.), *518*

- see Gasparini (D.A.), *10201*

Debnath (L.), see Bose (S.K.), *2366*

- drag coefficient, nonlinear analysis, offshore structures, virtual mass, wave loads, Rahman (M.), *7767*
- estuaries, nonlinear waves, shallow water, tidal waves, two dimensional flow, Chatterjee (A.K.), *11359*

Debra (D.B.), attitude control, control, gravimetrics, *2925*
Debussy (F.D.), see Dimotakis (P.E.), *643*
decay, grids, mixing, temperature, turbulence, Sreenivasan (K.R.), Tavoularis (S.), (et al.), *654*
- hydrodynamic stability, perturbations, shear flow, Brown (S.N.), Stewartson (K.), *2682*
- jets, similarity methods, Middleton (D.), *3682*
- bifurcation, computing techniques, discontinuities, ducts, Yaushev (K.K.), *3724*
- beams, reinforced concrete, shear strength, Scribner (C.F.), Wight (J.K.), *4038*
- turbulence (isotropic), turbulent flow, Nelkin (M.), Kerr (R.M.), *5469*
- diffusion, turbulence (isotropic), Sreenivasan (K.R.), *7748*
- acoustic emission, dislocations, elastic waves, Clifton (R.J.), Markenscoff (X.), *8332*
- dispersion, simulation, turbulence (homogeneous), Kowalski (A.D.), Peskin (R.L.), *8609*
- control, jets, Davis (M.R.), *10461*
- absorption, acoustic properties, acoustic waves, reverberation, Lyle (C.D.), *10787*
- acoustics, energy methods, reverberation, Kawakami (F.), Yamaguchi (K.), *11931*
- acoustics (architectural), diffusion, reverberation, Kuttruff (K.H.), *11938*
- acoustics, reverberation, Lyle (C.D.), *12001*

decelerators, drag, friction, vehicles, Korst (H.H.), White (R.A.), *9658*
decision theory, multiple scales, pattern recognition, Clarke (D.), Rivett (B.H.P.), *157*
- markov processes, optimization, stochastic processes, Demin (N.S.), *182*
- algorithms, bayesian decisions, optimization, Pashkovskii (G.S.), *2140*
- computer aided manufacturing, nonlinear programming, Keefer (D.L.), Kirkwood (C.W.), *2199*
- algorithms, identification, linear systems, Balk (P.I.), *3207*
- floods, probability theory, Bernier (J.), Miquel (J.), *4041*
- algorithms, bayesian approach, markov processes, stochastic processes, Sato (M.), Abe (K.), (et al.), *4317*
- dynamic programming, linear systems, optimization, time invariant systems, Hess (J.), Kagiwada (H.), (et al.), *8175*
- existence theorems, optimization, vector methods, Alekseichik (M.I.), Naumov (G.E.), *9113*
- differential equations (partial), dynamic programming, smoothing of data, transforms, Angel (E.S.), *10023*

decking, bridges, curved members, orthotropic materials, structural analysis, Dey (S.S.), Samuel (A.T.), *5357*
Deckker (B.E.L.), compressible flow, diffusers, duct flow, numerical methods, swirl flow, Jeffries (C.), (et al.), *7693*
- see Iwamoto (J.), *10462*

decomposition, heat transfer, mass transfer, radiant interchange, Senchenkov (A.S.), *797*
- reaction kinetics, vibration (thermally excited), Zaslonko (I.S.), Mukoseev (Yu.K.), *829*
- crack initiation, crack propagation, fracture, stochastics, Ichikawa (M.), Tanaka (S.), *7509*
- convection (free), exothermic reactions, porous surfaces, Saatdjian (E.), Caltagirone (J.P.), *8721*
- experimental methods, interfaces, jets, magneto fluid dynamics, Arkhipenko (V.I.), Barkov (Yu.D.), *10745*

Deconinck (H.), blades, cascades, finite element techniques, transonic flow, Hirsch (C.), *8590*
Decorso (S.M.), see Lew (H.G.), *10711*
decoupling, feedback, linear systems, multivariable systems, time invariant systems, Sinha (P.K.), *113*
- nonlinear systems, transformation, Schrapel (H.D.), *1079*
- frequency domain techniques, multivariable systems, pole placement, Kousiouris (T.G.), *3152*
- design, feedback, frequency domain techniques, Argoun (M.B.), Van De Vegte (J.), *3158*
- linear systems, time lag, time varying systems, Nakanishi (E.), Nanbara (K.), *4204*
- feedback, state space techniques, Descusse (J.), *4232*
- control, design, manipulators, robotics, Freund (E.), Hoyer (H.), *8176*
- control, model reduction, multivariable systems, Shieh (L.-S.), Wei (Y.-J.P.), (et al.), *9158*
- control, design, linear systems, multivariable systems, nonlinear systems, synthesis, Mercier (O.), *9165*
- control, design, large scale systems, manipulators, nonlinear systems, Vukobratovic (M.K.), Stokic (D.M.), *11049*
- control, design, digital control, feedback, nonlinear systems, Singh (S.N.), *11050*

Decraemer (W.F.), biomaterials, constitutive equations, nonlinear materials, tissues, viscoelastic materials, Maes (M.A.), (et al.), *1951*
Decroisette (M.), see Beklarian (A.), *5688*
Dees (P.J.), experimental methods, holes, permeability, porous media, Tjan (T.G.), (et al.), *7007*
defects, shells (cylindrical), stress strain relationships, Pobedrya (B.E.), Lavin (V.D.), *2272*
- flaw detection, inspection, temperature, thermal measurements, Vavilov (V.P.), Gorbunov (V.I.), *2504*
- lasers, layered media, nondestructive tests, residual stresses, ultrasonics, Berger (H.) eds., Linzer (M.), *3505, book*
- delamination, heat transfer, nondestructive tests, plates, thermography, Vavilov (V.P.), *3509*
- cracks, nondestructive tests, ultrasonics, De Billy (M.), Cohen-Tenoudji (F.), (et al.), *5314*
- bending, fracture toughness, plane strain, steel, Boichenko (Yu.A.), Sosnin (A.V.), (et al.), *5333*
- glass fibers, stress concentration, Ermak (A.A.), Mikhailov (A.M.), *6192*
- acoustic measurements, nondestructive tests, surface flaws, Polesskaya (L.M.), Grichuk (V.V.), (et al.), *6487*
- flaw detection, nondestructive tests, transducers, Lange (Yu.V.), *6488*
- acoustic measurements, acoustic waves, surface flaws, ultrasonics, Ermolov (I.N.), Razygraev (N.P.), (et al.), *6490*
- flaw detection, spectral analysis, surface flaws, ultrasonics, Vopilkin (A.Kh.), Ermolov (I.N.), (et al.), *6492*
- ceramics, crack initiation, nondestructive tests, stochastic systems, Evans (A.G.), Meyer (M.E.), (et al.), *7470*
- algorithms, flaw detection, frequency domain techniques, ultrasonics, Cleveland (D.), Barron (A.R.), (et al.), *7584*

Deferrari (H.A.), see Leung (R.), *5732*
deflagration, detonation (two phase), detonative ignition, explosives, thermal explosions, Terao (K.), Sawada (R.), *883*
- detonation (two phase), detonative ignition, explosives, thermal explosions, Calzia (J.), *884*
- detonation, explosions, liquid fuels, thermal explosions, Mitrofanov (V.V.), Pinaev (A.V.), (et al.), *1797*
- ballistics (interior), burning rate, detonation, propellants, Goliger (J.), Lucotte (J.-P.), *2928*
- chemical reactions, kinetic theory, nonlinear waves, transport phenomena, Abouseif (G.E.), Toong (T.Y.), *6708*
- chemical kinetics, detonation, explosions, Lesnyak (S.A.), Slutskii (V.G.), *9827*
- explosions, thermal explosions, Dik (I.G.), Zurer (A.B.), *9837*
- burning rate, chemical kinetics, models, solid propellants, Ben-Reuven (M.), Caveny (L.H.), *11790*

deflections, curved surfaces, holography, moire methods, Gilbert (J.A.), Herrick (J.W.), *1394*
- beams (variable cross section), matrix methods, Romhanyi (G.), *2264*
- beams, deformation, impulsive loading, Symonds (P.S.), *2525*
- beams, floors, stiffness, wood structures, Mccutcheon (W.J.), Vanderbilt (M.D.), (et al.), *3554*
- cracking, plates (circular), reinforced concrete, slabs, Desayi (P.), Muthu (K.U.), *4531*
- beams, shakedown structures, Tin Loi (F.), *5340*
- bridges (suspension), prestressed structures, Sofronie (R.), *5358*
- moire methods, propellers, propellers (marine), Sikora (J.P.), *8423*
- beams, elastoplasticity, frames, plasticity, yield condition, Bandyszewski (W.), Sawczuk (A.), *8438*
- bearing capacity, falsework, scaffolding, structural response, ultimate strength, Holmes (M.), Hindson (D.), *8455*
- contact stresses, elasticity, gear teeth, half space, Terauchi (Y.), Nagamura (K.), *8472*
- bridges, wind bracing, wind loads, Beguin (G.H.), *9453*
- stiffness, tires, Koutny (F.), *9461*
- beams (timoshenko), design, dynamic loads, gear teeth, transmissions, Nagaya (K.), Uematsu (S.), *10372*

deformable bodies, analogies, finite element techniques, rigid bodies, structural analysis, Grabski (J.), *7215*
- force, inviscid fluid, potential flow, three dimensional flow, Vilkhovchenko (S.D.), Yakimov (Yu.L.), *8624*
- mass flow, porous media, Beavers (G.S.), Hajji (A.), (et al.), *8938*
- experimental results, mass flow, porous media, Beavers (G.S.), Wittenberg (K.), (et al.), *8939*
- hydroelasticity, stresses, viscous flow, Guz (A.N.), *9010*
- numerical methods, Shilkrut (D.), *9275*
- beams, kinematics, Keler (M.L.), Beran (M.A.), *10138*

deformation, displacement, foundations, shells (cylindrical), tanks, Brandes (K.), *307*
- elastoplasticity, pressure vessels, shells (cylindrical), shells (plastic), Ohashi (Y.), Okouchi (T.), *312*
- elasticity (nonlinear), shells (of revolution), Myachenkov (V.I.), Yusov (V.N.), *316*
- pore pressure, pressure, rocks, Blanton (T.L.) III, *432*
- plastics, surfaces, visualization, Sevenhuijsen (P.J.), *484*
- adhesion, contact problems, friction, Tabor (D.), *1000*
- friction (sliding), rotating bodies, seals, Metcalfe (R.), *1017*
- dies, drawing, stress strain relationships, Hanaki (K.), Kato (K.), *1344*
- life expectancy, low cycle fatigue, resistance, welded joints, Daunis (M.A.), Daunene (S.A.), *1352*
- low cycle fatigue, measurements, Kochetov (V.T.), Erofeev (V.I.), (et al.), *1414*
- columns, reinforced concrete, Ford (J.S.), Chang (D.C.), (et al.), *1439*

- diffusion, mathematical models, porous media, Podstrigach (Ya.S.), Povstenko (Yu.Z.), *1730*
- inverse problems, numerical methods, thermoelasticity, Nikitenko (N.I.), *1833*
- heat, polymers, thermoelasticity, Persoz (B.), Rosso (J.C.), *1837*
- drops, two phase flow, Krzeczkowski (S.A.), *1859*
- earth, geodetic measurements, mantle, measurements, Kuchay (V.K.), Pevnev (A.K.), (et al.), *1878*
- conservation laws, constitutive equations, continuum mechanics, crystallography, solid mechanics, Billington (E.W.), Tate (A.), *1973, book*
- elasticity (linear), energy methods, strain energy, Ecsedi (I.), *2218*
- elasticity (linear), energy methods, strain energy, Ecsedi (I.), *2219*
- automation, moire methods, strain analysis, Sokolov (B.B.), *2473*
- acoustic emission, aluminum alloys, nondestructive tests, Green (G.), Clark (G.), *2482*
- beams, deflections, impulsive loading, Symonds (P.S.), *2525*
- couplings, drives, Fessler (H.), Stewart (R.W.), *2555*
- crystals, metals, plasticity, Berveiller (M.), *3268*
- cyclic loading, high temperature, low cycle fatigue, Zhitkyavichene (V.P.), Medeksha (G.G.), *3269*
- error, impact, strain gages, strain measurement, Malgun (M.M.), Loginov (P.M.), *3488*
- creep, springs, stresses, Sritharan (T.), Jones (J.), *3498*
- bridges, creep, prestressed concrete, repair, Takafuji (T.), Seki (S.), *3537*
- bolted joints, bolts, holography, Muruyama (K.), Yoshimoto (I.), (et al.), *3582*
- optical instruments, towers, wind loads, Neuerburg (W.), *3906*
- earth, earth's crust, earthquake effects, Yunga (S.L.), *4032*
- elastoplasticity, soils, Sporykhin (A.N.), *4464*
- alloys, grain boundaries, plasticity, superplastics, Kaibyshev (O.A.), Valiev (R.Z.), *4515*
- conical bodies, flexible bodies, pressure distribution, supersonic flow, wedges, Belyaev (N.M.), Khrushch (V.K.), *4585*
- fracture, joints, pore pressure, rocks, Dhowian (A.W.), *5264*
- finite element methods, flaw detection, holography, inhomogeneities, interferometry, nondestructive tests, Wachutka (H.), Kordisch (H.), (et al.), *5339*
- earth, faults, stress analysis, Dravinski (M.), Trifunac (M.D.), *5864*
- biomechanics, constitutive equations, diagnostics, heart, Ghista (D.N.), Ray (G.), (et al.), *6013*
- biomechanics, constitutive equations, diagnostics, heart, pulsatile flow, Ghista (D.N.), Ray (G.), (et al.), *6014*
- plasticity, strain analysis, thermoplasticity, viscoplasticity, Lehmann (T.), *6034*
- elastoplasticity, micromechanics, stress strain relationships, Getman (A.F.), *6139*
- dynamic loads, plates, reinforced bodies, slabs, Parker (D.F.), *6196*
- cutting, dynamic analysis, fracture mechanics, glass fibers, reinforced plastics, Inoue (H.), Ido (M.), *6449*
- elastoplasticity, fatigue, piezoelectric devices, ultrasonics, Bajons (P.), *6464*
- creep, ductility, nuclear reactors, testing equipment, tests, Kruglov (A.S.), Fazkullin (V.A.), (et al.), *6498*
- elastoplasticity, framed structures, inelasticity, variable loading, work hardening, Tin Loi (F.), *6528*
- fracture, welded joints, welding, Daunis (M.A.), Brazhenas (A.P.), *6567*
- drops, interface phenomena, shear flow, Flumerfelt (R.W.), *6990*
- granular media, strain analysis, Roj (J.), *7134*
- granular media, micromechanics, spherical bodies, statistical continuum mechanics, Vaisman (A.M.), Goldshtik (M.A.), *7270*
- models, porous media, rocks, saturation, Abey (A.E.), *7450*
- airfoil theory, lift, oscillations, potential flow, Laporte (R.), *7787*
- pressure measurement, towers, wind loads, Neuerburg (W.), *7909*
- biomechanics, lungs, mechanical properties, tissues, Tai (R.C.), Lee (G.C.), *8071*
- continuum mechanics, functional analyis, kinematics, motion, Roj (J.), *8084*
- dislocations, green function, Kossecka (E.), *8180*
- bending, composite structures, fibers, layered media, stress concentration, Isupov (L.P.), *8223*
- beams (flexural), elastoplasticity, shakedown structures, variational methods, Mazzarella (C.), *8232*
- aluminum alloys, cyclic loading, macroscopic characterization, metallography, microstructures, Wang (Z.G.), Ke (T.S.), *8429*
- buckling, pressure vessels, strain, thin walled structures, Stanley (P.), Campbell (T.D.), *8468*
- bodies of revolution, ellipsoids, integral methods, virtual mass, Apshtein (E.Z.), Kolotilova (N.G.), *8534*
- bubble dynamics, drops, Vanden-Broeck (J.-M.), Keller (J.B.), *8907*
- contact problems, friction (sliding), roughness, surface profiles, thermal effects, Burton (R.A.), *9041*
- faults, fluid injection, geothermal energy, rocks, Hayashi (K.), Abe (H.), *9373*
- holography, moire methods, stress analysis, Rastogi (P.K.), Spajer (M.), (et al.), *9419*
- displacement, holography, moire methods, vibration, Abramson (N.), Bjelkhagen (H.), *9420*
- creep, fracture, low cycle fatigue, titanium, Strizhalo (V.A.), *9428*
- creep, polymer concrete, polymers, Khristova (Ya.), *9451*
- drops, interface phenomena, shear flow, Rallison (J.M.), *9882*
- creep, earthquakes, faults, stochastic processes, Andrews (D.J.), *9917*
- bearings (gas lubricated), diaphragms, pressure distribution, Wernerowski (K.), *9967*
- bearings (gas lubricated), bearings (journal), lubricants (gas), lubrication (hydrodynamic), Grudskaya (E.G.), Zablotskii (N.D.), *9971*
- rocks, strain rate, tectonics, Pfiffner (O.A.), Ramsay (J.G.), *10261*
- forging, materials processing, Leutgob (A.), *10267*
- fracture, low temperature, twinning, Tot (L.), *10277*
- creep, rock mechanics, time dependence, tunnels, Kaiser (P.K.), Morgenstern (N.R.), *10365*
- plastics, pressure vessels, reinforced bodies, shells (torispherical), strength, Barton (D.C.), Soden (P.D.), (et al.), *10367*
- earthquakes, faults, simulation, Miyashita (K.), *10847*
- ocean bed, tsunamis generation, Voyt (S.S.), Lebedev (A.N.), (et al.), *10854*
- creep, embrittlement, fracture mechanics, microstructures, steel, Carlson (R.L.), Lo (H.C.), *11316*
- beams, reinforced concrete, Christiansen (K.), *11327*
- experimental mechanics, pipelines, thermal loading, Kogan (E.A.), Zlodeev (V.P.), *11333*
- deceleration, drops, unsteady flow, Gonor (A.L.), Zolotova (N.V.), *12023*

deformation (finite), elasticity (nonlinear), finite strain, stability, Sawyers (K.N.), Rivlin (R.S.), *232*
- elasticity (nonlinear), protoelasticity, sheet metal, Kydoniefs (A.D.), *233*
- elasticity (nonlinear), penny shaped crack, stress rupture, Selvadurai (A.P.S.), *234*
- boundary value problems, plasticity, variational methods, Klie (W.), *265*
- rods, Panayotounakos (D.E.), Theocaris (P.S.), *299*
- biomaterials, constitutive equations, tissues, Demiray (H.), *1038*
- constitutive equations, elastoplasticity, strain rate, Mandel (J.), *1051*
- constitutive equations, deformation (plastic), finite strain, Neale (K.W.), *1197*
- plasticity, plates (circular), Kondo (K.), Pian (T.H.H.), *2233*
- deformation (plastic), membranes, shells (plastic), Selyutin (A.E.), Lebedev (A.A.), *2280*
- deformation (plastic), plasticity, strain analysis, Lee (E.H.), *3259*
- cylindrical bodies, thermoelasticity (steady), Kamiya (N.), Kameyama (E.), *3992*
- materials possessing memory, thermoviscoelasticity, Senchenkov (I.K.), *3997*
- elasticity (nonlinear), finite strain, Aleksandrov (A.Ya.), Shushunov (V.V.), *4332*
- creep, viscoelasticity, Arutyunyan (N.Kh.), *4345*
- continuum mechanics, thermoelasticity (nonlinear), Iesan (D.), *4816*
- constitutive equations, elasticity (nonlinear), shock waves, thermodynamics (nonequilibrium), Malek-Madani (R.), *4925*
- constitutive equations, continuum mechanics, elasticity (nonlinear), solid mechanics, Gurtin (M.E.), *5080, book*
- elasticity (nonlinear), holes, plane strain, plane stress, Varley (E.), Cumberbatch (E.), *5084*
- extrusion, finite element techniques, forming, plasticity, Dung (N.L.), *5272*
- large displacement, nonlinear structures, structural analysis, Giambanco (F.), *6159*
- elastoplasticity, strain analysis, Zhong-Heng (G.), *6181*
- beams (plastic), large displacement, plastic behavior, Kondo (K.), Pian (T.H.H.), *6212*
- beams (elastic), frames, large displacement, Milner (H.R.), *6213*
- nonlinear theory, shells (thin), solid mechanics, Mollmann (H.), *6216, book*
- springs, strips, torsion, Mansfield (E.H.), *6218*
- elastoplasticity, soil consolidation, Carter (J.P.), Booker (J.R.), (et al.), *6386*
- elastoplasticity, failure, torsion, Billington (E.W.), *7286*
- beams (flexural), beams (plastic), Gurkok (A.), Hopkins (H.G.), *7323*
- beams (curved), springs, Reissner (E.), *7324*
- boundary value problems, elasticity (nonlinear), Levin (V.A.), Tarasev (G.S.), *8183*
- deformation (plastic), microcracks, micromechanisms, Luong (L.H.S.), Brown (R.H.), *8209*
- elastoplasticity, plates (stiffened), postbuckling behavior, ship structures, Matthies (H.), Payer (H.G.), *8276*
- crack opening displacement, elliptic equations, hyperbolic equations, Abeyaratne (R.), *8398*
- nonlinear waves, plates (rectangular), waveguides, Sugimoto (N.), Majima (Y.), *11156*

deformation (plastic), bending, plates, Paulun (J.), *304*
- constitutive equations, deformation (finite), finite strain, Neale (K.W.), *1197*
- material testing, polymers, yield criteria, G'Sell (C.), Jonas (J.J.), *2235*
- deformation (finite), membranes, shells (plastic), Selyutin (A.E.), Lebedev (A.A.), *2280*
- elastoplasticity, finite element techniques, forging, materials properties, Hartley (P.), Sturgess (C.E.N.), (et al.), *2394*
- crack growth, impact, runge kutta method, stiffness, testing equipment, Zhitenev (V.V.), Markochev (V.M.), *2495*
- kinematics, plasticity, strain analysis, Luberda (V.A.), Lee (E.H.), *3258*
- deformation (finite), plasticity, strain analysis, Lee (E.H.), *3259*
- elastoplasticity, finite element methods, plane strain, Corradi (L.), Gioda (G.), *3260*
- elastoplasticity, inverse problems, shells (plastic), Burlakov (A.V.), Lvov (G.I.), *3307*

- geometric nonlinearities, materials processing, metals, plastic behavior, Lysov (M.I.), Sosov (N.V.), *3421*
- cold working, sheet metal, stress strain relationships, Reif (T.), *3422*
- crack opening displacement, j-integral, Corman (D.E.), *3462*
- aluminum alloys, stress concentration, welded joints, Demina (N.I.), Zastolskaya (Z.K.), (et al.), *3584*
- half space, plastic waves, thermoplasticity, Nagrelli (V.E.), *3996*
- low temperature, steel, work hardening, Gurev (A.V.), Alkhimenkov (T.B.), *4352*
- laminates, metallurgy, work hardening, Yellup (J.M.), Woodward (R.L.), *4498*
- compression, high temperature, plasticity, testing equipment, Brovman (M.Ya.), *4517*
- creep, metals, thermal stresses, thermoelasticity (transient), Morjaria (M.), Mukherjee (S.), *4818*
- abrasion, friction (sliding), metals, wear, Miyoshi (K.), Buckley (D.H.), *4891*
- anisotropic media, cold working, rolling, sheet metal, Honda (K.), Hosokawa (N.), (et al.), *5271*
- dislocations, hot working, microstructures, steel, viscoplasticity, Teodosiu (C.), Soos (E.), (et al.), *5273*
- contact stresses, roughness, Kato (T.), Kato (S.), (et al.), *6182*
- aluminum alloys, copper alloys, damping capacity, superplastics, Furushiro (N.), Takimoto (J.), (et al.), *6188*
- crack propagation, high temperature, low cycle fatigue, Ivanova (V.S.), Gintsler (Ya.), (et al.), *6415*
- crack growth, fracture toughness, Maslov (L.I.), *6448*
- holes, residual stresses, rings, strain gages, Misra (A.), Peterson (H.A.), *6466*
- beams, dynamic loads, materials properties, reinforced concrete, Popov (N.N.), Rastorguev (B.S.), (et al.), *6521*
- fuel elements, grain boundaries, thin walled structures, Wire (G.L.), Duncan (D.R.), (et al.), *6550*
- boundary integral methods, elastoplasticity, Benitez (F.G.), Alarcon (E.), (et al.), *7294*
- constitutive relations, plasticity, soil mechanics, Borcia (E.), *7439*
- foil, materials properties, rolling, Kouzuma (M.), *7458*
- anisotropy, deep drawing, drawing, mechanical properties, Schmidt (W.), *7459*
- casting, forging, random media, void closure, Stahlberg (U.), Keife (H.), (et al.), *7462*
- aging, beryllium, hydrogen embrittlement, strength, Lashuk (N.K.), Tkachenko (V.G.), (et al.), *7502*
- crack initiation, frequency response, high cycle fatigue, Lindner (A.), Bajons (P.), (et al.), *7508*
- friction (sliding), surface profiles, wear, Mikhin (N.M.), Froiov (S.V.), (et al.), *8050*
- dislocations, hysteresis, imperfections, Guelin (P.), *8092*
- deformation (finite), microcracks, micromechanisms, Luong (L.H.S.), Brown (R.H.), *8209*
- conical bodies, finite element techniques, impact, plasticity, time dependence, Chiesa (M.L.), Callabresi (M.L.), *8342*
- heat treatment, pressure, void closure, void fraction, Keife (H.), Stahlberg (U.), *8359*
- crystals, dislocations, micromechanics, stress concentration, Kulagina (V.V.), Dudarev (E.F.), (et al.), *8416*
- blast waves, impulsive loading, plastic flow, plates (circular), Yakupov (R.G.), *10245*
- fatigue, plastic behavior, strength, Glikman (L.A.), Gurevich (B.G.), *10274*
- fracture, material testing, metallurgy, work hardening, Aurich (D.), Wobst (K.), *10280*
- acoustic measurements, acoustoelasticity, nondestructive tests, residual stresses, Johnson (G.C.), *10316*
- aluminum alloys, copper, crystals, dislocations, plasticity, Kolkman (H.J.), *10336*

Defrise (P.), atmosphere, functional analyis, geometrical properties, relativity, *7136*

Degani (D.), compressible flow, detection, separated flow, simulation, wires, Brosh (A.), (et al.), *1546*

Degen (P.P.), missiles, penetration, reinforced concrete, *2372*

Degtyarev (G.L.), see Vatolin (V.V.), *4308*

Dehoff (R.L.), gas turbines, jet engines, multivariable systems, optimal control, Hall (W.E.) Jr., *2186*

Deich (M.E.), diffusers, drops, two phase flow, Andriets (A.G.), (et al.), *12032*

Deigaard (R.), see Sumer (B.M.), *4572*

Deissler (R.G.), navier stokes equation, spectra, turbulence, turbulence (structure), *8684*

- mathematical models, navier stokes equation, reynolds number (high), turbulence, *8617*

Dekhtyar (A.S.), bearing capacity, limit analysis, plastic behavior, shells (of revolution), shells (stiffened), *10152*

Del (G.D.), necking, plane strain, slip line methods, strips, Oding (S.S.), *8203*

Del Giudice (S.), ducts (constant area), entrance region, laminar flow, noncircular pipes, three dimensional flow, Strada (M.), (et al.), *3659*

Del Pizzo (V.), focusing, ionized gases, laser plasma interaction, models, radiation pressure, Luther-Davies (B.), *3901*

Delamare (F.), see De Vathaire (M.), *3035*

delamination, composite structures, effective elastic moduli, interlaminar stresses, micromechanics, Salamon (N.J.), *288*

- bonding, glass fibers, holography, plates (sandwich), Erdmann-Jesnitzer (F.), Winkler (T.), *483*
- composite materials, debonding, fatigue, fibers, Gradin (P.A.), Backlunk (J.), *1478*
- buckling (local), laminates, plates (orthotropic), Chai (H.), Babcock (C.D.), (et al.), *2312*
- defects, heat transfer, nondestructive tests, plates, thermography, Vavilov (V.P.), *3509*
- composite materials, damage (cumulative), flaws, structural stability, Bolotin (V.V.), Zebelyan (Z.Kh.), (et al.), *6241*
- composite materials, crack growth, crack initiation, fracture mechanics, Wang (A.S.D.), Crossman (F.W.), *6436*
- composite materials, crack growth, crack initiation, fracture mechanics, material testing, Crossman (F.W.), Warren (W.J.), (et al.), *6437*
- aluminum alloys, copper, finite element methods, friction (sliding), wear, Ohmae (N.), Tsukizoe (T.), *7089*
- composite materials, laminates, Herakovich (C.T.), *7302*
- bonded joints, composite materials, laminates, ultrasonics, Schramm (S.W.), Daniel (I.M.), (et al.), *7557*
- flaw detection, inclusions, nondestructive tests, thermography, Williams (J.H.) Jr., Mansouri (S.H.), (et al.), *7579*
- composite materials, cracks, polymers, Tomashevskii (V.T.), Shalygin (V.N.), (et al.), *9246*

Delasi (R.J.), adhesives, airplane structures, bonded joints, composite materials, moisture, Schulte (R.L.), *3587*

Delchambre (M.), see Bastin (H.), *3102*

Delforge (J.), identifiability, identification, linear systems, linear theory, *4230*

Delil (A.A.M.), see Van Der Vooren (J.), *10629*

Delorenzi (H.G.), computing techniques, elastoplasticity, fracture, newton method, *6446*

Delpak (R.), elasticity, shells (of revolution), shells (thin), *328*

Delph (T.J.), constitutive equations, creep, relaxing media, *7956*

delta wings, airfoil characteristics, drag, flaps, leading edge, vortex flaps, Marchman (J.F.) III, *683*

- aerodynamic performance, conical flow, design, supersonic flow, Nastase (A.), *2731*
- pressure distribution, subsonic flow, swept wings, visualization, Nekrasova (M.N.), *2732*
- rotating bodies, separated flow, supersonic flow, Staicu (S.), *2734*
- pressure measurement, shock waves, supersonic flow, Squire (L.C.), *5489*
- potential flow, supersonic flow, Grossman (B.), Siclari (M.J.), *8638*
- leading edge, pressure distribution, supersonic flow, Ter-Minasyants (S.M.), *8641*
- aerodynamic heating, aerodynamic loads, space shuttle, structural analysis, Macconochie (I.O.), Lemessurier (R.W.), (et al.), *8643*
- computer programming, conical flow, vortices, Vigevano (L.), *9650*
- boundary layer (control), drag, leading edge, subsonic flow, Rao (D.M.), Johnson (T.D.) Jr., *9652*
- aerodynamic performance, drag, flaps, lift, Mattick (A.A.), Stollery (J.L.), *10498*
- hypersonic flow, pressure distribution, Golubinskiy (A.I.), Schchedrin (A.I.), *10503*
- blunt bodies, computer programming, supersonic flow, viscous flow, Tannehill (J.C.), Venkatapathy (E.), (et al.), *11728*

Dembo (R.S.), design (optimum), geometric programming, sensitivity, *10352*

Demchenko (P.F.), balloons, meteorology (physical), Golitsyn (G.S.), *4068*

Demchenko (R.I.), finite amplitude, gravity waves (surface), wave interactions, Yakovlev (V.V.), *4655*

Demchenko (V.V.), coding, plasma, similarity methods, *7775*

Demekhin (E.A.), film flow, reynolds number (small), surface waves, viscous flow, Shkadov (V.Ya.), *7758*

- entrainment, film flow, nonlinear waves, turbulent flow, two phase flow, *11565*

Demenik (I.V.), see Dorogov (V.G.), *1708*

Demetriades (A.), free shear layer, laminar flow, reynolds number, transition, turbulence, Ortwerth (P.J.), (et al.), *4605*

Demidov (V.P.), diffraction, elliptical bodies, sound generation, sound propagation, *12005*

Demidova (I.I.), analysis, holes, photothermoelasticity, photoviscoelasticity, plates (circular), *1392*

Demidovich (O.B.), computing techniques, guidance optimization, optimal control, *8845*

Demin (N.S.), decision theory, markov processes, optimization, stochastic processes, *182*

Demin (V.G.), circumnavigation, fluid mechanics, gravity waves, planetary theory, potential theory, Barkin (Yu.V.), *7913*

Demina (N.I.), aluminum alloys, deformation (plastic), stress concentration, welded joints, Zastolskaya (Z.K.), (et al.), *3584*

Demiray (H.), biomaterials, constitutive equations, deformation (finite), tissues, *1038*

- continuum mechanics, liquid crystals (nematic), nonlocal theory, polar fluids, *4139*
- composite materials, diatomic solids, microstructures, mixture theories, viscoelasticity, *5104*

Demirkol (M.), see Aran (A.), *2237*
Demkowicz (L.), constraints, contact problems, elasticity (linear), functional analyis, *6165*
Dempsey (J.P.), elasticity (linear), singularities, stress concentration, stresses, wedges, *238*
• composite structures, stress concentration, wedges, Sinclair (G.B.), *4335*
Dems (K.), composite structures, design (optimum), multicomposite structures, optimization, shape factors, Mroz (Z.), *3522*
• bars, elastic bodies, optimization, shape factors, torsion, *7599*
Demura (M.V.), see Chizhov (V.I.), *12020*
Demuth (R.B.), see Cook (T.L.), *11426*
Den Broeder (G.), computing techniques, matrix inversion, matrix methods, optimization, *3113*
Denby (G.M.), see Clough (G.W.), *421*
• clay, field tests, pressuremeter, shear strength, Clough (G.W.), *3404*
Dendy (J.E.) Jr., chemical kinetics, combustion, numerical methods, quenching, Wendroff (B.), *3875*
Denisenko (T.D.), see Bashtovoi (V.G.), *9785*
Denisova (G.B.), see Dotsenko (A.M.), *9388*
Denisyuk (V.A.), brittle fracture, crystals, ductile fracture, grain boundaries, metallurgy, molybdenum alloys, Drachinskii (A.S.), (et al.), *6432*
Denn (M.M.), see Roger (D.V.), *2579*
• see Chang (J.C.), *7741*
Dennis (S.C.R.), finite difference methods, navier stokes equation, rotating bodies, spherical bodies, viscous flow, Ingham (D.B.), (et al.), *1507*
• see Smith (F.T.), *4613*
• contraction, laminar flow, noncircular pipes, numerical analysis, separation, steps, Smith (F.T.), *6649*
Dennison (E.E.), see Ying (S.P.), *3978*
density, eddy currents, energy, ocean, oceanography, Kozlov (V.F.), Molchanova (L.A.), (et al.), *1895*
• atmosphere, measurements, meteorology, temperature, Dyubua (P.P.), Melnikov (A.N.), (et al.), *1920*
• conductivity, gases, heat transfer, thermal measurements, transient effects, Filippov (L.P.), Eldarov (F.G.), (et al.), *2780*
• measurements (dynamic), vibration, viscous effects, Wenger (A.P.), *3754*
• measurements, particle fluid flow, two phase flow, Lourenco (L.), Riethmuller (M.L.), *4831*
• moire methods, optical techniques, supersonic flow, visualization, Stricker (J.), Kafri (O.), *5512*
• interferometry, laser plasma interaction, measurements (dynamic), transport phenomena, Benattar (R.), Popovics (C.), *5683*
• interferometry, measurements (dynamic), plasma (toroidal), tokamak, Mitarai (O.), Nakashima (H.), (et al.), *5693*
• boilers, density waves, oscillatory flow, Unal (H.C.), *6699*
• elastic waves, high pressure, high temperature, rocks, Levykin (A.I.), Vavakin (V.V.), *7026*
• measurements, slurries, Clift (R.), Clift (D.H.M.), *7969*
• axial flow, fluid-structure interaction, tube bundles, vibration (flow induced), Paidoussis (M.P.), Besancon (P.), *8624*
• buoyancy, diffusion, interface phenomena, mass transfer, Griffiths (R.W.), Ruddick (B.R.), *8781*
• nonlinear characteristics, plasma (toroidal), tokamak, waveguides, Krapchev (V.B.), Theilhaber (K.S.), (et al.), *8829*
• buoyancy, plumes, water, Mollendorf (J.C.), Johnson (R.S.), (et al.), *9599*
• schlieren methods, shock tubes, shock waves, thermal effects, thermal gradient, Akimov (A.I.), Piskareva (M.V.), (et al.), *10492*
density currents, bores, breakers, coasts, oceanography, Stern (M.E.), *8975*
Dent (R.W.), fibers, filamentary structures, paper, strength, yarn, *2253*
Dente (G.), experimental methods, piles, settlements, *3412*
Denton (J.D.), see Hirsch (C.), *7802*
Denus (S.), see Chlodzinski (J.), *6338*
Deonath, aluminum alloys, damping capacity, machinability, materials properties, metallic composites, Narayan (R.), (et al.), *5123*
deposition, diffusion, filtration, particles, turbulent flow, Gaidukov (N.I.), *1842*
• channels, entrance region, suspensions, Korjack (T.A.), Chen (R.Y.), *4010*
• cascades, contamination, gas turbines, inlets, nozzles, Nealy (D.A.), Timmerman (W.H.), (et al.), *4744*
• particles, rotating disks, suspensions, Adamczyk (Z.), Pomianowski (A.), *4822*
• entrance region, suspensions, tubes, Chen (R.Y.), Gelber (M.W.), *6957*
• absorption, concentration, particles, Goldberg (I.S.), *6961*
• estimation, pollution, Rodhe (H.), *7968*
• boundary layer, compressible flow, gas turbines, particles, two dimensional flow, Menguturk (M.), Sverdrup (E.F.), *8564*
• self weight effects, soil consolidation, strain, Lee (K.), Sills (G.C.), *9357*
• oil flow, pipe flow, solidification, wax, Krasovitskii (B.A.), Maron (V.I.), *11488*
• aerosols, diffusion, fibers, filters, Ingham (D.B.), *12061*
Deprez (G.), acoustic measurements, acoustic waves, impulse, scattering, spherical bodies, Hazebrouck (R.), *7941*
Deprit (A.), mathematical methods, oblateness, perturbation methods, transformation, *878*
• artificial satellites, circumnavigation, computer algebra, computer programming, oblateness, *10776*
Der (J.) Jr., see Chu (C.-W.), *10454*
Der Kiureghian (A.), dynamic response, multiple degree of freedom, random loading, seismic loading, *7038*
• risk, seismic loading, structural response, *7049*
Derby (S.), design, manipulators, mechanical joints, mechanisms, robotics, *6563*
Derese (I.), bilinear systems, control, control stability, design, lyapunov's functions, observers, Noldus (E.), *5040*
• bilinear systems, control, design, feedback, Noldus (E.), *9160*
Deresiewicz (H.), clay, saturation, semi infinite media, soil consolidation, *412*
Dergach (A.A.), see Kogan (G.A.), *7842*
Derham (C.J.), bearings, damping, earthquake resistant structures, rubber, Thomas (A.G.), *8016*
derivatives, approximations, finite difference methods, Lau (P.C.M.), *10045*
• airplane performance, dynamic analysis, dynamic testing, modeling, Stalford (H.L.), *10510*
Derksen (R.W.), turbulence, turbulence (correlations), turbulence model, Azad (R.S.), *647*
Dervin (E.), see Banks (A.J.), *3071*
• see Banks (A.J.), *4922*
Deryabin (A.N.), see Buevich (Yu.A.), *10653*
Deryabina (G.N.), casting, ingots, isotopes, multiphase media, solidification, Ripp (A.G.), *9434*
Derzhiev (V.I.), electron beams, energy transport, heat addition, laser plasma interaction, thermodynamic processes, vacuum, Marchenko (V.S.), (et al.), *11840*
Desai (C.S.), clay, micromechanics, stress strain relationships, Siriwardane (H.J.), *415*
• failure, plastic behavior, sand, yield criteria, *419*
• see Li (G.C.), *2344*
• finite element methods, mathematical models, plasticity, soils, Phan (H.V.), (et al.), *7438*
• see Siriwardane (H.J.), *9356*
desalination, evaporation, heat transfer, Suematsu (H.), Inoue (S.), (et al.), *1716*
Desanto (D.F.), see Takeuchi (K.), *11672*
Desanto (J.A.), acoustics, parabolic equations, wave equations, Perkins (J.S.), (et al.), *1826*
Desayi (P.), cracking, deflections, plates (circular), reinforced concrete, slabs, Muthu (K.U.), *4531*
descent, algorithms, convergence, minimization, Cohen (A.I.), *7193*
• dynamic analysis, tractors, vehicles, Hunter (A.G.M.), *9462*
Descusse (J.), decoupling, feedback, state space techniques, *4232*
Deshaies (B.), flame propagation, mathematical models, pressure distribution, Leyer (J.C.), *9752*
design, algorithms, nonlinear programming, Sandgren (E.), Ragsdell (K.M.), *58*
• computing techniques, corrections, programming, Guk (K.N.), *68*
• observers, pole placement, Arbel (A.), Tse (E.), *100*
• control, nonlinear systems, van der pol plant, Horowitz (I.), Shur (D.), *116*
• estimation, kalman filters, tracking, Weiss (H.), Moore (J.B.), *119*
• airplanes, feedback, observers, Singh (S.N.), Schy (A.A.), *121*
• feedback, state feedback, state space techniques, Preuss (H.-P.), *125*
• control, linear sequential machines, time optimal systems, Faradzhev (R.G.), *134*
• digital control, modeling, modulated systems, Lim (Yu.A.), *137*
• control, distributed parameters, thermal sciences, Breger (A.M.), Butkovskii (A.G.), (et al.), *139*
• algorithms, discrete systems, observers, optimal control, Willems (J.L.), *191*
• flight control, optimal control, Govindaraj (K.S.), Rynaski (E.G.), *193*
• algorithms, control, manipulators, robotics, Malyshev (V.A.), Timofeyev (A.V.), *201*
• magnetic stabilization, optimal control, rotor layer, Ulbrich (H.), *212*
• algorithms, control, manipulators, robotics, trajectories, Lakota (N.A.), Lisenko (S.A.), (et al.), *214*
• algorithms, control, manipulators, robotics, trajectories, Vereschagin (A.F.), Generozov (V.L.), *216*
• control, man machine systems, Pavlov (V.V.), Yakovlev (O.S.), (et al.), *217*
• boilers, control, mathematical models, power generation, Lin (Y.-H.), Nielsen (R.S.), (et al.), *218*
• manipulators, robotics, Shishigin (M.I.), Khomeriki (T.L.), *223*
• optimal control, synthesis, Afimiwala (K.A.), Mayne (R.W.), *227*
• buckling, cooling towers, shells (hyperbolic), vibration, Form (J.), Krings (W.), (et al.), *321*
• dynamic analysis, Hager (R.W.), *392*
• environmental control, fluid mechanics, Hunt (J.C.R.), *565*
• slender bodies, vehicles, vortex shedding, Ericsson (L.E.), Reding (J.P.), *686*
• helicopters, vibration isolation, Reichert (G.), *695*
• internal combustion engines, laser doppler velocimeters, piston driven flow, swirl, Morse (A.), Whitelaw (J.H.), (et al.), *706*
• lyapunov's functions, structural analysis, structural design, Carmichael (D.G.), *1153*
• gauss-poisson processes, jump conditions, linear systems, stochastic control, Segall (A.), *1154*
• control, manipulators, Ivkin (A.M.), Kudryashov, (et al.), *1159*
• guidance systems, missiles, simulation, Zarchan (P.), *1162*

- heat exchangers, multivariable systems, process control, regulator problem, Davison (E.J.), Taylor (P.A.), (et al.), *1163*
- graph theory, networks, optimization, piping systems, Bhaskaran (S.), Salzborn (F.J.M.), *1165*
- diodes, fluidics, laminar flow, scroll diode, Sher (E.), *1170*
- biocontrol, biphasic stimulation, mathematical models, Donaldson (N.De N.), *1173*
- loads, reinforced concrete, Noakowski (P.), *1442*
- diesel engines, heat engines, marine engineering, Henshall (S.H.), Orbeck (F.), *1760*
- combustors, flame holders, gas turbines, vaporization, Plee (S.L.), Mellor (A.M.), *1767*
- rockets, solid propellants, space vehicle structures, Zimmerman (C.A.), *1769*
- feedback, regulator problem, sensitivity, state space techniques, Howze (J.W.), Cavin (R.K.) III, *2083*
- large scale systems, linear systems, observers, Arbel (A.), Tse (E.), *2084*
- digital control, multivariable systems, sampled data systems, Rao (G.V.), *2093, book*
- computer memories, optimization, Kitovich (V.V.), Porotskii (S.M.), (et al.), *2107*
- diagnostics, process control, reliability analysis, Davydovskaya (N.I.), *2114*
- markov processes, stochastic control, Bukhalev (V.A.), *2125*
- differential games, evasion, pursuit, Ostapenko (V.V.), *2127*
- algorithms, programming, Aladzhev (B.M.), Kokotov (V.M.), *2144*
- optimization, process control, Timofeyev (B.B.), Litvinov (A.M.), (et al.), *2146*
- airplanes, flight control, side-force control, Binnie (W.B.), Stengel (R.F.), *2160*
- flight control, vtol, Lebacqz (J.V.), Radford (R.C.), *2161*
- guidance systems, lasers, Nulk (R.A.), Pastrick (H.L.), (et al.), *2163*
- process control, regulator problem, time lag, Khasmamedov (F.I.), *2169*
- control, nuclear power, power generation, Frogner (B.), Rao (H.S.), *2176*
- control, jet engines, multivariable systems, turbofan engines, Taiwo (O.), *2179*
- flight control, flutter, optimal control, Newsom (J.R.), *2180*
- airplanes, control, external stores, flutter, Nissim (E.), Lottati (I.), *2183*
- control, ergatic control, man machine systems, Pavlov (V.V.), Voronin (A.N.), *2185*
- flywheels, optimal control, railroads, Sweet (L.M.), Keane (M.J.), *2189*
- algorithms, computer aided manufacturing, Dunsmuir (A.M.), *2200*
- composite materials, optimization, Bryzgalin (G.I.), *2246*
- reinforced concrete, slabs, Hornung (R.K.), Oesterle (E.), *2522*
- lubrication (elastohydrodynamic), seals, stirling cycles, Etsion (I.), *2570*
- aerodynamic performance, conical flow, delta wings, supersonic flow, Nastase (A.), *2731*
- airplane structures, forebodies, geometrical properties, pressure distribution, Barger (R.L.), *2738*
- airfoils, sailplane, Boermans (L.M.M.), Selen (H.J.W.), *2746*
- helium, nuclear reactors, power plants, turbomachinery, Mcdonald (C.F.), Smith (M.J.), *2750*
- dimensional analysis, hydraulic turbines, scale models, Etinberg (I.E.), *2753*
- ludwig tubes, orifices, reservoirs, Matsuo (K.), Kawagoe (S.), (et al.), *2763*
- cycles, gas turbines, heat engines, thermodynamic processes, Harman (R.T.C.), *2870, book*
- launching, satellites, O'Neill (G.K.), Kolm (H.H.), *2874*
- guidance theory, missiles, Nesline (F.W.), *2926*
- control, guidance systems, space shuttle, Anderson (W.W.), Groom (N.J.), (et al.), *2927*
- decoupling, feedback, frequency domain techniques, Argoun (M.B.), Van De Vegte (J.), *3158*
- discrete systems, lur'e plants, nonlinear systems, tracking, Grujic (I.T.), Porter (B.), *3159*
- control, deterministic control, feedback, nonlinear methods, nonlinear systems, stability theory, Leitmann (G.), *3174*
- digital control, reliability analysis, Brodetskii (G.L.), *3178*
- linear systems, optimal control, Belikov (S.A.), Zak (Yu.A.), *3184*
- algorithms, functional analyis, linear programming, optimal control, Bershchanskii (Ya.M.), Meerov (M.V.), *3185*
- control, linear systems, multivariable systems, observers, pole placement, process control, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- graph theory, integer programming, networks, optimization, pipelines, Grosz (M.), *3193*
- adaptive systems, continuous systems, control, discrete systems, Kazakevich (V.V.), Shcherbina (Yu.V.), *3205*
- control, power generation, regulator problem, turbomachinery, Taiwo (O.), *3217*
- cranes, optimal control, oscillations, Mamalyga (V.M.), *3219*
- biocontrol, myoelectric control, prosthetic devices, Shannon (G.F.), *3227*
- crack growth, fatigue, high temperature, life expectancy, Mcgowan (J.J.), Liu (H.W.), *3436*
- bridges, composite structures, slabs, Heins (C.P.), *3545*
- damping, drag, dynamic response, fluid-structure interaction, offshore structures, Fish (P.R.), Dean (R.B.), (et al.), *3559*
- aerospace vehicles, space vehicle structures, Hedgepeth (J.M.), Miller (R.K.), (et al.), *3562*
- algorithms, force, kinematics, mechanisms, transmission, Sutherland (G.H.), *3569*
- damping, rotors, squeeze films, Simandiri (S.), Hahn (E.J.), *3576*
- compressible flow, incompressible flow, turbomachinery, Balje (O.E.), *3739, book*
- aerodynamic performance, axial turbines, cooling, gas turbines, Yamamoto (A.), Takahara (K.), (et al.), *3741*
- blades, performance, turbines, Whitney (W.J.), Moffitt (T.P.), (et al.), *3742*
- combustors, turbojet engines, wind loads, Shou (Z.Q.), *3748*
- boilers, nonuniform flow, steam, superheater, Chebulaev (V.V.), Lokshin (V.A.), *3881*
- bearings (ball), experimental methods, hall effect, Kawakita (K.), Halling (J.), *4113*
- multivariable systems, pid, pole placement, Seraji (H.), *4220*
- feedback, modal control, multivariable systems, synthesis, Lutskiv (N.M.), Strepko (I.T.), *4221*
- algorithms, automatic control, frequency domain techniques, matrix methods, multivariable systems, Frisch (H.P.), *4224*
- feedback, multivariable systems, sensitivity, stability theory, Safonov (M.G.), Laub (A.J.), (et al.), *4226*
- adaptive systems, linear systems, multivariable systems, process control, tracking, Davison (E.J.), *4236*
- stability theory, stochastic systems, Riashko (L.B.), *4248*
- algorithms, control stability, feedback, linear systems, stability theory, Tannenbaum (A.), *4249*
- control stability, feedback, interconnected systems, large scale systems, lyapunov's functions, stability theory, Mahalanabis (A.K.), Singh (R.), *4250*
- algorithms, digital control, discrete systems, Krutko (P.D.), Popov (Ye.P.), *4257*
- multivariable systems, synthesis, Horowitz (I.), Wang (T.-S.), *4268*
- algorithms, multivariable systems, pole placement, Bogachev (A.V.), Grigorev (V.V.), (et al.), *4276*
- algorithms, minimax techniques, multivariable systems, Bakan (G.M.), Strashko (V.T.), *4280*
- constraints, optimal control, regulator problem, Sirazetdinov (T.K.), Smirnov (S.V.), *4292*
- observers, regulator problem, Baloev (A.A.), *4296*
- differential games, optimal control, unknown parameters, Kuntsevich (V.M.), Lychak (M.M.), *4301*
- algorithms, nonlinear programming, Boychuk (L.M.), *4303*
- aerospace vehicles, regulator problem, rotating bodies, structural response, Baloev (A.A.), *4307*
- discrete systems, observers, realization, time optimal systems, Inoue (A.), Fisher (D.G.), (et al.), *4314*
- adaptive systems, linear systems, observers, Westphal (L.C.), *4323*
- fluidics, proximity detectors, switching, Silvoff (F.), Stojanow (B.), (et al.), *4327*
- cable supported structures, roofs, Clarke (D.), *4537*
- arches, structural support, tunnels, Matsumoto (Y.), Sakamoto (S.), (et al.), *4538*
- offshore structures, shells, Fumes (O.), Loset (O.), *4544*
- bending, cables, resistance, Shashaty (A.J.), *4552*
- curvature, gears, gears (hypoid), gears (spiral), surface profiles, synthesis, Litvin (F.L.), *4555*
- four bar linkage, kinematics, linkages, mechanisms, Hain (K.), *4560*
- kinematics, mechanisms (spatial), optimization, Keler (M.), *4562*
- automobiles, exhaust gases, internal combustion engines, optimization, Kanarachos (A.), Seifert (H.), *4564*
- bilinear systems, control, control stability, lyapunov's functions, observers, Derese (I.), Noldus (E.), *5040*
- bilinear systems, control, lyapunov's functions, Franke (D.), *5042*
- model reduction, process control, sampled data systems, Atluri (R.), Kao (Y.K.), *5044*
- digital control, sampled data systems, Oz (H.), Meirovitch (L.), (et al.), *5045*
- linear-quadratic optimal control, optimal control, positive control, synthesis, Pachter (M.), *5048*
- four bar linkage, kinematics, mechanisms (planes), Hain (K.), *5376*
- bolted joints, mechanical joints, wood, Wilkinson (T.L.), Rowlands (R.E.), *5378*
- airfoils, boundary layer, gliders, laminar flow, sailplanes, Ostrowski (J.), Skrzynski (S.), (et al.), *5492*
- aerodynamic interference, helicopters, tails, Brocklehurst (A.), Taylor (P.), *5496*
- floating bodies, flow measurement, pulsatile flow, unsteady flow, Maki (H.), Ikeda (Y.), *5508*
- electromagnetic loading, flow measurement, linearization, Smiegielski (J.), *5509*
- combustors, control, gas turbines, Egan (W.J.) Jr., Reilly (R.S.), (et al.), *5654*
- wind tunnels, wind turbines, Vinayagalingam (T.), *5667*
- dynamic analysis, wind turbines, Kehl (K.), Keim (W.), (et al.), *5696*
- bearings (journal), design (optimum), lubrication (hydrodynamic), lubrication (hydrostatic), Koshal (D.), Rowe (W.B.), *5979*
- control, feedback, linear systems, multivariable systems, pole placement, Balestrino (A.), Celentano (G.), *6125*
- control, feedback, linear systems, multivariable systems, pole placement, Seraji (H.), *6126*
- adaptive systems, algorithms, discrete systems, lyapunov's functions, observers, Tamaki (S.), Omatu (S.), (et al.), *6132*
- control, drilling, hydraulic machinery, numerical control, Glaser (D.J.), Nachtigal (C.L.), *6148*

- shells (stiffened), ship structures, structural stability, submarine, Niessen (E.), *6542*
- connecting rods, error, linkages, mechanisms, sensitivity, Lebedev (P.A.), *6559*
- manipulators, mechanical joints, mechanisms, robotics, Derby (S.), *6563*
- manipulators, mechanisms, robotics, synthesis, Orlandea (N.), Berenyi (T.), *6564*
- blades, lifting surfaces, mathematical models, propellers, turbomachinery, Brockett (T.E.), *6738*
- design criteria, heating, regenerators, steam turbines, Sergeeva (V.B.), Ivashchenko (S.S.), (et al.), *6816*
- control, propulsion, space vehicles, Finston (R.), Spicer (L.M.), *6853*
- propellers, wind power, wind turbines, Moretti (P.M.), Thresher (R.W.), *6855*
- beam plasma interactions, helium, injectors, nuclear fusion, Blum (A.S.), Barr (W.L.), (et al.), *6868*
- aeroelasticity, buildings, vibration (forced), wind tunnels, Templin (J.T.), Cooper (K.R.), *6871*
- control, discrete systems, linear systems, observers, Tomizuka (M.), Auslander (D.M.), (et al.), *7251*
- control, position control, regulator problem, robotics, Seyfarth (K.), Hain (E.), *7252*
- digital control, mathematical models, modeling, synthesis, Neugebauer (G.), *7254*
- control, gas turbines, lyapunov's functions, model reference systems, Monopoli (R.V.), *7256*
- columns, finite element methods, mines, pillars, structural support, underground, Pariseau (W.G.), Sorensen (W.K.), *7610*
- gravity platforms, offshore structures, structural analysis, Smits (F.P.), *7613*
- beams, bellows, mechanical design, plates, Chand (S.), Garg (S.B.L.), *7623*
- engines, expanders, expansion, Robinson (F.J.), *7624*
- machine design, mechanisms (planes), structure, Miller (S.), Gronowicz (A.), (et al.), *7625*
- cams, dynamics, linkages, mechanisms, Kwong (C.W.), Wiederrich (J.L.), (et al.), *7627*
- algorithms, manipulators, robotics, Sugimoto (K.), Duffy (J.), *7630*
- linkages, mobility, rigid bodies, structures, Baker (J.E.), *7631*
- four bar linkage, mechanisms (planes), Heinzl (J.), *7632*
- damage (cumulative), fatigue, machine elements, Proshkovets (I.), Voitishek (Ya.), *7634*
- bolted joints, connections, contact stresses, flanges, Jofriet (J.C.), Sze (Y.), (et al.), *7635*
- gravity waves (surface), theory, wave generation, wavemakers, Hudspeth (R.T.), Chen (M.-C.), *7653*
- buildings, structural analysis, wind loads, Simiu (E.), Filliben (J.J.), *7795*
- airships, flight stability, helicopters, rotors, Nagabhushan (B.L.), Tomlinson (N.P.), *7799*
- axial turbines, blades, velocity profiles, Hirsch (C.), Denton (J.D.), *7802*
- centrifugal pumps, optimization, volutes, Kowalik (M.), Zarzer (E.), (et al.), *7804*
- aeroelasticity, flutter, panels, supersonic flow, Pierson (B.L.), Hajela (P.), *7907*
- astronautics, celestial mechanics, mission analysis, optimization, orbits, space vehicles, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*
- bearings (thrust), bearings (tilted pad), lubrication (hydrostatic), Safar (Z.S.), *8061*
- control, linear systems, multivariable systems, optimization, servomechanisms, Davison (E.J.), Ferguson (I.J.), *8168*
- airplanes, feedback, feedforward control, interception, optimal control, pursuit, Lunderstadt (R.), *8169*
- control, decoupling, manipulators, robotics, Freund (E.), Hoyer (H.), *8176*
- cooling towers, shells (hyperbolic), Aimasi (J.), *8458*
- data analysis, offshore structures, structural analysis, substructuring, Hatlestad (B.), Mellingen (K.), *8461*
- dynamic loads, landing gears, longitudinal stability, stabilization, Allen (R.R.), O'Massey (R.C.), *8462*
- cams, mechanisms, Turnbull (S.R.), *8470*
- damping, dynamic loads, gears (spur), runge kutta method, stiffness, Kasuba (R.), Evans (J.W.), *8471*
- bearings (ball), springs, stiffness, vibration, Tamura (H.), Tsuda (Y.), *8474*
- cams, kinematics, robotics, synthesis, Tsai (Y.C.), Soni (A.H.), *8479*
- algorithms, manipulators, mechanisms (planes), robotics, Murata (H.), Hayashi (I.), *8480*
- bolted joints, joints, plasticity, riveted joints, Surtees (J.O.), Gildersleeve (C.P.), (et al.), *8482*
- airplanes, optimization, supersonic flow, transonic flow, vortex flow, wings, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- calibration, discharges, flow measurement, meters, venturi tubes, Inoue (M.), Yano (H.), (et al.), *8665*
- aerodynamic interference, inlet flow, models, wind, wind tunnels, Eckert (W.T.), Mort (K.W.), *8669*
- combustion, geometrical properties, scramjets, supersonic flow, Waltrup (P.J.), Billig (F.S.), (et al.), *8809*
- seismic loading, Chen (C.), Moreadith (F.L.), *8968*
- hull propeller interaction, propellers (marine), vibration (flow induced), Johnsson (C.-A.), *9009*
- bearings (tilted pad), dynamics, high speed, rotors, Martelli (F.), Manfrida (G.), *9028*
- frequency response, optimal control, Gupta (N.K.), *9156*
- bilinear systems, control, feedback, Derese (I.), Noldus (E.), *9160*
- frequency domain techniques, sampled data systems, time delay systems, Schnieder (E.), Kraft (K.H.), *9162*
- feedback, frequency domain techniques, multivariable systems, process control, state space techniques, Bar (W.), *9163*
- algorithms, analytical methods, multivariable systems, synthesis, Graser (A.), *9164*
- control, decoupling, linear systems, multivariable systems, nonlinear systems, synthesis, Mercier (O.), *9165*
- learning systems, pattern recognition, Kittler (J.), *9174*
- optimization, queue theory, Gadjiev (A.G.), *9176*
- multivariable systems, time optimal systems, trajectory optimization, Frick (K.), *9178*
- filters, kalman filters, optimization, wiener-hopf technique, Melnikov (B.G.), *9180*
- control, frequency domain techniques, state space techniques, Hippe (P.), Wurmthaler (C.), *9181*
- digital control, robotics, Haferkorn (P.), Schwarz (W.), *9187*
- control, hydraulic machinery, robotics, suboptimal control, Rossler (J.), *9188*
- control, position control, servomechanisms, state space techniques, Wierschem (T.), *9190*
- control, hydraulic machinery, position control, state space techniques, Wierschem (T.), *9191*
- actuators, control, feedback, pneumatic components, position control, Bender (E.), Kotschenreuther (P.), *9194*
- automatic control (optimal), digital control, Leonhard (W.), *9195*
- blankets, dams, Gill (M.A.), *9456*
- dams, membranes, Goel (M.C.), Singhal (M.M.), *9457*
- automobiles, brakes, Newcomb (T.P.), *9469*
- gears, kinematics, Colbourne (J.R.), *9470*
- cutting, gears, kinematics, Mitome (K.), *9471*
- high speed, linkages, mechanisms (planes), springs, synthesis, Griffin (J.N.), Matthew (G.K.), *9477*
- dynamic analysis, four bar linkage, mechanisms (spatial), velocity profiles, Osman (M.O.M.), Dukkipati (R.V.), *9479*
- linkages, mechanisms (planes), mechanisms (spatial), rotational capability, Geise (G.), Modler (K.H.), *9481*
- algorithms, control, manipulators, mechanisms (planes), robotics, Hewit (J.R.), Burdess (J.S.), *9482*
- airplanes, supercritical wings, swept wings, Garabedian (P.), Mcfadden (G.), *9545*
- aerodynamic performance, airplanes, geometrical properties, wings, Larson (E.S.), *9648*
- potential flow, three dimensional flow, transonic flow, wings, Henne (P.A.), *9653*
- calibration, flow measurement, vortex shedding, Glockner (G.), Fock (K.), *9673*
- bearings (gas lubricated), bearings (thrust), reynolds equation, Safar (Z.S.), *9957*
- bearing capacity, bearings (roller), computer aided design, loads, Dziurski (A.), Kania (L.), (et al.), *9977*
- automatic control, magnetic levitation, magnetic stabilization, transportation devices, vehicles, Breinl (W.), *10082*
- algorithms, automatic control (optimal), linear systems, pole placement, Lee (G.K.F.), *10084*
- automatic control, state space techniques, Hippe (P.), Wurmthaler (C.), *10089*
- piles, Poulos (H.G.), Davis (E.H.), *10250, book*
- lateral pressure, piles, Bannerjee (R.), *10255*
- biaxial loading, piles, reinforced concrete, Klein (G.K.), Karavaev (V.N.), *10259*
- crack growth, cracking, holes, plates (holed), pressure vessels, stress intensity factor, Rooke (D.P.), *10332*
- hydraulics, pipe flow, pipelines, soil structure interaction, Stephenson (D.), *10369*
- cams, kinematics, optimization, Berzak (N.), *10371*
- beams (timoshenko), deflections, dynamic loads, gear teeth, transmissions, Nagaya (K.), Uematsu (S.), *10372*
- dynamic loads, gear teeth, surface profiles, Hidaka (T.), Terauchi (Y.), (et al.), *10373*
- bearings (thrust), damping, ship design, stiffness, vibration, Vassilopoulos (L.), *10375*
- bearings (journal), lubrication (hydrodynamic), optimization, Mokhtar (M.O.A.), *10377*
- airfoil theory, incompressible flow, viscous flow, Berak (P.), *10504*
- airplane performance, flight tests, leading edge, spin recovery, wind tunnels, Dicarlo (D.J.), Stough (H.P.) III, (et al.), *10512*
- composite materials, helicopters, rotors, tails, Huber (H.), Frommlet (H.), (et al.), *10515*
- aerodynamics, injection systems, swirl flow, vortex flow, Volchkov (E.P.), Kislykh (V.I.), (et al.), *10542*
- propulsion, space shuttle, systems, Sackheim (R.L.), Fritz (D.E.), (et al.), *10725*
- impulse, rockets, solid propellants, Landsbaum (E.M.), Salinas (M.P.), (et al.), *10726*
- algorithms, matrix methods, multivariable systems, Wolovich (W.A.), *11039*

- feedback, state space techniques, Willems (J.C.), *11040*
- large scale systems, multivariable systems, observers, Das Gupta (R.), Fairman (F.W.), *11046*
- actuators, controllability, optimization, oscillations, space vehicle structures, Arbel (A.), *11047*
- control, decoupling, large scale systems, manipulators, nonlinear systems, Vukobratovic (M.K.), Stokic (D.M.), *11049*
- control, decoupling, digital control, feedback, nonlinear systems, Singh (S.N.), *11050*
- large scale systems, regulator problem, Viswanadham (N.), Ramakrishna (A.), *11052*
- adaptive systems, optimal control, time lag, time optimal systems, Kim (B.K.), Bien (Z.), *11073*
- hovercraft, optimal control, suspension systems, vehicles, Balzer (L.A.), *11078*
- control, feedback, large scale systems, stability theory, Andersen (B.D.O.), Moore (J.B.), *11089*
- adaptive systems, dynamic analysis, feedback, Corless (M.J.), Leitmann (G.), *11090*
- adaptive systems, feedback, networks, pierce loop, queue theory, Yu (W.), Majithia (J.C.), *11093*
- control, fluidics, hydraulic machinery, pneumatic components, servomechanisms, Mccloy (D.), Martin (H.R.), *11100, book*
- analytical methods, piles, soil consolidation, Randolph (M.F.), Wroth (C.P.), *11179*
- failure, fatigue, fracture, materials properties, piping systems, pressure vessels, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- combustors, gas turbines, jets, Novick (A.S.), Arvin (J.R.), (et al.), *11513*
- airplanes, control surfaces, equations of motion, flight control, mathematical models, Paljaruci (G.), *11733*
- airplanes, rolling motion, spin recovery, wind tunnels, Bihrle (W.) Jr., Bowman (J.S.) Jr., *11734*
- closed cycle, gas turbines, materials properties, thermodynamic properties, working fluids, Lee (J.C.), Campbell (J.) Jr., (et al.), *11740*
- airplane performance, propulsion, stol, turbofan engines, vtol, Glasgow (E.R.), Skarshaug (R.E.), *11742*
- axial flow, leaks, seals, steam turbines, stresses, Abramov (Yu.I.), Smirnov (S.A.), *11746*
- annular flow, centrifugal pumps, radial loading, Borovskii (B.I.), *11751*
- thermal effects, thermal sciences, thermodynamics, Bejan (A.), *11756*
- damping capacity, masts, oscillations, viscous effects, wind loads, Etkin (B.), Hansen (J.S.), *11842*

design (elastic), load cells, rings, Barbato (G.), Desogus (S.), (et al.), *3512*

design (minimum weight), beams (continuous), girders, Azad (A.K.), *1426*
- shape factors, steel, trusses, Spillers (W.R.), Kountouris (G.E.), *1429*
- bridges (suspension), optimization, prestressed structures, shape factors, Sofronie (R.), *2533*
- frames, optimization, plates (stiffened), Bennett (J.A.), *3518*
- beams (curved), beams (open section), beams (thin section), Petukhov (L.V.), *4363*
- elastic behavior, Fleury (C.), *4524*
- compression, springs, Khare (A.K.), *4553*
- laminates, multilayer, optimization, tubes, Doroginin (V.V.), *5164*
- frames, kinematics, limit design, optimization, Brousse (P.), *5345*
- trusses, Lagache (J.-M.), *5346*
- design (optimum), plates, rupture, De Oliveira (P.), *6505*
- design (optimum), thermal loading, thermal stresses, Venkateswara Rao (G.), *6507*
- trusses, Fuchs (M.B.), *7590*
- convex programming, shape factors, trusses, Svanberg (K.), *7593*
- beam columns, simply supported structures, Karihaloo (B.L.), *7597*
- beams, design (optimum), vibration, Karihaloo (B.L.), Parbery (R.D.), *8441*
- design (optimum), optimization, trusses, Somekh (E.), Kirsch (U.), *9439*
- constraints, optimization, trusses, Levy (R.), Parzynski (W.), *10342*
- trusses, Yates (D.F.), Templeman (A.B.), (et al.), *10345*
- design (optimum), eigenvalues, simply supported structures, Karihaloo (B.L.), Parbery (R.D.), *10347*
- beams, composite structures, design (optimum), reinforced bodies, structural stability, vibration, Rikards (R.B.), *10348*
- columns, design (optimum), optimization, postbuckling behavior, Venkateswara Rao (G.), Narayanaswami (R.), *10351*
- composite structures, flutter, shells (cylindrical), supersonic flow, Kosichenko (A.A.), Pochtman (Yu.M.), (et al.), *10763*
- constraints, frequencies, optimization, Khan (M.R.), Willmert (K.D.), *11318*

design (optimum), convergence, mathematical methods, newton method, Watson (L.), Yang (W.H.), *56*
- algorithms, automation, mathematical programming, Zhabin (V.I.), Korneichuk (V.I.), (et al.), *159*
- algorithms, control, vibration, vibration isolation, De Silva (C.W.), *165*
- optimization, series expansion, structural analysis, Kirsch (U.), *502*
- nonlinear programming, portal frames, roofs, Crawford (A.B.), Jenkins (W.M.), *503*
- frames, Saka (M.P.), *504*
- structural optimization, Fleury (C.), Schmit (L.A.), *505*
- monte carlo analysis, trusses, Jackiewicz (M.), *506*
- imperfections, trusses, Rosen (A.), Schmit (L.A.) Jr., *507*
- airplanes, subsonic flow, transport, Torenbeek (E.), *688*
- beams (sandwich), large displacement, plates (nonlinear), shear, Gierlinski (J.), Mroz (Z.), *1223*
- pressure vessels, shells (of revolution), Mansfield (E.G.), *1231*
- arches, mathematical programming, Lipson (S.L.), Haque (M.I.), *1424*
- fillets, penalty function, stress intensity factor, Queau (J.P.), Trompette (P.), *1425*
- pareto optima, trusses, Carmichael (D.G.), *1427*
- rotating disks, shape factors, Bhavikatti (S.S.), Ramakrishnan (C.V.), *1428*
- cylindrical bodies, plates, safety, Patnaik (S.N.), Srivastava (N.K.), *1430*
- iterative methods, optimization, Obozov (V.I.), *1431*
- dynamic response, guideways, vehicles, Minnetyan (L.), Nelson (R.B.), (et al.), *1457*
- mechanisms, synthesis, Kothari (M.), Rao (A.C.), *1468*
- monotonicity analysis, optimization, Papalambros (P.), Wilde (D.J.), *1474*
- boilers, cogeneration, energy conversion, gas turbines, steam power plants, Clifford (D.), Coates (R.), (et al.), *1766*
- rockets, solid propellants, Sforzini (R.H.), *1768*
- anisotropic media, plates (circular), vibration (free), Olhoff (N.), Lurie (K.A.), (et al.), *2508*
- elasticity, harmonic analysis, inclusions, Richards (R.) Jr., Bjorkman (G.S.) Jr., *2510*
- constraints, shells (cylindrical), shells (stiffened), Rao (S.S.), Reddy (E.S.), *2511*
- bridges (box girder), Heins (C.P.), Hua (L.-J.), *2532*
- bridges (arch), Lightfoot (E.), Hutchinson (G.L.), *2538*
- pressure vessels, shells (ellipsoidal), shells (toroidal), stress analysis, Smith (C.O.), *2547*
- geometric programming, mechanisms, synthesis, Rao (A.C.), *2551*
- beams (prestressed), effective widths, flanges, Adekola (A.O.), *3284*
- drainage, highways, networks, stormwater, Templeman (A.B.), Walters (G.A.), *3418*
- constraints, displacement, elastoplasticity, optimization, Kaneko (I.), Maier (G.), *3515*
- bending elements, finite element techniques, optimization, plates, Haftka (R.T.), Prasad (B.), *3516*
- optimization, photoelasticity, Durelli (A.J.), *3517*
- buckling, columns, elastoplasticity, optimization, Amari (M.), Okumura (A.), *3521*
- composite structures, multicomposite structures, optimization, shape factors, Dems (K.), Mroz (Z.), *3522*
- airplane structures, optimization, Sliwa (S.M.), *3523*
- energy conservation, generators, heat exchangers, power plants, Aminov (R.Z.), Radchenko (E.V.), *3837*
- experimental design, linear programming, statistical design, Sedunov (E.V.), Trofimov (A.I.), (et al.), *4290*
- holes, reinforced openings, shells, Pelekh (B.L.), Gleba (A.Yu.), *4380*
- beam columns, bending, optimization, Karihaloo (B.L.), Parbery (R.D.), *4523*
- beams (composite), bending, shear strength, ultimate strength, Farkas (J.), *4526*
- columns, follower forces, Bogacz (R.), Irretier (H.), (et al.), *4527*
- beam columns, sandwich construction, Parbery (R.D.), Karihaloo (B.L.), *4528*
- roofs, space frames, Stenker (H.), Michael (A.), (et al.), *4543*
- computer aided design, linkages, mechanisms (planes), optimization, Gauchel (H.-J.), *4563*
- optimization, trusses, tubes, Felton (L.P.), Fuchs (M.B.), *5343*
- frames, substructuring, Govil (A.K.), Arora (J.S.), (et al.), *5347*
- flexible bodies, high speed, mechanisms, Cleghorn (W.L.), Fenton (R.G.), (et al.), *5377*
- airplanes, gas turbines, Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5659*
- ducted fans, gas turbines, turbofan engines, Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5660*
- bearings (journal), design, lubrication (hydrodynamic), lubrication (hydrostatic), Koshal (D.), Rowe (W.B.), *5979*
- analog computation, analog simulation, digital analog computation, hydraulic machinery, Sankar (S.), Svoboda (J.V.), *6123*
- modeling, structural optimization, Carmichael (D.G.), *6502*
- beams, boundary conditions, photoelasticity, plates (holed), slots, Durelli (A.J.), Rajaiah (K.), *6504*
- design (minimum weight), plates, rupture, De Oliveira (P.), *6505*
- design (minimum weight), thermal loading, thermal stresses, Venkateswara Rao (G.), *6507*
- beams, distributed parameters, impulsive loading, inelasticity, structural support, Lepik (U.), *6508*
- minimization, trusses, Lagache (J.M.), *6509*
- duality, framed structures, minimax techniques, Imai (K.), Shoji (M.), *6510*
- dynamic programming, foundations, walls, Ladany (S.P.), *6511*
- linear programming, trusses, Kirsch (U.), *6512*
- constraints, nonlinear programming, work hardening, Mazzarella (C.), Polizzotto (C.), *6513*
- plasticity, statically indeterminate structures, Mazzarella (C.), Panzeca (T.), *6514*

- modeling, railroad cars, railroads, vehicles, Haftka (R.T.), Prasad (B.), *6544*
- abrasion, grinding, grinding wheels, optimization, Prasad (B.), Haftka (R.T.), (et al.), *6552*
- fourier transform, laplace transform, mechanisms, nonlinear mechanics, Sandler (B.Z.), *6565*
- elastic bodies, plates, Cheng (K.-T.), Olhoff (N.), *7589*
- constraints, Belegundu (A.D.), Arora (J.S.), *7591*
- move limits, trusses, Fuchs (M.B.), *7595*
- axial loading, beams, reinforced concrete, Melchers (R.E.), *7596*
- geneva mechanisms, high speed, machine design, Lee (T.W.), *7633*
- panels (stiffened), plates (anisotropic), plates (stiffened), Garmash (L.I.), Olshanskii (V.P.), *8249*
- boundary value problems, distributed parameters, optimization, structural optimization, Haug (E.J.) eds., Cea (J.), *8440, book*
- beams, design (minimum weight), vibration, Karihaloo (B.L.), Parbery (R.D.), *8441*
- trusses, Fuchs (M.B.), *8442*
- plane stress, plates (holed), Dhir (S.K.), *8443*
- beams (cantilever), beams (variable cross section), dynamic programming, Hamada (M.), Seguchi (Y.), (et al.), *8444*
- piston rings, Mcallister (G.T.), Rohde (S.M.), *8445*
- constraints, structural design, Mroz (Z.), Mironov (A.), *8446*
- computer aided design, constraints, structural optimization, Pappas (M.), *8453*
- damping, frequency domain techniques, stochastic systems, Reznikov (L.M.), Fishman (G.M.), *9179*
- dynamic analysis, optimization, vibration isolation, Rao (S.S.), Hati (S.K.), *9302*
- design (minimum weight), optimization, trusses, Somekh (E.), Kirsch (U.), *9439*
- computer aided design, optimization, stochastics, Ruppert (M.), *9440*
- columns, dynamic stability, Hanaoka (M.), Washizu (K.), *9441*
- bridges (suspension), prestressed structures, Sofronie (R.), *9455*
- bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), optimization, Shevchenko (A.V.), Fedotov (V.A.), (et al.), *9968*
- prestressed concrete, ultimate strength, Lo Bianco (M.), Mazzarella (C.), *10341*
- floating bodies, mooring, Jones (H.L.), Nelson (J.K.) Jr., *10343*
- beams (cantilever), beams (elastic), Blachut (J.), *10344*
- nonlinear programming, Fox (D.B.), Liebman (J.S.), *10346*
- design (minimum weight), eigenvalues, simply supported structures, Karihaloo (B.L.), Parbery (R.D.), *10347*
- beams, composite structures, design (minimum weight), reinforced bodies, structural stability, vibration, Rikards (R.B.), *10348*
- dynamic loads, pressurized pipes, reinforced bodies, reinforced concrete, Heinloo (M.), Kaliszky (S.), *10349*
- columns, design (minimum weight), optimization, postbuckling behavior, Venkateswara Rao (G.), Narayanaswami (R.), *10351*
- geometric programming, sensitivity, Dembo (R.S.), *10352*
- portal frames, precast concrete, Andam (K.A.), Knapton (J.), *10353*
- connections, joints, mathematical programming, steel, Douty (R.), *10354*
- grinding, gyroscopes, surface profiles, synthesis, tools, Osman (M.O.M.), Sankar (S.), (et al.), *10370*
- automobiles, drag, fuel economy, geometrical properties, Stapleford (W.R.), *10506*
- drag, geometrical properties, trucks, Garry (K.P.), *10507*
- shells (of revolution), structural optimization, torsion, Gura (N.M.), *11115*
- combined loading, plasticity, space frames, structural analysis, Grierson (D.E.), Aly (A.A.), *11319*
- Kang (J.-Z.), *11321*
- composite materials, optimization, plates, Bryzgalin (G.I.), *11323*
- composite materials, shells (cylindrical), stiffened structures, Pochtman (Yu.M.), Tugai (O.V.), *11324*
- earthquake resistant structures, nonlinear programming, Bhatti (M.A.), Pister (K.S.), *12070*

design (ultimate strength), bending, columns (eccentrically loaded), reinforced concrete, tension, Nazir (C.P.), *6500*

- plates (skew), reinforced concrete, slabs, Kwiecinski (M.), Wojewodzki (W.), *7604*
- axial loading, flexure, hydraulic structures, reinforced concrete, Liu (T.C.), Gleason (S.), *7609*
- numerical methods, plates, shells (axisymmetric), strength, Dzygadlo (Z.), Olejnik (A.), *10350*

design criteria, airfoil characteristics, transonic flow, two dimensional flow, Nakamura (M.), *685*

- centrifugal compressors, swirl flow, visualization, volute casings, Yadav (R.), Yahya (S.M.), *704*
- bridges (box girder), Wolchuk (R.), *1447*
- airplane performance, engine failure, runway (critical length), runways, Powers (S.A.), *1625*
- beam columns, beams, floors, Kitipornchai (S.), Trahair (N.S.), *2293*
- heat exchangers, heat exchangers (multipass), radiant interchange, two phase flow, Kakac (S.) eds., Bergles (A.E.), (et al.), *2825, book*
- flanges, machine elements, pressure vessels, Waters (E.O.), Schneider (R.W.), *3570*
- hydraulic structures, probabilistic design, risk, Tung (Y.-K.), Mays (L.W.), *4530*
- bridges (box girder), shear lag, Evans (H.R.), Taherian (A.R.), *5151*
- channels, generators, magneto plasma dynamics, open loop systems, Kessler (R.), *5681*
- laser plasma interaction, nuclear fusion, reactor structures, thermonuclear energy, Basov (N.G.), Krokhin (O.N.), (et al.), *5686*
- cams, modal analysis, vibration, Wiederrich (J.L.), *6555*
- design, heating, regenerators, steam turbines, Sergeeva (V.B.), Ivashchenko (S.S.), (et al.), *6816*
- approximation methods, extended surfaces, fins, heat exchangers, Kern (J.), *8757*
- buckling, shells, Bushnell (D.), *9290*
- failure, fretting, Hoeppner (D.W.), Gates (F.L.), *9390*

Desikan (V.), channel flow, finite difference methods, flood routing, reservoirs, Nath (S.C.), *6597*

Desloge (E.A.), dynamic analysis, mechanics, *7144*

Desmond (T.P.), beams (intersecting), elastic waves, impact, joints, *6325*

Desogus (S.), see Barbato (G.), *3512*

Despain (A.M.), algorithms, computer programming, fast fourier transform, fourier transform, *70*

Dessi (M.), computer programming, finite element techniques, linear equations, Priolo (P.), *7197*

Destuynder (P.), asymptotic methods, biharmonic equation, finite element methods, plates, *9137*

Detavernier (W.), see Hebel (W.), *2794*

determinants, difference equations, linear equations, Rizvi (S.A.H.), *46*

detonation, detonative ignition, explosions, explosives, Vasilev (A.A.), Nikolaev (Yu.A.), (et al.), *882*

- deflagration, explosions, liquid fuels, thermal explosions, Mitrofanov (V.V.), Pinaev (A.V.), (et al.), *1797*
- ballistics (interior), burning rate, deflagration, propellants, Goliger (J.), Lucotte (J.-P.), *2928*
- combustion, reaction kinetics, shock waves, tubes, Gendugov (V.M.), *5630*
- explosive loading, tubes, Mogilev (V.A.), Ivanov (A.G.), (et al.), *8346*
- ballistics (interior), heat transfer, particle dynamics, propagation, turbulent flow, Buckingham (A.C.), *8855*
- chemical kinetics, explosions, thermal explosions, Eidelman (S.), Sichel (M.), *9823*
- chemical kinetics, detonative ignition, explosions, thermal explosions, Kassoy (D.R.), Poland (J.), *9824*
- chemical kinetics, combustion, explosions, Dremin (A.N.), Nelin (V.M.), (et al.), *9825*
- chemical kinetics, detonative ignition, explosions, Ulyanitskii (V.Yu.), *9826*
- chemical kinetics, deflagration, explosions, Lesnyak (S.A.), Slutskii (V.G.), *9827*
- chemical kinetics, explosions, Gendugov (V.M.), *9830*
- blast waves, chemical kinetics, explosions, propagation, Levin (V.A.), Svalov (A.M.), *9831*
- chemical kinetics, explosions, Shurshalov (L.V.), *9832*
- explosions, shock waves, unsteady flow, Ulyanitskii (V.Yu.), *10781*
- detonative ignition, explosions, thermal explosions, Kassoy (D.R.), Poland (J.), *11893*
- explosions, shock waves (oblique), Sheng (Y.), Sislian (J.P.), *11894*

detonation (condensed phase), dynamic behavior, explosive solid interactions, impulsive loading, Mardashev (A.M.), *6889*

- explosions, thermal explosions, Bdzil (J.B.), *6890*
- explosives, impact, piercing, Lucas (G.), Sorel (J.), (et al.), *6893*

detonation (two phase), deflagration, detonative ignition, explosives, thermal explosions, Terao (K.), Sawada (R.), *883*

- deflagration, detonative ignition, explosives, thermal explosions, Calzia (J.), *884*
- compressional waves, explosives, layered media, liquid gas mixture, slurries, Trebinski (R.), Trzcinski (W.), (et al.), *1595*
- explosions, shock waves, thermal explosions, Ulyanitskii (V.Yu.), *7931*
- explosions, ignition, propagation, Smirnov (N.N.), *8853*
- detonative ignition, explosions, propagation, Terentev (E.D.), *8854*
- blast waves, chemical kinetics, explosions, explosive loading, Eidelman (S.), Sichel (M.), *9822*
- chemical kinetics, explosions, premixed fuel air, Vasilev (V.M.), Volpert (A.I.), (et al.), *9828*
- chemical kinetics, explosions, Putyatin (B.V.), *9829*

detonative ignition, detonation, explosions, explosives, Vasilev (A.A.), Nikolaev (Yu.A.), (et al.), *882*

- deflagration, detonation (two phase), explosives, thermal explosions, Terao (K.), Sawada (R.), *883*
- deflagration, detonation (two phase), explosives, thermal explosions, Calzia (J.), *884*
- explosions, ignition, thermal explosions, Andersen (W.H.), *3925*
- detonation (two phase), explosions, propagation, Terentev (E.D.), *8854*
- explosions, ignition, impact, Sorel (J.), Lucas (G.), (et al.), *8856*
- chemical kinetics, detonation, explosions, thermal explosions, Kassoy (D.R.), Poland (J.), *9824*
- chemical kinetics, detonation, explosions, Ulyanitskii (V.Yu.), *9826*
- explosions, ignition, self ignition, thermal explosions, viscous effects, Aleksapolskii (N.B.), Naidenov (V.I.), *9836*

- detonation, explosions, thermal explosions, Kassoy (D.R.), Poland (J.), *11893*

Dettleff (G.), liquefaction, phase changes, retrograde gases, shock waves, *6753*

Deutsch (S.), see Davis (R.W.), *560*

Deutsch (V.), see Crostack (H.A.), *7560*

developing flow, jets, velocity profiles, Rankin (G.W.), Sridhar (K.), *2659*
- channel flow, hydrodynamic stability, orr sommerfeld equation, perturbations, two dimensional flow, Gupta (S.C.), Garg (V.K.), *3696*
- channel flow, hydrodynamic stability, reynolds number (critical), stability theory, Gupta (S.C.), Garg (V.K.), *3700*
- inlet flow, laminar flow, non newtonian flow, pipe flow, AlNassri (S.A.), Unny (T.), *4626*
- hydrodynamic stability, pipe flow, reynolds number (critical), velocity profiles, Garg (V.K.), *5460*
- jets, turbulent flow, velocity profiles, Laryushkin (M.A.), Dvoinishnikov (V.A.), *6672*
- hydrodynamic stability, pipe flow, reynolds number (critical), three dimensional flow, Garg (V.K.), Gupta (S.C.), *6676*
- pipe flow, surveys, turbulent flow, Klein (A.), *8571*
- entrance region, numerical analysis, overshoot, velocity profiles, Li (L.C.), Ludford (G.S.S.), *8585*
- cascades, nozzles, velocity profiles, Cherepenin (N.D.), *9579*
- convergence, ducts (variable area), power law fluids, velocity profiles, Jarzebski (A.B.), Wilkinson (W.L.), *10443*
- ducts, turbulent flow, wakes, Elliott (C.J.), Townsend (A.A.), *10455*
- impingement, jets, Iwamoto (J.), Deckker (B.E.L.), *10462*
- annular flow, hydrodynamic stability, perturbations, Gupta (S.C.), Garg (V.K.), *10464*

Devi (P.), see Mohapatra (P.), *3806*

Devisme (J.-M.), insulating materials (thermal), layered media, partition walls, thermal loading, transient effects, *9740*

Devries (W.R.) ed., computer aided manufacturing, mathematical models, modeling, process control, robotics, *8173, book*

Dewey (C.F.) Jr., arteries, cell behavior, dynamic response, muscles, shear stress, Bussolari (S.R.), (et al.), *3065*

Dewhurst (R.J.), see Scruby (C.B.), *8877*

Dewolf (J.T.), limit design, plates, Sarisley (E.F.), *2284*

Dexiang (G.), convection, earth, mantle, modeling, Yinting (L.), (et al.), *3007*

Dexter (A.R.), see Hewitt (J.S.), *1323*

Dexter (P.E.), ocean air interaction, surface waves, swell, *10869*

Dey (S.), core-mantle boundary, earth, mantle, reflection, seismic waves, Addy (S.K.), *8954*

Dey (S.S.), bridges, curved members, decking, orthotropic materials, structural analysis, Samuel (A.T.), *5357*

Deysarker (H.K.), see Bandyopadhyay (S.N.), *2430*

Dezhkunov (N.V.), capillary flow, experimental methods, ultrasonics, Prokhorenko (P.P.), *6588*

Dhagat (S.K.), finite element methods, galerkin method, oil films, reynolds equation, seals, Sinhasan (R.), (et al.), *2569*
- friction (solid fluid), geometrical properties, lubrication (hydrodynamic), seals, Sinhasan (R.), (et al.), *12091*

Dhaliwal (R.S.), see Rokne (J.), *3990*
- half space, inclusions, spherical bodies, torsion, Singh (B.M.), (et al.), *5090*
- elasticity, energy release rate, fourier transform, griffith cracks, stress intensity factor, strips, Singh (B.M.), *8390*

Dhanak (M.R.), elliptical bodies, numerical methods, oscillations, unsteady flow, vortex rings, De Bernardinis (B.), *5398*
- hydrodynamic stability, mathematical models, vortices, *8604*
- euler equations, inviscid fluid, numerical methods, spherical bodies, vortex lines, *11361*

Dhatt (G.), finite element techniques, iterative methods, navier stokes equation, stream function, Fomo (B.K.), (et al.), *3143*

Dhawan (G.K.), anisotropic media, axisymmetric loading, boundary value problems, half space, punch problems, *247*
- adhesion, anisotropic media, contact stresses, half space, indentation, *250*
- anisotropic media, half space, punch problems, *10142*

Dhir (M.P.), experimental methods, highways, surface waves, vibration, Venkatesha (M.C.), (et al.), *8350*

Dhir (S.K.), design (optimum), plane stress, plates (holed), *8443*

Dhole (A.), beams (cantilever), eigenvalues, vibration (forced), *3359*

Dhowian (A.W.), deformation, fracture, joints, pore pressure, rocks, *5264*

Di Carlo (A.), see Rizzi (N.), *342*
- see Piva (R.), *2611*
- beam columns, buckling (experimental), postbuckling behavior, Pignataro (M.), (et al.), *3321*
- see Pignataro (M.), *9281*

Di Filippo (P.), see Baroncini (C.), *724*

diagnostics, design, process control, reliability analysis, Davydovskaya (N.I.), *2114*
- acoustic measurements, bearings (ball), spectral analysis, vibration, vibroacoustics, Cempel (C.), *2480*
- nuclear fusion, plasma, radiation properties, tokamak, Koopman (D.W.), Mcilrath (T.J.), (et al.), *2898*
- arrays, piezoelectrics, transducers (ultrasonic), ultrasonics, Sato (J.), Kawabuchi (M.), (et al.), *2955*
- axisymmetric flow, jets, optical techniques, Santoro (R.J.), Semerjian (H.G.), (et al.), *3762*
- combustion, lasers (gasdynamic), scattering, Eckbreth (A.C.), Bonczyk (P.A.), (et al.), *3879*
- arteries, stenoses, Fox (B.), Seed (W.A.), *4118*
- biomathematics, electroretinogram, eyes, nonlinear analysis, Koblasz (A.J.), *4923*
- containment, inertia, measurements (dynamic), nuclear fusion, Campbell (E.M.), Lane (S.M.), (et al.), *5684*
- energy spectrum, ionic flow, laser plasma interaction, measurements (dynamic), Chowdhury (S.S.), Clement (R.M.), (et al.), *5687*
- biomechanics, constitutive equations, deformation, heart, Ghista (D.N.), Ray (G.), (et al.), *6013*
- biomechanics, constitutive equations, deformation, heart, pulsatile flow, Ghista (D.N.), Ray (G.), (et al.), *6014*
- head, human body, pressure measurement, Viernstein (L.J.), *6028*
- charged particles, currents, plasma, saturation, Benilov (M.S.), Tirskii (G.A.), *6858*
- tissues, ultrasonics, Foster (F.S.), Hunt (J.W.), *7114*
- eyes, optical techniques, Tamarova (R.M.), *7127*
- continuous systems, dynamic properties, reliability analysis, Mironovskii (L.A.), *8174*
- experimental methods, gait, spine, Thurston (A.J.), Whittle (M.W.), (et al.), *9071*
- muscles, scattering, tissues, ultrasonics, Engin (A.E.), Peindl (R.D.), (et al.), *9072*
- flaw detection, gear trains, transmissions, vibration, Randall (R.B.), *11338*
- acoustics, gear teeth, holography, vibration, Umezawa (K.), Houjoh (H.), *11339*

Diamant (R.M.E.), cooling, energy conservation, energy conversion, energy storage, heating, Kut (D.), *3833, book*

diaphragms, large displacement, membranes, Na (T.Y.), Kurajian (G.M.), *323*
- aluminum alloys, anisotropic media, plasticity, pressurized components, Ilahi (M.F.), Parmar (A.), (et al.), *5112*
- bearings (gas lubricated), deformation, pressure distribution, Wernerowski (K.), *9967*

Dib (G.M.), see Wellford (L.C.) Jr., *6240*

Dicarlo (D.J.), airplane performance, design, flight tests, leading edge, spin recovery, wind tunnels, Stough (H.P.) III, (et al.), *10512*

Dickey (T.D.), see Simpson (J.J.), *9924*

Dickinson (S.M.), see Kaldas (M.M.), *2333*
- see Kaldas (M.M.), *8307*

Dickson (J.I.), see Bailon (J.-P.), *448*

Dicus (R.L.), explosions (underwater), impulse, transfer functions, underwater acoustics, *11906*

Didaleusky (D.G.J.), see Whitbeck (R.F.), *4258*

Didwania (A.K.), see Ramchandran (N.), *1876*
- fluidized beds, multiphase flow, transition flow, Homsy (G.M.), *9895*

Didyk (R.P.), dynamic fracture, explosive loading, implosion, Semenyuk (E.A.), (et al.), *885*

dielectrics, lubricants (liquid), viscoelasticity, viscosity, Bair (S.), Winer (W.O.), *1940*
- constitutive equations, thermoelasticity, Dost (S.), *2215*
- chemical reactions, electro fluid dynamics, liquids, tubes, Pribylov (V.N.), Chernyi (L.T.), *2879*
- electroelasticity, variational methods, Iannece (D.), Romano (A.), *5088*
- cracks, dispersion, electroelasticity, Farat (K.), *5089*
- annular flow, convection, electro fluid dynamics, heat transfer, laminar flow, Mizushina (T.), Ogino (F.), (et al.), *6768*
- electro fluid dynamics, statistical continuum mechanics, Gur (Y.), Ravina (I.), (et al.), *7643*
- constitutive equations, functional analyis, group theory, Chowdhury (K.L.), Glockner (P.G.), *8085*
- dynamic testing, transducers, vibration, Vomel (M.), *9331*

Diering (J.A.C.), excavation, mining, numerical methods, stress analysis, tunnels, *1335*

Diersch (H.-J.), convection (free), finite element techniques, porous media, *8945*

dies, deformation, drawing, stress strain relationships, Hanaki (K.), Kato (K.), *1344*
- drawing, material testing, rolling, Al-Makky (M.M.), Woo (D.M.), *2397*
- compression, cycles, powder metallurgy, tableting, Carstensen (J.T.), Toure (P.), *2404*
- coatings, drawing, glass fibers, lubrication, Eichenbaum (B.R.), *4681*
- films, materials processing, melting, polymers, Cheng (C.Y.), *6407*
- casting, computer aided design, thermal effects, Siauw (T.H.), *7461*
- compaction, friction (rolling), materials properties, powder metallurgy, Lammens (R.F.), Struyk (C.), (et al.), *7463*
- compaction, friction, powder metallurgy, powders, punch problems, Lammens (R.F.), Liem (T.B.), (et al.), *7465*
- extrusion, viscoelastic fluids, Crochet (M.J.), Keunings (R.), *8488*
- extrusion, polymers, Weill (A.), *8495*

diesel engines, air pollution, emulsions, fuels, heat engines, Thorp (I.), Armstrong (G.), (et al.), *1759*
- design, heat engines, marine engineering, Henshall (S.H.), Orbeck (F.), *1760*
- combustion products, exhaust gases, particle fluid flow, Cuthbertson (R.D.), Stinton (H.C.), (et al.), *1763*

- combustion products, exhaust gases, particle fluid flow, Carpenter (K.), Johnson (J.H.), *1764*
- combustion, fuel jets, injectors, Greeves (G.), *1765*
- propellers (marine), propulsion, ship design, Ono (R.), Yoshida (O.), *1923*
- fuel jets, injection systems, thermodynamic processes, Watson (N.), Kamel (M.), *2869*
- combustion, hydrogen, ignition sensitivity, Ikegami (M.), Miwa (K.), (et al.), *4742*
- modeling, noise, Crocker (M.J.), Hamilton (J.F.), *5651*
- crankshafts, noise abatement, vibration (torsional), Ochiai (K.), Nakano (M.), *5652*
- dynamic stresses, failure, rotating shafts, vibration (torsional), Pasricha (M.S.), Carnegie (W.D.), *6303*
- cavitation, erosion, injectors, unsteady flow, visualization, Bastenhof (D.), *8661*
- leaks, piston rings, pressure, Ruddy (B.L.), Dowson (D.), (et al.), *8801*
- combustion, flow irregularities, geometrical properties, Losonci (P.), *8802*
- aerodynamic interference, combustion chambers, computer programming, thermal measurements, Gwinner (J.U.), *8803*
- combustion, evaporation, injection systems, modeling, Baumer (K.), Hartje (J.), (et al.), *8804*
- heat sources, modeling, pistons, thermal diffusion, Kao (T.K.), Wallace (F.J.), *8805*
- prediction, probability theory, wear, Lausch (W.), Biemann (W.), (et al.), *9024*
- combustion (unsteady), flames (diffusion), stochastics, Ikegami (M.), Shioji (M.), *10710*
- combustion chambers, fuel economy, heat transfer, injection systems, Kamel (M.), Watson (N.), *11797*

Diesperov (V.N.), compressible flow, corners, transonic flow, viscid inviscid flow, *2613*

Dietz (P.W.), conductivity, heat transfer, packed beds, *5856*

difference differential equations, arteries, blood flow, Lefevre (J.), Magnus (A.), *1044*
- bounded variables, oscillations, semi infinite media, Philos (C.G.), Staikos (V.A.), *3100*
- runge kutta method, stability theory, van der pol equation, Bastin (H.), Delchambre (M.), *3102*

difference equations, determinants, linear equations, Rizvi (S.A.H.), *46*
- stability theory, stochastic systems, Ma (F.), Caughey (T.K.), *1097*
- stability theory, stochastic systems, Ma (F.), Caughey (T.K.), *2018*
- cooling, metals, parabolic equations, Drenska (N.T.), *2037*
- approximation theory, compressible flow, iterative methods, stability theory, Samarskii (A.A.), *4169*
- nonlinear theory, parabolic equations, Schechter (E.), *4186*
- boundary layer, boundary value problems, nonlinear analysis, stagnation point, Balu (R.), *5436*
- lyapunov's functions, stability theory, stochastics, Bitmead (R.R.), Anderson (B.D.O.), *9119*
- computing techniques, poisson equation, relaxation methods, torsion, Banki (I.), *9124*
- hyperbolic equations, shock waves, Laval (P.), *9638*
- computing techniques, conservation laws, implicit schemes, Hollanders (H.), Peyret (R.), *10044*
- computing techniques, conservation laws, differential equations (ordinary), fokker-planck equation, plasma, Volosov (V.N.), Pekker (M.S.), *10932*

differential equations, boundary value problems, computer algebra, newton method, Hanson (J.N.), *6098*

differential equations (ordinary), bifurcation, codes, differential equations (partial), mathematical methods, Hassard (B.D.), Kazarinoff (N.D.), (et al.), *21, book*
- averaging, mathematical methods, Bainov (D.), Milusheva (S.), *22*
- green function, linear equations, Pan (H.H.), Hohenstein (R.M.), *23*
- damping, nonlinear mechanics, Caristi (G.), Invernizzi (S.), *24*
- boundary value problems, shock layer, singular perturbations, Howes (F.A.), *25*
- oscillations, stability, Zubova (A.F.), *26*
- linear systems, oscillations, transition process, Kononyuk (V.A.), *28*
- boundary value problems, existence theorems, falkner-skan equation, Utz (W.R.), *31*
- banach space, functional equations, time delay systems, Thompson (R.J.), *32*
- boundary value problems, discrete systems, finite difference methods, Chawla (M.M.), Katti (C.P.), *57*
- differential equations (partial), mesh generation, numerical methods, time dependence, Lee (N.N.), Meyers (R.E.), *59*
- boundary value problems, computing techniques, splines, Usmani (R.A.), Warsi (S.A.), *60*
- equations of motion, iterative methods, micropolar media, numerical methods, Anwar (M.), Guram (G.S.), *61*
- differential geometry, perturbation methods, transformation, Rapaport (M.), *873*
- linear theory, mathematical methods, nonlinear systems, Rama Mohana Rao (M.), *1073, book*
- asymptotic behavior, dynamic behavior, transient effects, Friedman (C.N.), *1076*
- lyapunov's functions, nonlinear mechanics, stability theory, Martinyuk (A.A.), *1081*
- evolution equations, time dependence, Shugrin (S.M.), *1091*
- computer programming, computing techniques, differential equations (partial), mathematical methods, numerical analysis, Lederman (W.) eds., Churchhouse (R.F.), *1109, book*
- computing techniques, differential equations (partial), mathematical methods, numerical analysis, Ferziger (J.H.), *1110, book*
- differential equations (partial), numerical analysis, perturbation theory, runge kutta method, Ixaru (L.G.), *1112, book*
- bifurcation, sliding, trajectories, Grishin (S.A.), Utkin (V.I.), *1143*
- energy methods, integration, nonlinear structures, structural analysis, Kamat (M.P.), Hayduk (R.J.), *1181*
- convection (free), grashof number, shells (spherical), Singh (S.N.), Chen (J.), *1689*
- boundary value problems, discontinuities, variational methods, Kriz (J.), *1992*
- autonomous systems, perturbation methods, stability theory, Huseyin (K.), *1995*
- functional analyis, inverse method, scattering, Shabat (A.B.), *1998*
- eigenvalue problems, resonance, spinning bodies, stability theory, Kunitsyn (A.L.), Medvedev (S.V.), *2000*
- bending, boundary value problems, plates, splines, Usmani (R.A.), Warsi (S.A.), *2044*
- least squares, time delay systems, Shih (Y.-P.), Hwang (C.), (et al.), *2054*
- analytical methods, control, Sultanov (I.A.), *2105*
- magneto fluid dynamics, nonlinear theory, rotating disks, viscoelastic fluids, Bhatnagar (R.K.), *2887*
- mathematical methods, nonlinear theory, Nagle (R.K.), Singkofer (K.), *3096*
- boundary value problems, mathematical methods, Struwe (M.), *3097*
- approximations, integration, numerical analysis, Mikeladze (Sh.E.), *3116, book*
- dynamics, glass, materials processing, melting, Kobayashi (M.), Hujisawa (T.), (et al.), *3424*
- asymptotic methods, limit cycles, nonlinear mechanics, oscillators, van der pol equation, Grasman (J.), *4152*
- impulse, nonlinear systems, time delay systems, Martynyuk (D.I.), Tsyganovskii (N.S.), *4154*
- limit cycles, singularities, Wang (M.), Wang (L.), *4155*
- lyapunov's functions, stability theory, Kosolapov (V.I.), *4156*
- acoustic waves, oscillations, self excitation, Chernyshenko (S.I.), *4157*
- finite difference methods, inequalities, integro differential equations, mathematical methods, Pachpatte (B.G.), *4170*
- boundary value problems, iterative methods, kinetics, Pennline (J.A.), *4178*
- algorithms, computing techniques, runge kutta method, Krinke (D.C.), Huston (R.L.), *4183*
- filtration, heat transfer, injection, porous walls, Sergeev (G.T.), *4732*
- almost periodic functions, existence theorems, oscillations, Simirad (C.), *4950*
- impulse, periodic orbits, Perestyuk (N.A.), Shovkoplyas (V.N.), *4952*
- computing techniques, evolution equations, integration, Sepehrnoori (K.), Carey (G.F.), *5000*
- bifurcation, computing techniques, perturbation theory, Weber (H.), *5015*
- burgers equation, computing techniques, differential equations (partial), finite element techniques, Caldwell (J.), Wanless (P.), (et al.), *5037*
- chemical kinetics, chemical reactors, combustion, Do (D.D.), Weiland (R.H.), *5626*
- coordinate systems, orbit mechanics, Nazaroff (G.J.), *5705*
- asymptotic behavior, oscillations, vibration, Taylor (W.E.) Jr., *6062*
- routh-hurwitz criterion, stability theory, time delay systems, tools, vibration, Stepan (G.), *6070*
- computing techniques, mesh generation, singular perturbations, Kreiss (B.), Kreiss (H.-O.), *6087*
- approximation methods, vibration (parametric), Zajaczkowski (J.), *6283*
- dynamic stability, structural analysis, Liubushin (E.A.), *7147*
- boundary value problems, computer programming, stiff systems, Mahony (J.J.), Shepherd (J.J.), *7153*
- averaging, bifurcation, hopf bifurcation, Smith (H.L.), *7155*
- boundary value problems, eigenvalues, singular perturbations, stiff systems, Mahony (J.J.), Shepherd (J.J.), *7157*
- approximations, asymptotic methods, complex variables, eigenvalue problems, strum-liouville problems, Boyd (J.P.), *7158*
- initial value problems, laplace transform, nonlinear systems, Brenig (L.), Fairen (V.), *7159*
- linear equations, mathematical methods, monodromy deformation, Jimbo (M.), Miwa (T.), (et al.), *7160*
- initial value problems, mathematical methods, Verwer (J.G.), *7182*
- approximations, computing techniques, iterative methods, Korner (E.), *7187*
- boundary value problems, conduction (unsteady), lanczos-chebyshev, stress analysis, Chen (P.Y.P.), *7192*
- mathematical methods, matrix methods, structural analysis, Hees (G.), *7200*
- finite element techniques, numerical analysis, sturm-liouville problem, Babuska (I.), Rheinboldt (W.C.), *7205*
- boundary layer, computing techniques, differential equations (partial), nonlinear analysis, Shih (T.M.), Huang (H.J.), *7712*
- bifurcation, circumnavigation, resonance, stability theory, Goltser (I.M.), *7917*

- analog simulation, chaos, feedback, Sparrow (C.T.), *8104*
- asymptotic behavior, large scale systems, singular perturbations, stability theory, Grujic (L.T.), *8105*
- boundary value problems, mathematical methods, resonance, turning point problems, Lewis (G.N.), *8125*
- boundary value problems, splines, Papamichael (N.), Worsey (A.J.), *8129*
- computer programming, initial value problems, Gottwald (B.A.), Wanner (G.), *8141*
- boussinesq equation, differential equations (partial), hydrology, porous media, similarity methods, Bhutani (O.P.), Sharma (N.L.), *8969*
- asymptotic methods, eigenvalue problems, iterative methods, Gogokhiya (V.Sh.), *9095*
- bifurcation, biomathematics, periodic orbits, Holmes (P.), Lewis (D.), *9097*
- asymptotic behavior, biomathematics, feedback, Selgrade (J.F.), *10015*
- nonlinear systems, stability theory, Vorotnikov (V.I.), *10016*
- asymptotic behavior, boundary value problems, Chin (R.C.Y.), *10039*
- approximations (polynomial), computing techniques, initial value problems, splines, Multhei (H.N.), *10049*
- differential equations (stiff), integration, stability theory, Mihelcic (M.), Wingerath (K.), *10052*
- diffusion, magneto fluid dynamics, nonlinear analysis, reaction kinetics, Bishop (A.), Campbell (D.), (et al.), *10931*
- computing techniques, conservation laws, difference equations, fokker-planck equation, plasma, Volosov (V.N.), Pekker (M.S.), *10932*

differential equations (partial), lyapunov's functions, mathematical methods, Bhat (M.S.), Shrivastava (S.K.), *12*

- bifurcation, codes, differential equations (ordinary), mathematical methods, Hassard (B.D.), Kazarinoff (N.D.), (et al.), *21, book*
- banach space, cauchy problem, evolution equations, quasilinearization, Altman (M.), *33*
- continuum mechanics, integration, micropolar media, potential theory, Constanda (C.), *43*
- differential equations (ordinary), mesh generation, numerical methods, time dependence, Lee (N.N.), Meyers (R.E.), *59*
- dirichlet problem, functional analyis, nonlinear analysis, Thews (K.), *1093*
- computer programming, computing techniques, differential equations (ordinary), mathematical methods, numerical analysis, Lederman (W.) eds., Churchhouse (R.F.), *1109, book*
- computing techniques, differential equations (ordinary), mathematical methods, numerical analysis, Ferziger (J.H.), *1110, book*
- differential equations (ordinary), numerical analysis, perturbation theory, runge kutta method, Ixaru (L.G.), *1112, book*
- integration, rotating shafts, transient effects, Chu (F.H.), Pilkey (W.D.), *1114*
- boundary value problems, elastic foundations, strips, Tsamasphyros (G.J.), Theocaris (P.S.), *1186*
- eigenvalues, inverse problems, nonlinear systems, scattering, Gerdzhikov (V.S.), Ivanov (M.I.), (et al.), *2007*
- fluid mechanics, mathematical methods, mathematical models, perturbation theory, surveys, Brosowski (B.) eds., Martensen (E.), *2035, book*
- computing techniques, iterative methods, newton method, nonlinear methods, Carey (G.F.), Krishnan (R.), *2036*
- analog computation, conduction (unsteady), Zboril (F.), *2046*
- finite element techniques, mesh generation, Bernadou (M.), Hassan (K.), *2060*
- analog computation, elliptic equations, optical techniques, parabolic equations, Cederquist (J.), Lee (S.H.), *2079*
- compressible flow, numerical methods, transonic flow, Neuberger (J.W.), *2616*
- boundary layer, cylindrical bodies, magneto fluid dynamics, transport, Venkatachala (B.J.), Nath (G.), *2886*
- analogies, elasticity (linear), Everstine (G.C.), *3075*
- asymptotic methods, nonlinear mechanics, orbit mechanics, perturbation methods, Kevorkian (J.), Cole (J.D.), *3111, book*
- boundary value problems, elasticity (three dimensional), functional analyis, Tereshchenko (V.Ya.), *3231*
- hydrodynamics, plasma, theory, two component flow, Forste (J.), *3897*
- boundary value problems, iterative methods, Wenston (P.R.), *4162*
- chemical reactions, composite materials, diffusion, galerkin method, Cavendish (J.C.), Oh (S.H.), *4731*
- eigenvalues, helmholtz equation, Bareket (M.), *4960*
- random media, stability theory, Ahmadi (G.), *4976*
- burgers equation, computing techniques, differential equations (ordinary), finite element techniques, Caldwell (J.), Wanless (P.), (et al.), *5037*
- monopoles, nonlinear systems, soliton theory, volterra equations, Leznov (A.N.), Savelev (M.V.), (et al.), *6063*
- complex variables, integral operators, linear equations, survey, Kracht (M.), Kreyszig (E.), (et al.), *7162*
- perturbation methods, resonance, Roberts (A.J.), *7166*
- boundary integral methods, computing techniques, finite difference methods, galerkin method, iterative methods, surveys, Noye (J.) ed., *7180, book*
- biharmonic equation, elasticity (linear), Jaswon (M.A.), Shidfar (A.), (et al.), *7272*
- boundary layer, computing techniques, differential equations (ordinary), nonlinear analysis, Shih (T.M.), Huang (H.J.), *7712*
- boundary value problems, finite difference methods, finite element techniques, generalized coordinates, Schulz (B.), Wachter (J.), *8135*
- boussinesq equation, differential equations (ordinary), hydrology, porous media, similarity methods, Bhutani (O.P.), Sharma (N.L.), *8969*
- conduction (heat), elasticity, finite element techniques, Gibert (P.), Gorge (Y.), *9142*
- liquid liquid interface, plates, two component flow, viscous flow, Pismen (L.M.), Nir (A.), *9538*
- boussinesq equation, korteweg de vries equation, nonlinear waves, scattering, solitary waves, Ablowitz (M.J.), Segur (H.), *10017*
- group theory, hyperbolic equations, mass transfer, Berman (V.S.), *10020*
- dynamic programming, stochastics, Bensoussan (A.), Lions (J.-L.), *10022*
- decision theory, dynamic programming, smoothing of data, transforms, Angel (E.S.), *10023*
- beams, evolution equations, periodic orbits, vibration, Holmes (P.), Marsden (J.), *10024*
- axisymmetric flow, existence theorems, stratified flow, Yih (C.-S.), *10407*
- crystals, sine-gordon equation, standing waves, Seeger (A.), Wesolowski (Z.), *10935*

differential games, airplanes, algorithms, evasion, pursuit, Rajan (N.), Prasad (U.R.), (et al.), *1157*

- design, evasion, pursuit, Ostapenko (V.V.), *2127*
- optimization, pursuit, sensitivity, Abramyants (T.G.), Maslov (E.P.), (et al.), *2128*
- avoidance, nonlinear theory, synthesis, Gusyatnikov (N.B.), *2130*
- evasion, pursuit, synthesis, Tomskii (G.V.), *2131*
- algorithms, control, Krasovskii (N.N.), *3200*
- guidance, interception, Lutmanov (S.V.), *3201*
- normative games, Kondratev (A.I.), Stognii (A.A.), *3202*
- algorithms, pursuit, Chikrii (A.A.), *4273*
- design, optimal control, unknown parameters, Kuntsevich (V.M.), Lychak (M.M.), *4301*
- algorithms, pursuit, Zak (V.L.), *4318*
- algorithms, linear systems, Rappoport (I.S.), *4319*
- algorithms, control, distributed parameters, hyperbolic equations, parabolic equations, position control, Korotkii (A.I.), Osipov (Iu.S.), *7240*
- optimization, synthesis, Kumar (P.R.), *7247*
- evasion, pursuit, Getz (W.M.), Pachter (M.), *8170*
- algorithms, biomathematics, cybernetics, pattern recognition, Yablonskij (S.V.), *9152, book*
- evasion, lyapunov's functions, pursuit, Getz (W.M.), Pachter (M.), *11086*
- evasion, pursuit, stochastic systems, Pachter (M.), Yavin (Y.), *11087*

differentiation, algorithms, interpolation, Oliver (J.), *3123*

- hardening, hardening (kinematic), incremental analysis, plasticity, Kaneko (K.), *3267*
- interpolation, matrix inversion, singularities, Okabe (M.), Kikuchi (N.), *5022*
- convergence, iterative methods, parabolic equations, Heron (B.), *7183*
- algorithms, computer programming, computing techniques, Oliver (J.), *9123*

diffraction, cracks, elastic waves, Harris (J.G.), *402*

- discontinuities, elastic waves, Shibahara (M.), Tateno (S.), (et al.), *403*
- gravity waves, sloping bottom, surface waves, Lozano (C.), Liu (P.L.-F.), *665*
- cylindrical bodies, flow irregularities, gravity waves, nonlinear waves, Miloh (T.), *667*
- corners, cracks, elastic waves, interference, Achenback (J.D.), Norris (A.N.), *1305*
- flow irregularities, gravity waves, travelling waves, Hunt (J.N.), Baddour (R.E.), *1590*
- breakwater, coasts, integral methods, Mattioli (F.), *1591*
- acoustic waves, ocean, sound propagation, Esswein (R.), Flatte (S.M.), *1799*
- acoustic waves, cylindrical waves, soils, sound propagation, Hebault (D.), Filippi (P.), *1808*
- acoustic measurements, lasers, sound fields, sound propagation, transducers, Kleszczewski (Z.), *1827*
- breakwater, ocean waves, refraction, shallow water, Lui (P.L.-F.), Lozano (C.J.), (et al.), *1887*
- autocorrelation function, fourier transform, lasers, statistical theory, yarn, Toba (E.), *2256*
- analysis, shock waves, submerged bodies, Gorshkov (A.G.), *2715*
- attenuation, transducers (ultrasonic), ultrasonics, Chivers (R.C.), Rosselaar (L.), (et al.), *2952*
- acoustic waves, barriers, transmission, wave energy, Czarnecki (S.), Engel (Z.), (et al.), *3933*
- acoustic waves, barriers, wedges, Poruchikov (V.B.), *3936*
- acoustics, antennas, arrays, sound fields, Adekola (S.A.), *3967*
- elastic waves, elliptical cracks, Adler (L.), Achenbach (J.D.), *4454*
- acoustic waves, cylindrical bodies, Veksler (N.D.), *4775*
- penny shaped crack, ultrasonics, Achenbach (J.D.), Adler (L.), (et al.), *4778*
- acoustic waves, barriers, wedges, Borovikov (V.A.), *4780*
- acoustic waves, reflection, Vovk (I.V.), *4784*
- acoustic waves, electromagnetic waves, scale models, scattering, Mei (C.C.), Tuck (E.O.), *4967*
- acoustic waves, surface waves, Anisimkin (V.I.), Morozov (A.I.), (et al.), *5236*
- elastic waves, wedges, Israilov (M.Sh.), *5245*
- plates, residual stresses, x ray techniques, Doi (O.), Ukai (T.), *5323*
- gravity waves (surface), submerged bodies, wave interactions, Belyaev (V.A.), *5475*

- caustics, gravity waves (surface), refraction, Williams (R.G.), Darbyshire (J.), (et al.), *5481*
- modes, sound propagation, underwater acoustics, Leung (R.), Deferrari (H.A.), *5732*
- ocean, scattering, surface profiles, underwater acoustics, Holford (R.L.), *5785*
- acoustic waves, optical techniques, scattering, sound fields, Saiga (N.), Suzuki (T.), *5792*
- elliptic equations, finite element techniques, hydrodynamics, infinite medium, Jami (A.), Polyzakis (M.), *6103*
- cracks, metals, nondestructive tests, surfaces, ultrasonics, Parvatov (G.N.), Popov (A.A.), *6486*
- flow measurement, operational methods, oscillators, Yamasaki (H.), Honda (S.), *6740*
- eddies, sound propagation, underwater acoustics, Munk (W.H.), *6912*
- attenuation, barriers, heat exchangers (crossflow), noise (aerodynamic), vortex shedding, Howe (M.S.), *6931*
- acoustic waves, cylindrical bodies, Karpenko (V.V.), *6933*
- cracks, fatigue, nondestructive tests, ultrasonics, Golan (S.), Adler (L.), (et al.), *7513*
- optical techniques, ultrasonics, waves, Riley (W.A.) Jr., *7947*
- edge cracks, elastic bodies, shear waves, Roy (A.), Visalakshi (N.), *8340*
- cylindrical bodies, elastic bodies, floating bodies, gravity waves (surface), Kudryavtsev (E.P.), *8625*
- asymptotic methods, ocean waves, ships, slender bodies, wave interactions, Beck (R.F.), Troesch (A.W.), *9012*
- energy conversion, floating bodies, ocean waves, Haren (P.), Mei (C.C.), *9013*
- cracks, elastic waves, fracture, lamb problem, Rokhlin (S.I.), *9347*
- nonlinear characteristics, nonlinear waves, Bagdoev (A.G.), *9348*
- crack growth, fatigue, nondestructive tests, ultrasonics, Sigmond (R.S.), Lien (E.), *10282*
- cylindrical bodies, nonlinear waves, offshore structures, shallow water, Rahman (M.), Chakravartty (I.C.), *10393*
- cylindrical bodies, fluid-structure interaction, gravity waves, Alliney (S.), *10476*
- shock waves, wedges, Pekurovskii (L.E.), *10494*
- acoustic waves, acoustics, barriers, wedges, Bhattacharyya (S.), *10800*
- bottom irregularities, coasts, oceanography, surface waves, Wang (D.-P.), *10859*
- cylindrical bodies, flow irregularities, gravity waves (surface), Miles (J.W.), *11572*
- gravity waves (surface), refraction, sloping bottom, Houston (J.R.), *11576*
- flow irregularities, gravity waves (finite depth), reefs, scattering, Miles (J.W.), *11578*
- barriers, sound, sound fields, Kawai (T.), *11968*
- barriers, plane waves, Kendig (R.P.), *11972*
- sound, trailing edge, vortex shedding, Rienstra (S.W.), *11978*
- acoustic waves, elastic bodies, plates, spherical bodies, Saadat (H.), Filippi (P.), *11989*
- elliptical bodies, sound generation, sound propagation, Demidov (V.P.), *12005*
- boundary value problems, ships, slender bodies, wave interactions, Liapis (N.), Faltinsen (O.M.), *12086*

diffusers, boundary layer, conical flow, entrainment, shape factors, Odukwe (O.), *625*
- aerodynamic performance, conical flow, entrance region, Sharma (P.C.), *626*
- numerical methods, plane flow, stalling, Bardina (J.), Lyrio (A.), (et al.), *1567*
- annuli, pressure recovery, swirl, Kumar (D.S.), Kumar (K.L.), *1570*
- centrifugal compressors, rotating stall, unsteady flow, Abdelhamid (A.N.), *1633*
- aerodynamic performance, optimization, Ryabinkov (G.M.), *2653*
- radial flow, separation, turbulent flow, Brandt (U.), Teipel (I.), *3675*
- conical flow, inlet flow, inlet flow (sheared), shear flow, velocity profiles, Nakamura (I.), Ishikawa (K.), (et al.), *3679*
- centrifugal compressors, oscillatory flow, rotating stall, Abdelhamid (A.N.), Bertrand (J.), *3744*
- modes, plane waves, scattering, wave energy, Strube (H.W.), *3949*
- annuli, experimental results, vortex flow, Adkins (R.C.), Matharu (D.S.), (et al.), *4628*
- aerodynamic performance, annuli, conical flow, turbines, Kruse (H.), Quest (J.), *4629*
- aerodynamic performance, conical flow, surveys, Klein (A.), *5444*
- aerodynamic performance, turbulence (freestream), Hoffmann (J.A.), *5445*
- arrays, diffusion, jets, mixing, Lee (J.H.W.), *5454*
- jets, shallow water, Lee (J.H.), Jirka (G.H.), *6671*
- centrifugal compressors, entrance region, laser doppler velocimeters, optical analysis, rotors, Krain (H.), *6735*
- compressible flow, duct flow, numerical methods, swirl flow, Deckker (B.E.L.), Jeffries (C.), (et al.), *7693*
- compressible flow, friction (skin), radial flow, Brandt (U.), Teipel (I.), *7731*
- boundary layer, oscillatory flow, transonic flow, Sajben (M.), Kroutil (J.C.), *8586*
- channels (closed), ducts (variable area), stratified flow, turbulence, Mehta (P.R.), *9602*
- axisymmetric flow, entrance region, separated flow, supersonic flow, Vishnevetskii (S.L.), Pakhomova (Z.S.), *9589*
- inlets, simulation, supersonic flow, unsteady flow, Colbourne (D.E.), *9590*
- conical flow, rotating bodies, visualization, Kikuyama (K.), Murakami (M.), (et al.), *9591*
- jets, mixing, plumes, Sorrell (F.Y.), Smith (B.W.), *9593*
- annular flow, inlet flow, swirl flow, Elgammal (A.H.), Elkersh (A.M.), *9669*
- aerodynamic interference, cascades, centrifugal compressors, rotors, Fisher (E.H.), Inoue (M.), *9670*
- centrifugal compressors, inlet flow, laser doppler velocimeters, velocity profiles, Flueckiger (G.), Melling (A.), *10528*
- compressible flow, geometrical properties, incompressible flow, mixing, pressure drop, Labendik (V.P.), Dantsyg (A.Ya.), (et al.), *11799*
- absorption, attenuation, sound propagation, Holger (D.K.), *11961*
- drops, two phase flow, Deich (M.E.), Andriets (A.G.), (et al.), *12032*

diffusion, convection, finite element techniques, heat transfer, Baliga (B.R.), Patankar (S.V.), *96*
- mass transfer, plumes, turbulence (transport), Chatwin (P.C.), Sullivan (P.J.), *656*
- boundary layer, impact, mass transfer, particle dynamics, Valentin (G.), Le Goff (P.), *803*
- finite difference methods, gases, navier stokes equation, stratified flow, Ukeguchi (N.), Okamoto (H.), (et al.), *825*
- electro fluid dynamics, mathematical models, theory, two phase flow, Gogosov (V.V.), Naletova (V.A.), (et al.), *850*
- composite materials, hygrothermal effects, Sih (G.C.), Shih (M.T.), (et al.), *931*
- approximation methods, singular perturbations, transient effects, Mann-Nachbar (P.), *1105*
- convection, finite element techniques, Keramidas (G.A.), *1139*
- convection, dilute solutions, laminar flow, Yu (J.S.), *1557*
- mass transfer, turbulence, Krishna (R.), *1585*
- particle dynamics, statistical theory, turbulence, turbulence model, Lamb (R.G.), *1586*
- cavities, cylindrical bodies, mass transportation, porous media, Gipson (G.S.), Thoms (R.L.), *1729*
- deformation, mathematical models, porous media, Podstrigach (Ya.S.), Povstenko (Yu.Z.), *1730*
- brownian motion, particle dynamics, shear flow, Foister (R.T.), Van De Ven (T.G.M.), *1731*
- chains, drops, mass transfer, saturation, Polianin (A.D.), *1738*
- gas solid interface, transient effects, Garcia (E.A.), *1739*
- holes, hygrothermal effects, thermal stresses, thermoelasticity, Hartranft (R.J.), Sih (G.C.), *1832*
- deposition, filtration, particles, turbulent flow, Gaidukov (N.I.), *1842*
- brownian motion, mass transfer, Hardt (S.L.), *1953*
- bifurcation, periodic orbits, perturbation methods, reaction-diffusion systems, Ermentrout (G.B.), *2003*
- cavities, infinite medium, mathematical methods, spherical bodies, Akkas (N.), Bauld (N.R.) Jr., *2010*
- jets, stratified flow, turbulence, Hofer (K.), Hutter (K.), *2696*
- turbulence, turbulence model, Shirakashi (M.), Tomita (Y.), *2697*
- dispersion, magneto fluid dynamics, plates (parallel), solutions (material), Annapurna (N.), Gupta (A.S.), *2882*
- blood flow, microcirculation, Sheth (B.V.), Hellums (J.D.), *3063*
- finite element techniques, inequalities, Neta (B.), *3137*
- cavities, creep, creep rupture, Pharr (G.M.), Nix (W.D.), *3452*
- discrete systems, equations of motion, hydrodynamics, one dimensional flow, Visscher (P.B.), *3635*
- capillary flow, drying, evaporation, porous media, Molnar (K.), *3845*
- convection, pipe flow, plug flow, Bauer (H.P.), *3851*
- boundary value problems, chemical reactions, dirichlet problem, mathematical methods, polymerization, Bobisud (L.E.), *3853*
- equations of motion, two component flow, Reimschussel (W.), Abramczyk (H.), *3854*
- immiscible fluids, interfaces, Hennenberg (M.), Bisch (P.M.), (et al.), *3855*
- chemical kinetics, combustion, exhaust gases, Malte (P.C.), Schmidt (S.C.), (et al.), *3877*
- mixing, powders, Hwang (C.L.), Hogg (R.), *4007*
- particles, pipelines, slurries, trajectories, two phase flow, Okuda (K.), *4011*
- inclusions, metals, nonhomogeneous media, Trzesowski (A.), *4138*
- crack growth, creep rupture, stress intensity factor, void growth, Wilkinson (D.S.), *4487*
- spectra, turbulence, Moffatt (H.K.), *4643*
- mass transfer, polymers, rotating disks, Lal (P.), Mishra (P.), (et al.), *4729*
- boundary conditions, concentration, laminar flow, mass transfer, Vorotyntsev (M.A.), Grafov (V.M.), (et al.), *4730*
- chemical reactions, composite materials, differential equations (partial), galerkin method, Cavendish (J.C.), Oh (S.H.), *4731*
- bubble dynamics, saturation, stability, Isay (W.H.), *4827*
- oceanography, stratification, stratified flow, Turner (J.S.), *4870*
- bifurcation, existence theorems, perturbation theory, reaction diffusion equations, Rothe (F.), *4961*
- parabolic equations, vector methods, Lugt (H.J.), *4966*
- boundary value problems, maximum principle, parabolic equations, Aifantis (E.C.), Hill (J.M.), *4973*

- nonhomogeneous media, particles, Dolgov (A.S.), Ostroushko (V.N.), *5424*
- porous surfaces, rarefied gases, Mingle (J.O.), *5425*
- arrays, diffusers, jets, mixing, Lee (J.H.W.), *5454*
- burning rate, combustion, liquid vapor interface, Sukhov (G.S.), Yarin (L.P.), *5629*
- absorption, heating, lasers, metals, Boiko (V.I.), Bunkin (F.V.), (et al.), *5808*
- lakes, reservoirs, Imberger (J.), Patterson (J.), (et al.), *5912*
- blood flow, mass transfer, Schwartz (A.J.), *6016*
- metals, mixture theories, solid mechanics, Aifantis (E.C.), *6045*
- convection, finite element techniques, one dimensional flow, Varoglu (E.), Finn (W.D.L.), *6112*
- burgers equation, finite element techniques, initial value problems, Varoglu (E.), Finn (W.D.L.), *6119*
- particle fluid flow, particle size, reservoirs, turbidity, Miyanaga (Y.), Aki (S.), *6606*
- blood flow, couple stresses, non newtonian flow, Soundalgekar (V.M.), Chaturani (P.), *6655*
- convection, finite element techniques, Heinrich (J.C.), *6808*
- boundary value problems, composite structures, mass transfer, models, moisture, Miller (R.K.), *6827*
- mathematical methods, mathematical models, transport phenomena, Mikhailov (M.D.), Ozisik (M.N.), *6828*
- diffusion-reaction, mass transfer, mathematical methods, mathematical models, Sperb (R.P.), *6829*
- boundary layer (atmospheric), mathematical methods, mathematical models, Nieuwstadt (F.T.M.), *6830*
- boundary value problems, mathematical models, nonlinear analysis, porous media, Alikakos (N.D.), Rostamian (R.), *6831*
- brownian motion, charged particles, Prem (A.), Pilat (M.J.), *7001*
- aquifers, infiltration, Dassonville (G.), Emsellem (Y.), *7050*
- boundary layer (atmospheric), clouds, shear flow, turbulence (geophysical), wind, Skhirtladze (G.I.), Yurchak (B.S.), *7061*
- boltzmann equation, evolution equations, kinetic theory, statistical mechanics, Brunnschweiler (A.), *7164*
- asymptotic behavior, nonlinear analysis, phase plane, travelling waves, Fife (P.C.), Mcleod (J.B.), *7167*
- periodic orbits, reaction kinetics, reaction-diffusion systems, travelling waves, Maginu (K.), *7168*
- bifurcation, dynamics, reactors, stability theory, Pao (C.V.), *7173*
- finite difference methods, separated flow, two dimensional flow, unsteady flow, vorticity, Porthouse (D.T.C.), Lewis (R.I.), *7678*
- damping, oscillations, shock tubes, Srinivas (K.), Gururaja (J.), *7682*
- decay, turbulence (isotropic), Sreenivasan (K.R.), *7748*
- convection, modal analysis, nonlinear analysis, rayleigh number, Riahi (N.), *7841*
- membranes (permeable), permeability, thermal effects, Ibanez (J.A.), Tejerina (A.F.), *7874*
- conduction (heat), heat transfer, mass transfer, mathematical models, Hatton (T.A.), Chiang (A.S.), (et al.), *7875*
- convection (free), layered media, porous media, Griffiths (R.W.), *7991*
- elastic bodies, finite element techniques, porous media, Kanok-Nukulchai (W.), Suaris (V.W.), *7997*
- boundary layer (atmospheric), evaporation, mass transfer, Reijnhart (R.), Pieters (J.), (et al.), *8030*
- adhesion, cutting, magnetic field, tool wear, wear, Muju (M.K.), Ghosh (A.), *8055*
- dilute solutions, membranes (permeable), mixing, osmosis, Pedley (T.J.), *8078*
- existence theorems, inverse problems, uniqueness, Chrzanowski (E.M.), *8115*
- control, estimation, nonlinear systems, Banon (G.), Nguyen (H.T.), *8122*
- boussinesq equation, convection, nonlinear analysis, Knobloch (E.), Proctor (M.R.E.), *8531*
- convection, hydrodynamic stability, nonlinear theory, perturbation methods, Neu (J.C.), *8602*
- liquids, thermal instability, thermal waves, Baydakov (V.G.), *8674*
- cylindrical bodies, solids, thermal excitation, unsteady flow, Lamvik (M.), *8678*
- critical phenomena, inclined layer, rayleigh number, stratified flow, thermal instability, Paliwal (R.C.), Chen (C.F.), *8712*
- boundary layer (thermal), convection, mathematical models, Barrett (J.W.), Morton (K.W.), *8749*
- buoyant flow, conductivity, convection (free), heat addition, heat transfer (combined modes), radiant interchange, Epstein (M.), Cheung (F.B.), (et al.), *8751*
- fluidized beds, mass transfer, mathematical models, Yasnikov (G.P.), Galperin (L.G.), (et al.), *8777*
- conduction (unsteady), darcy flow, half space, mass transfer, Nilson (R.H.), *8778*
- absorption, galerkin method, moisture, soils, Tolikas (P.K.), Tzimopoulos (C.D.), (et al.), *8780*
- buoyancy, density, interface phenomena, mass transfer, Griffiths (R.W.), Ruddick (B.R.), *8781*
- anisotropy, convection (free), galerkin method, Kelly (D.W.), Nakazawa (S.), (et al.), *8786*
- absorption, boundary layer, drops, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *8896*
- convection, finite difference methods, parabolic equations, stability (numerical), Morton (K.W.), *9126*
- three dimensional flow, two component flow, uniqueness, unsteady flow, Beirao Da Veiga (H.), Serapioni (R.), (et al.), *9537*
- concentration, drops, peclet number, wakes, Zhivotyagin (A.F.), *9539*
- particle dynamics, turbulence, turbulence (transport), Mailliat (A.), Duhamel (P.), *9614*
- combustion, evaporation, metals, oxidation, Fursov (V.P.), Shevtsov (V.I.), (et al.), *9767*
- combustion, metals, models, Kudryavtsev (V.M.), Sukhov (A.V.), (et al.), *9774*
- mathematical methods, quasisolutions, reaction kinetics, stability theory, Lakshmikantham (V.), Vatsala (A.S.), *10028*
- jets, stratification, turbulent flow, Hofer (K.), Hutter (K.), *10457*
- turbulence, turbulence (geophysical), Mikhaylov (G.A.), Sabelfeld (K.K.), *10480*
- bubble dynamics, freezing, liquid solid interface, solidification, two phase flow, Petrie (D.J.), Linehan (J.H.), (et al.), *10598*
- evaporation, kinetics, models, Petersen (I.F.), *10648*
- phase changes, Druzhinin (A.A.), Tunitskii (N.N.), *10654*
- impurities, pipe flow, porous walls, Eroshenko (V.M.), Zaichik (L.I.), *10669*
- mixtures, navier stokes equation, poiseuille flow, Shavaliev (M.Sh.), *10672*
- contamination, rivers, stochastic processes, Molyneux (J.E.), Witten (A.J.), *10674*
- bubble dynamics, solubility, Polyanin (A.D.), Sergeev (Yu.A.), *10676*
- kinetics, particles, stokes flow, Polyanin (A.D.), Sergeev (Yu.A.), *10680*
- convection, weighted residual methods, Jensen (O.K.), Finlayson (B.A.), *10694*
- contamination, convection (free), fracture, porous media, Nuttall (H.E.), Ray (A.K.), *10829*
- differential equations (ordinary), magneto fluid dynamics, nonlinear analysis, reaction kinetics, Bishop (A.), Campbell (D.), (et al.), *10931*
- air, bubble dynamics, cavitation inception, laminar flow, separation, Parkin (B.R.), *11382*
- channel flow, mass transfer, roughness, Polyakova (L.A.), Shakhov (V.G.), *11486*
- boltzmann equation, chemical reactions, pollution, Muller (K.H.), *11525*
- particle dynamics, turbulence, turbulence (geophysical), Middleton (J.F.), *11557*
- convection, liquids, mixtures, optical techniques, two component flow, Ruddick (B.R.), *11755*
- boundary layer, convection, numerical methods, Kanarachos (A.), *11764*
- acoustics (architectural), decay, reverberation, Kuttruff (K.H.), *11938*
- aerosols, deposition, fibers, filters, Ingham (D.B.), *12051*
- finite element methods, nonlinear theory, two phase flow, Robinson (P.C.), Rae (J.), (et al.), *12053*

diffusion bonding, bonded joints, contact problems, elastoplasticity, half space, Kharitonova (A.N.), Sergeev (A.V.), (et al.), *4565*

diffusion coefficient, gases (nonideal), Bezverkhii (P.P.), Martynets (V.G.), (et al.), *820*

- experimental methods, Besserdich (H.), Kahrib (E.), (et al.), *824*
- computing techniques, convection (benard), magneto fluid dynamics, penetration, Drobyshevski (E.M.), Kolesnikova (E.N.), (et al.), *6861*
- galerkin method, moisture, soils, Hromadka (T.V.) II, Guymon (G.L.), *8779*
- mixing, mixtures, particulate flow, Koga (J.), Yamaguchi (K.), (et al.), *10561*
- dispersion, liquids, Alizadeh (A.), Nieto De Castro (C.A.), (et al.), *10667*
- liquids, mass transfer, Rao (D.P.), Rao (G.H.), *10670*
- channel flow, rivers, water pollution, West (J.R.), Cotton (A.P.), *11777*

diffusion pumps, pumps, vacuum, Harris (N.S.), *1531*

Digby (P.J.), elastic constants, porous media, rocks, *7448*

Dight (P.M.), buildings, foundations, joints, piles, rock mechanics, shear, Chiu (H.K.), *9485*

digital analog computation, analog to digital conversion, computer graphics, Reznichenko (V.A.), Buglov (E.G.), (et al.), *4511*

- aerodynamic performance, data acquisition, wind tunnels, Whitfield (J.D.), Pate (S.R.), (et al.), *4689*
- analog computation, analog simulation, design (optimum), hydraulic machinery, Sankar (S.), Svoboda (J.V.), *6123*

digital control, automatic control, sampled data systems, Jury (E.I.), *135*

- design, modeling, modulated systems, Lim (Yu.A.), *137*
- frequency domain techniques, multivariable systems, process control, state space techniques, Seborg (D.E.), Fisher (D.G.), *205*
- adaptive systems, furnaces, glass furnace, identification, process control, Keviczky (L.), Haber (R.), (et al.), *206*
- chatter, process control, turning, Eman (K.), Wu (S.M.), *437*
- optimal control, time delay systems, Hammarstrom (L.G.), Gros (K.S.), *1148*
- computer aided design, internal combustion engines, microprocessors, *1167*
- airplane performance, flight loads, sampled data systems, Keskar (D.A.), Slater (G.L.), *1626*
- design, multivariable systems, sampled data systems, Rao (G.V.), *2093, book*
- airplanes, flight control, fly-by-wire system, navigation, reliability analysis, Berman (H.), Boudreau (J.), *2159*
- rivers, water pollution, Gourishankar (V.), Lawal (M.A.), *2174*
- flight control, helicopters, Stengel (B.F.), Broussard (J.R.), (et al.), *2195*
- drives, hydraulic machinery, Volosov (V.V.), Voronova (L.I.), (et al.), *2198*
- design, reliability analysis, Brodetskii (G.L.), *3178*

- heat, heat storage, heat transfer, heating, identification, Kulakowski (B.T.), Schmidt (F.W.), *3211*
- algorithms, design, discrete systems, Krutko (P.D.), Popov (Ye.P.), *4257*
- analytical methods, frequency domain techniques, frequency response, Whitbeck (R.F.), Didaleusky (D.G.J.), (et al.), *4258*
- optimal control, space vehicle structures, structural response, Gran (R.), Rossi (M.), (et al.), *4297*
- design, sampled data systems, Oz (H.), Meirovitch (L.), (et al.), *5045*
- design, mathematical models, modeling, synthesis, Neugebauer (G.), *7254*
- control, manipulators, robotics, Luh (J.Y.S.), Walker (M.W.), (et al.), *9186*
- design, robotics, Haferkorn (P.), Schwarz (W.), *9187*
- automatic control (optimal), design, Leonhard (W.), *9195*
- adaptive systems, microprocessors, nonlinear systems, observers, Sinha (N.K.), Law (S.S.Y.), (et al.), *10081*
- control, decoupling, design, feedback, nonlinear systems, Singh (S.N.), *11050*

digital simulation, mathematical models, numerical methods, regenerators, Khandwawala (A.I.), Chawla (O.P.), *72*
- dynamic behavior, magnetically suspended structures, railroads, state space techniques, vibration, Sommerer (J.), *73*
- boilers, dynamic analysis, mathematical models, nonlinear theory, Roder (H.W.), Rosel (G.S.), *74*
- cooling, plumes, Gaillard (P.), *1574*
- noise (traffic), noise abatement, sound generation, Jones (R.R.K.), Hothersall (D.C.), (et al.), *1812*
- elliptic equations, flow measurement, time dependence, Essers (J.A.), *3121*
- algorithms, mathematical models, multivariable systems, stochastic systems, Razevig (V.D.), *3179*
- algorithms, binary signals, filters, interpolation, Konkin (A.V.), Kulman (N.K.), *3191*
- accelerometers, aerodynamic coefficients, reentry, spinning bodies, Mcdowell (J.L.), Williamson (W.E.) Jr., *3924*
- algorithms, linear systems, matrix methods, numerical methods, simulation, state space techniques, transition matrices, Litz (L.), *4206*
- oscillators, stochastic processes, van der pol oscillator, Spanos (P.-T.D.), *4956*
- automobiles, human engineering, man machine systems, maneuverability, Garrott (W.R.), Wilson (D.L.), (et al.), *5020*
- control, convergence, runge kutta method, Tuschak (R.), *6100*
- rivers, sediment transport, Bettess (R.), White (W.R.), *7656*
- mixtures, two phase flow, Dorfman (A.L.), *7960*
- beams (curved), curved elements, forming, shells (shallow), Stolarski (H.), Belytschko (T.), *8142*
- computing techniques, dirichlet problem, finite element techniques, iterative methods, Korneev (V.G.), Kuzmenko (V.G.), *8147*
- jets, turbulent flow, Edwards (A.V.J.), Morfey (C.L.), *8598*
- microprocessors, nondestructive tests, synthesis, ultrasonics, Hanstead (P.D.), *9423*
- estimation, kalman filters, martingales, Moek (G.), *10034*
- automobiles, brakes, maneuverability, Mitchell (B.), Abrams (R.), (et al.), *10057*
- computer programming, dynamic analysis, Fischer (J.), Gerhardt (H.-D.), (et al.), *10058*

Dijksman (E.A.), chebyshev approximations, linkages, mechanisms, *1472*

Dik (I.G.), heat addition, ignition, limit analysis, thermal explosions, *9746*
- deflagration, explosions, thermal explosions, Zurer (A.B.), *9837*

Dikshit (H.K.), acoustic measurements, holography, reverberation, Dikshit (K.D.), *3971*

Dikshit (K.D.), see Dikshit (H.K.), *3971*

dilatancy, granular media, waves, Cowin (S.C.), Nunziato (J.W.), *1304*
- anisotropic media, rocks, strain, Lerau (J.), Saint-Leu (C.), (et al.), *5263*
- magneto fluid dynamics, non newtonian flow, shear waves, theory, Pavlov (K.B.), *11829*

Dillenius (M.F.E.), aerodynamic loads, computer programming, missiles, pressure distribution, supersonic flow, vortices, wing body combinations, Nielsen (J.N.), *3738*

Dillon (J.L.), aerodynamics, hypersonic flow, inlet flow, missiles, Marcum (D.C.) Jr., (et al.), *2742*

dilute solutions, convection, diffusion, laminar flow, Yu (J.S.), *1557*
- polymers, viscosity, viscous flow, Geisler (H.), Muller (H.G.), *6579*
- drag reduction, hot film, polymers, Piau (J.-M.), *6590*
- chemical thermodynamics, statistical mechanics, thermodynamics (statistical), Dudowicz (J.), *6756*
- chemically reactive flow, polymers, Kwack (E.Y.), Hartnett (J.P.), (et al.), *7640*
- polymers, viscometry, viscosity, Nikonov (N.T.), *7641*
- diffusion, membranes (permeable), mixing, osmosis, Pedley (T.J.), *8078*
- micromechanisms, polar fluids, polymers, Kroner (E.), Takserman-Krozer (R.), *8484*
- particle fluid flow, suspensions, viscosity, Ryskin (G.), *8496*
- boundary layer, polymers, Kiya (M.), Arie (M.), (et al.), *8499*
- polar fluids, suspensions, viscoelastic fluids, Taran (E.Yu.), *8503*
- drag reduction, pipe flow, polymers, pressure drop, Leca (A.), Hubert (I.), (et al.), *8578*
- additives, drag reduction, experimental results, micellar additives, Vocel (J.), Myska (J.), *8581*
- linear systems, lyapunov's functions, polymers, stability theory, turbulent flow, Phan-Thien (N.), Atkinson (J.D.), *9094*
- birefringence, scattered light, visualization, Krishnamurthy (A.R.), Pindera (J.T.), *9678*
- bubble dynamics, damping, polymers, Mccomb (W.D.), Ayyash (S.), *9884*
- inlets, laminar flow, pitot tube, polymers, Bistagnino (C.), Cancelli (C.), (et al.), *10444*
- couette flow, hydrodynamic stability, polymers, Lhuillier (D.), *11502*
- cavitation, equilibrium, two component flow, two phase flow, Cha (Y.S.), *12039*

Dimaggio (F.L.), containers (partially filled), hydroelasticity, shells (fluid-filled), sloshing, surveys, *676*
- see Vasudevan (R.), *2961*
- cavitation, fluid-structure interaction, numerical methods, underwater structures, Sandler (I.S.), (et al.), *9628*

Dimarco (R.J.), see Stapleford (R.L.), *3912*

Dimarogonas (A.), see Michalopoulos (D.), *9020*

dimensional analysis, bottom irregularities, channel flow, intakes, modeling, Venkataraman (P.), *555*
- bond number, contact angle, films, friction (skin), Eichhorn (R.), *1536*
- design, hydraulic turbines, scale models, Etinberg (I.E.), *2753*
- asymptotic behavior, similarity methods, Barenblatt (G.I.), *4998*
- osborne reynolds formulae, pipe flow, turbulent flow, Barr (D.I.H.), *5440*
- landing devices, turbojet engines, Khabibullin (M.G.), Nesterov (E.D.), (et al.), *5661*
- brittle fracture, impact, thermal effects, Solntsev (Yu.P.), Zamyatnin (M.M.), (et al.), *6368*
- cratering, impact, satellites, Holsapple (K.A.), Schmidt (R.M.), *9351*
- spectra, turbulence, turbulence (isotropic), Szablewski (W.), *9613*
- compressible flow, impingement, jets, plates, Gerasimov (Yu.I.), *11399*

Dimentberg (M.F.), dynamic response, random excitation, vibration (nonlinear), *4406*
- acceleration, deceleration, dynamic analysis, random excitation, vibration (parametric), *8284*

Dimotakis (P.E.), experimental results, mixing layers, turbulence, turbulence (structure), Debussy (F.D.), (et al.), *643*

Dinapoli (F.R.), green function, layered media, sound propagation, underwater acoustics, wave equations, Deavenport (R.L.), *5767*

Dinca (D.), beams, elastic behavior, solids (fluid immersed), vibration (random), *10194*

Dines (K.A.), see Laine (E.F.), *5262*

Dintenfass (L.), blood flow, hydrodynamic stability, viscometry, Fu-Lung (L.), *8083*

Dinulescu (H.A.), infiltration, moisture, porous media, Eckert (E.R.G.), *5854*

diodes, design, fluidics, laminar flow, scroll diode, Sher (E.), *1170*
- fluidics, internal combustion engines, mass transfer, valves, Sher (E.), *11796*

Diosey (P.G.), see Ogawa (Y.), *6646*

Diprima (R.C.), see Stuart (J.T.), *3660*

direction, crack propagation, photoelasticity, prediction, Gdoutos (E.E.), *2469*
- calibration, flow measurement, velocity measurement, Huffman (G.D.), Rabe (D.C.), (et al.), *5510*
- reflection, sonar, underwater acoustics, Chestnut (P.C.), Floyd (R.W.), *11901*

dirichlet problem, differential equations (partial), functional analyis, nonlinear analysis, Thews (K.), *1093*
- kinetics, spherical bodies, Kapila (A.K.), Matkowsky (B.J.), (et al.), *2852*
- boundary value problems, chemical reactions, diffusion, mathematical methods, polymerization, Bobisud (L.E.), *3853*
- boundary conditions, conduction (unsteady), parabolic equations, time dependence, Sommeijer (B.P.), Van Der Houwen (P.J.), (et al.), *5002*
- asymptotic behavior, fourier series, tricomi problem, Chebanova (N.A.), *8116*
- computing techniques, digital simulation, finite element techniques, iterative methods, Korneev (V.G.), Kuzmenko (V.G.), *8147*
- convergence, corners, finite element methods, lagrange multiplier, Pitkaranta (J.), *9133*

discharges, channel flow, energy transport, minimization, sediment transport, Chang (H.H.), *556*
- boundary layer (turbulent), combustion, magneto fluid dynamics, waves, Okazaki (K.), Mori (Y.), (et al.), *857*
- choked flow, pipes, tubes, Tikhonenko (L.K.), Kevorkov (L.R.), (et al.), *941*
- channel flow, free boundary, sediment transport, Chang (H.H.), *1492*
- bed load, flow measurement, Reid (I.), Layman (J.T.), (et al.), *1498*
- flood flow, rivers, sediment transport, Williams (G.P.), *2580*
- cavitation flow, gates, hydroelectric power, tunnels, vibration (flow induced), Giezendanner (W.), Henry (P.), *2582*
- aerodynamic performance, discharge coefficients, flow measurement, nozzles, Ito (H.), Watanabe (Y.), (et al.), *2656*
- accelerators, magneto plasma dynamics, shock tubes (electromagnetic), similarity methods, Beloshitskii (V.V.), Komelkov (V.S.), (et al.), *2900*
- canals, flumes, head, weirs, Bos (M.G.), Reinink (Y.), *3601*
- channel flow, finite difference methods, sediment transport, Pezzoli (G.), *3608*
- crossflow, dispersion, rivers, water pollution, Roman (P.), *3609*
- computer programming, hydraulics, rivers, Price (R.K.), Samuels (P.G.), *3613*
- flow measurement, mathematical models, potential flow, swirl flow, Murakami (M.), Kito (O.), *3756*
- containment, plasma, swirl flow, theory, Boulos (M.I.), Gagne (R.), (et al.), *3898*

- hydrology, rivers, streams, Zheleznyakov (G.V.), Danilevich (B.B.), *4045*
- bottom irregularities, prediction, river beds, Parker (G.), Peterson (A.W.), *4575*
- elliptic equations, finite difference methods, flow measurement, manifolds, Majumdar (A.K.), *4589*
- collapse, plasma, schlieren methods, shock waves, Baronets (P.N.), Saprykin (A.I.), (et al.), *4667*
- culverts, head, pipe flow, scale models, Sassy (L.), *5387*
- contamination, particles, plasma, thrusters, Rudolph (L.K.), Pless (L.C.), (et al.), *5665*
- magneto fluid dynamics, metallurgy, models, vortex flow, Boyarevich (V.V.), *5678*
- high pressure, measurements, plasma, walled structures, Kiparenko (G.F.), Kozyukov (A.V.), *5690*
- arcjets, dynamic behavior, generators, plasma jets, Sergienko (A.S.), *5695*
- drainage, finite difference methods, hydrographs, mathematical models, storage, Khan (S.I.), Takagi (F.), (et al.), *6599*
- granular media, hoppers, Dryabin (V.A.), Galershtein (D.M.), (et al.), *6997*
- contamination, environmental control, estuaries, rivers, water pollution, Smith (R.), *7657*
- channels, flood waves, free boundary, saint venants equation, Sridharan (K.), Mohan Kumar (M.S.), *8506*
- hydraulic instruments, jets, orifices, reynolds number (high), Akers (A.), *8510*
- calibration, design, flow measurement, meters, venturi tubes, Inoue (M.), Yano (H.), (et al.), *8665*
- channels, head, shallow water, spillways, Sivakumaran (N.S.), Hosking (R.J.), (et al.), *9505*
- bearings (gas lubricated), loads, lubricants (gas), lubrication (hydrostatic), Shatokhin (S.N.), Kodnyanko (V.A.), *9969*
- internal flow, irrotational flow, orifices, weirs, Cranfield (R.R.), *10390*
- concentration, friction (skin), pressure drop, slurries, Carstens (M.R.), Addie (G.), *10398*
- analysis, containers, electrical conductivity, liquids, Golovko (Yu.N.), *10736*
- modeling, steam, valves, Sonin (A.A.), *11366*
- electrical properties, plasma, theory, turbulence (transport), Ziganshin (R.R.), Ismagilov (R.Kh.), (et al.), *11831*

disclinations, continuum mechanics, dislocations, micromechanics, Kadic (A.), *6036*

- composite materials, fibers, fracture mechanics, peeling, Vladimirov (V.I.), Priemskii (N.D.), (et al.), *8217*

discontinuities, finite element techniques, rayleigh waves, scattering, Fuyuki (M.), Matsumoto (Y.), *401*

- diffraction, elastic waves, Shibahara (M.), Tateno (S.), (et al.), *403*
- elastic waves, half space, scattering, Neerhoff (F.L.), *404*
- polytropic processes, shock waves, waves, Ruggeri (T.), *679*
- integro differential equations, mathematical methods, nonlinear characteristics, volterra equations, Aizicovici (S.), *1096*
- beam columns, buried structures, connections, underground, Brockenbrough (R.L.), Frost (R.W.), (et al.), *1435*
- boundary value problems, differential equations (ordinary), variational methods, Kriz (J.), *1992*
- plates, shells (stiffened), theory, Mikhailov (B.K.), *2278, book*
- elastic waves, interface waves, Schoenberg (M.), *2365*
- composite materials, conduction (unsteady), eigenvalue problems, variational methods, NematNasser (S.), Horgan (C.O.), *3110*
- compressible flow, corners, transonic flow, Ivanov (V.A.), Chernov (I.A.), *3638*
- bifurcation, computing techniques, decay, ducts, Yaushev (K.K.), *3724*
- control, lyapunov's functions, nonlinear systems, nonlinear theory, stability theory, Stalford (H.), *6131*
- jump conditions, maximum principle, optimal control, Getz (W.M.), Martin (D.H.), *6139*
- composite materials, fibers, metallic composites, shear lag, Fukuda (H.), Chou (T.-W.), *6194*
- crack propagation, cracks, infinite medium, time dependence, Wesolowski (Z.), *6452*
- computing techniques, cracks, elasticity, Ioakimidis (N.I.), *6455*
- compressible flow, dissociation, gases, Sharma (V.D.), *6710*
- continuum mechanics, internal state variables, Matsumoto (E.), *7139*
- composite materials, eigenvalues, rayleigh ritz method, sturm-liouville problems, Bielak (J.), *7156*
- stability theory, state space techniques, Kovalskii (I.P.), Kudin (G.I.), *7238*
- bimodulus materials, crack arrest, crack coalescence, crack propagation, Theocaris (P.S.), Milios (J.), *7532*
- channels, free boundary, surface profiles, surge, Barr (D.I.H.), Das (M.M.), *7651*
- compressible flow, nonequilibrium effects, thermodynamics, Sharma (V.D.), Singh (R.S.), *7780*
- boundary integral methods, elasticity (three dimensional), Hartmann (F.), *8185*
- algorithms, boundary value problems, computing techniques, Welsh (W.), Ojika (T.), *9122*
- characteristic methods, dissociation, gases, Sharma (V.D.), Sharma (J.), (et al.), *9636*
- approximations, liquid metals, magneto fluid dynamics, propagation, Patsegon (N.F.), *9797*
- adiabatic processes, plasma, theory, waves, Menon (V.V.), Sharma (V.D.), *10759*
- discrete systems, granular media, wedges, Trollope (D.H.), Burman (B.C.), *11330*
- magneto plasma dynamics, propagation, radiating flow, shock waves, Shankar (R.), Jain (S.K.), *11826*

discrete systems, constraints, continuum mechanics, differential geometry, dynamics, Benenti (S.), Tulczyjew (W.M.), *1*

- boundary value problems, differential equations (ordinary), finite difference methods, Chawla (M.M.), Katti (C.P.), *57*
- filters, mathematical models, Blyumin (S.L.), *136*
- filters, nonlinear systems, Shapiro (E.I.), *144*
- maximum principle, optimal control, sampled data systems, stochastic processes, De Koning (W.L.), *175*
- maximum principle, optimal control, sampled data systems, Kuntsevich (V.M.), Lychak (M.M.), *176*
- controllability, synthesis, Bakan (G.M.), *180*
- algorithms, kalman filters, Simkin (M.M.), *181*
- algorithms, design, observers, optimal control, Willems (J.L.), *191*
- distributed parameters, modal control, space vehicles, spinning bodies, Meirovitch (L.), Van Landingham (H.F.), (et al.), *198*
- filters, inertial guidance, minimax techniques, Vathsal (S.), *200*
- automation, control, Koren (Y.), Masory (O.), *204*
- optimal control, regulator problem, Warrior (J.), Viswanadham (N.), *1151*
- algorithms, optimal control, Bakan (G.M.), Strashko (V.T.), *2124*
- frequency domain techniques, identification, information theory, Zarrop (M.B.), *2126*
- adaptive systems, model reference systems, stability, Narendra (K.S.), Lin (Y.-H.), *2134*
- existence theorems, integer programming, optimization, scheduling problems, uniqueness, Smadici (C.), *3114*
- algorithms, identification, nonlinear systems, realization, Tarn (T.J.), Nonoyama (S.), *3150*
- eigenvalues, linear systems, periodic systems, pole placement, Kono (M.), *3156*
- design, lur'e plants, nonlinear systems, tracking, Grujic (I.T.), Porter (B.), *3159*
- adaptive systems, linear systems, stochastic control, stochastic systems, Yoshimura (T.), Kiyota (M.), (et al.), *3204*
- adaptive systems, continuous systems, control, design, Kazakevich (V.V.), Shcherbina (Yu.V.), *3205*
- diffusion, equations of motion, hydrodynamics, one dimensional flow, Vischer (P.B.), *3635*
- continuum mechanics, functional analyis, topological techniques, Wozniak (C.), *4123*
- algorithms, identification, kalman filters, linear systems, stochastic systems, Konishi (K.), Inouchi (K.), (et al.), *4219*
- algorithms, identification, multivariable systems, stochastic approximation, stochastic processes, El-Sherief (H.), Sinha (N.K.), *4238*
- algorithms, design, digital control, Krutko (P.D.), Popov (Ye.P.), *4257*
- feedback, identification, linear systems, Sin (K.S.), Goodwin (G.C.), *4259*
- analytical methods, reliability analysis, Netes (V.A.), *4260*
- algorithms, optimal control, Kondratev (V.V.), Savelev (V.P.), (et al.), *4310*
- adaptive systems, algorithms, Kakabadze (D.P.), Kubintsev (G.M.), (et al.), *4312*
- design, observers, realization, time optimal systems, Inoue (A.), Fisher (D.G.), (et al.), *4314*
- catastrophe theory, structural stability, Niwa (Y.), Watanabe (E.), (et al.), *4388*
- acoustics, filters, fourier transform, spectral analysis, Williams (J.R.), *5790*
- adaptive systems, algorithms, design, lyapunov's functions, observers, Tamaki (S.), Omatu (S.), (et al.), *6132*
- eigenvalues, pole placement, riccati equation, Mori (Y.), Shimemura (E.), *7228*
- entropy, linear systems, linear theory, time invariant systems, Zames (G.), *7231*
- adaptive systems, algorithms, linear systems, multivariable systems, state space techniques, Goodwin (G.C.), Ramadge (P.J.), (et al.), *7233*
- dynamic analysis, synthesis, Perov (V.P.), *7245*
- control, design, linear systems, observers, Tomizuka (M.), Auslander (D.M.), (et al.), *7251*
- biomechanics, composite materials, continuum theory, mixtures, porous media, Brulin (O.) eds., Hsieh (R.K.T.), *8090, book*
- computing techniques, electrical analogies, graph theory, mathematical models, Savage (G.J.), Kesavan (H.K.), *8137*
- continuous systems, identification, iterative methods, least squares, stochastic systems, Vorobeychikov (S.E.), Konev (V.V.), *8163*
- prediction, process control, regression rate, time delay systems, Potapova (T.P.), *8164*
- nonlinear systems, sensitivity, time delay systems, Kukhtenkov (L.P.), Ruban (A.I.), *8167*
- algorithms, control, singular perturbations, Rajagopalan (P.K.), Naidu (D.S.), *11043*
- automatic control, feedback, multipass processes, stability theory, Boland (F.M.), Owens (D.H.), *11045*
- continuous systems, routh-hurwitz method, stability theory, time delay systems, Thowsen (A.), *11056*
- bilinear systems, control, dead-beat control, regulator problem, Grasselli (O.M.), Isidori (A.), (et al.), *11059*
- estimation, kalman filters, nonlinear theory, Kalaba (R.), Tesfatsion (L.), *11067*

- adaptive systems, identification, linear systems, observers, Suzuki (T.), Nakamura (T.), (et al.), *11095*
- discontinuities, granular media, wedges, Trollope (D.H.), Burman (B.C.), *11330*
- dynamic analysis, newmark's method, numerical methods, structural analysis, Wood (W.L.), Bossak (M.), (et al.), *11331*

Diskovskii (I.A.), see Gudramovich (V.S), *351*

disks, endurance limit, thermal loading, turbines, Getsov (L.B.), Nigin (A.A.), (et al.), *516*
- airy function, anisotropic media, elasticity (three dimensional), plates (anisotropic), Zastrow (U.), *2226*
- gas turbines, high speed, steel, strength, Shikida (M.), Kanayama (Y.), (et al.), *2501*
- boundary layer, hall effect, magneto fluid dynamics, torsional waves, Krishna (D.V.), Prasada Rao (D.R.V.), *2883*
- heat sources, thermal stresses, Misra (J.C.), Achari (R.M.), *3993*
- crack growth, stress intensity factor, Yarema (S.Ya.), Ivanitskaya (G.S.), *4475*
- elasticity (linear), holes, rings, Uspenskii (A.A.), *5166*
- copper alloys, machine design, springs, steel, Curti (G.), Orlando (M.), (et al.), *5374*
- bones, compression, finite element methods, spine, Spilker (R.L.), *6030*
- piezoelectric devices, travelling waves, Vovkodav (I.F.), Talatynova (E.K.), *6328*
- heat transfer, navier stokes equation, oscillating bodies, second order analysis, Dohara (N.), *6617*
- dynamic analysis, finite element techniques, fourier series, Srinivasan (V.), Ramamurti (V.), *8152*
- viscometry, water, Kestin (J.), Shankland (J.R.), *8666*
- boundary layer (three dimensional), fluid mechanics, machinery, rotational flow, Toren (M.), Solan (A.), (et al.), *9559*
- calibration, oscillating bodies, viscometry, Kestin (J.), Shankland (I.R.), *9675*
- convection, heat sources, plates (circular), Kolyano (Yu.M.), Semerak (M.M.), (et al.), *9715*
- heat addition, radiant interchange, solar energy, Zyablova (Zh.I.), Komissarchik (M.G.), (et al.), *9726*
- electro fluid dynamics, oscillatory flow, plates (parallel), theory, Govardhan Reddy (K.), Seshagiri Rao (S.V.), *9783*
- aerodynamics, trajectories, wind, Frohlich (C.), *11731*

dislocations, elastic constants, orthotropic materials, stress concentration, strips, Krenk (S.), *2213*
- combined loading, plastic waves, Jimma (T.), Inoue (H.), (et al.), *4445*
- aluminum alloys, copper alloys, experimental results, micromechanisms, Cherns (D.), Hirsch (P.), (et al.), *5120*
- deformation (plastic), hot working, microstructures, steel, viscoplasticity, Teodosiu (C.), Soos (E.), (et al.), *5273*
- creep, grain boundaries, hardening, stainless steels, stress analysis, Harris (M.), Davies (T.J.), *5332*
- dynamic properties, Janszky (J.), *5522*
- continuum mechanics, disclinations, micromechanics, Kadic (A.), *6036*
- plastic behavior, relaxing media, Blum (W.), Nix (W.D.), *6187*
- acoustic emission, iron, nondestructive tests, strain, Bassim (M.N.), Veillette (M.), *6463*
- carbides, creep, electron microscopy, high temperature, precipitation, steel, Orlova (A.), Milicka (K.), (et al.), *6472*
- deformation (plastic), hysteresis, imperfections, Guelin (P.), *8092*
- deformation, green function, Kossecka (E.), *8180*
- relaxing media, rods, stress relaxation, yield criteria, Merzhievskii (L.A.), Shamonin (S.A.), *8200*
- indentation, metals, polycrystalline materials, Tanaka (Y.), Ido (M.), (et al.), *8214*
- acoustic emission, decay, elastic waves, Clifton (R.J.), Markenscoff (X.), *8332*
- elastic waves, half space, Brock (L.M.), *8335*
- plastic waves, singular waves, Markenscoff (X.), *8336*
- crack propagation, creep, Ihara (C.), *8382*
- creep, steel, Ostrom (P.), Lagneborg (R.), *8385*
- crystals, deformation (plastic), micromechanics, stress concentration, Kulagina (V.V.), Dudarev (E.F.), (et al.), *8416*
- creep, grain boundaries, microstructures, steel, Williams (K.R.), *8430*
- crack initiation, fatigue, Tanaka (K.), Mura (T.), *9387*
- crack opening displacement, wedges, Maiti (M.), Paramguru (R.), *9396*
- adhesives, composite materials, concrete, interface phenomena, Kendall (K.), *9487*
- boundary value problems, complex variables, cracks, energy release rate, kinking, Hayashi (K.), Nemat-Nasser (S.), *10289*
- aluminum alloys, copper, crystals, deformation (plastic), plasticity, Kolkman (H.J.), *10336*
- faults, initiation, modeling, seismic waves, Cornea (I.), Misicu (M.), (et al.), *10845*
- plasticity, shock waves (normal), Dynin (E.A.), *11158*
- creep, friction (internal), models, stress relaxation, Mclean (M.), *12093*

dispersed flow, liquid vapor mixture, radiation, two phase flow, void fraction, Ohba (K.), *939*
- absorption, conduction (heat), conductivity, Oshima (N.), *2813*
- conduction (heat), dispersed media, freezing, melting, thermophysical properties, Pavlov (A.R.), Permyakov (P.P.), (et al.), *2815*
- boiling, critical heat flux, drops, impact jets, impingement cooling, Monde (M.), *3793*
- convection (forced), critical heat flux, drops, heat transfer, turbulent flow, Yao (S.-C.), Rane (A.), *3795*
- shear flow, suspensions, walls, Brunn (P.), *4008*
- emissions, fluid mechanics, Kovenskii (V.I.), *5848*
- conduction (heat), conductivity, spherical bodies, thermodynamic functions, viscosity, Endler (B.S.), *6759*
- convection, drops, entrance region, heat transfer, tubes, two phase flow, Rane (A.G.), Yao (S.-C.), *7825*
- boiling, critical flow, critical heat flux, film flow, two phase flow, Andreyev (P.A.), Borishanskiy (V.M.), (et al.), *9695*
- contact problems, heat transfer, liquid liquid interface, spray columns, sprays, Moresco (L.L.), Marschall (E.), *9731*
- boiling, heat addition, solutions (material), Berman (M.I.), Gorbis (Z.R.), *10606*
- mass transfer, Vain (A.), *10668*
- axial flow, chemically reactive flow, Gupalo (Yu.P.), Novikov (V.A.), (et al.), *11500*
- drag, particle fluid flow, Oshima (N.), *12021*
- hydrodynamics, rods, tube bundles, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12028*

dispersion, mass transfer, porous media, stagnation zones, Golubev (V.S.), *831*
- ballistics (terminal), reentry, rockets, trajectories, Platus (D.J.), *1796*
- sedimentation, sprays, Kumar (A.), Vohra (D.K.), (et al.), *1867*
- dispersive layers, heat exchangers, Poveshchenko (G.P.), *2830*
- diffusion, magneto fluid dynamics, plates (parallel), solutions (material), Annapurna (N.), Gupta (A.S.), *2882*
- air pollution, galerkin method, numerical methods, Pepper (D.W.), Kern (C.D.), (et al.), *3028*
- crossflow, discharges, rivers, water pollution, Roman (P.), *3609*
- air pollution, plumes, Sheih (C.M.), *4057*
- air pollution, boundary layer (atmospheric), stratified flow, Tangermann (G.), *4080*
- bars, elastic waves, elasticity (three dimensional), Nagaya (K.), *4442*
- separated flow, two phase flow, Banerjee (S.), *4830*
- cracks, dielectrics, electroelasticity, Farat (K.), *5089*
- gravity waves (surface), oscillatory flow, reynolds number (small), ripples, viscous flow, Kamachi (M.), Honji (H.), *5473*
- fluidized beds, gas solid interface, thermal diffusion, Wakao (N.), Shiozawa (B.), (et al.), *5541*
- scattering, underwater acoustics, Zornig (J.G.), *5764*
- adsorption, porous media, rocks, transport phenomena, Satter (A.), Shum (Y.M.), (et al.), *5834*
- currents, surface waves, turbulence (geophysical), water pollution, Ergin (A.), *5903*
- mixing, rivers, water pollution, Shen (H.T.), *5911*
- boundary layer (atmospheric), Venkatram (A.), *5928*
- finite element techniques, galerkin method, korteweg de vries equation, waves, Sanz-Serna (J.M.), Christie (I.), *6088*
- flexural waves, path integrals, Brazier-Smith (P.R.), Butler (D.), (et al.), *6322*
- bonded joints, flaw detection, interference, layered media, Budenkov (G.A.), (et al.), *6497*
- fast fourier transform, pressure change, tubes, waves, Moodie (T.B.), Haddow (J.B.), *6913*
- multiphase flow, particles, Nevolin (V.G.), Kirchanov (V.G.), *6966*
- contamination, finite element techniques, lakes, water pollution, Salmon (J.R.), Liggett (J.A.), (et al.), *7661*
- anisotropy, concentration, mixed flow, porous media, Routaboul (F.), Quintard (M.), *7973*
- decay, simulation, turbulence (homogeneous), Kowalski (A.D.), Peskin (R.L.), *8609*
- closure, statistical theory, turbulence, Larcheveque (M.), Lesieur (M.), *8614*
- finite element methods, natural gas, simulation, Chan (S.T.), Gresho (P.M.), (et al.), *8902*
- porous media, stratification, taylor instability, Lake (L.W.), Hirasaki (G.J.), *8919*
- channel flow, shear flow, turbulence, turbulence (transport), Durbin (P.A.), *9609*
- floating bodies, gravity waves (surface), oscillatory flow, visualization, Ergin (A.), *9633*
- elastic bodies, nonlinear waves, one dimensional waves, Tokuoka (T.), *10232*
- attenuation, elastic waves, measurements (dynamic), Bondarenko (A.N.), Kondratev (A.I.), *10240*
- diffusion coefficient, liquids, Alizadeh (A.), Nieto De Castro (C.A.), (et al.), *10667*
- groundwater, mass transportation, models, stochastics, Smith (L.), Schwartz (F.W.), *10671*
- fickian model, models, rivers, Nordin (C.F.) Jr., Troutman (B.M.), *10673*
- contamination, fickian model, rivers, Liu (H.), Cheng (A.H.D.), *10677*
- adsorption, convection, porous media, surfactants, Ramirez (W.F.), Shuler (P.J.), (et al.), *10690*
- channel flow, mass transfer, non newtonian flow, solutions (material), Soundalgekar (V.M.), Mohiuddin (M.), *11505*

- boundary layer, convection, smoke stacks, thermal plumes, Venkatram (A.), *11519*
- boundary layer (turbulent), inhomogeneities, wind, Durbin (P.A.), Hunt (J.C.R.), *11520*
- atmosphere, clouds, models, Eidsvik (K.J.), *11522*
- air pollution, concentration, plumes, prediction, Harrison (R.M.), Mccartney (H.A.), *11523*
- gravity waves (solitary), ocean waves, Boyd (J.P.), *11563*
- porous media, sound speed, ultrasonics, Sayers (C.M.), *11925*
- acoustics, eigenvalue problems, nonlinear waves, Banerjee (P.P.), Korpel (A.), *11936*

dispersion coefficient, annular flow, dispersion relation, thermal diffusion, Achwal (S.K.) Shenoy (A.V.), *5620*
- mathematical models, mixing, rivers, Lau (Y.L.), Krishnappan (B.G.), *9520*

dispersion hardening, creep, mechanical properties, nickel alloys, tensile strength, Whittenberger (J.D.), *3500*

dispersion relation, alfven number, earth, magneto plasma dynamics, solar wind, Gulelmi (A.V.), *2899, book*
- crystals, diamond, elastic constants, micropolar media, Minagawa (S.), Arakawa (K.), (et al.), *3079*
- electro fluid dynamics, perturbations, taylor instability, theory, Shchelkachev (M.V.), *3890*
- boussinesq equation, gravity waves, magneto fluid dynamics, propagation, El Sawi (M.), Eltayeb (I.A.), *3892*
- modes, nonlinear characteristics, plasma, waves, Franklin (R.N.), Edgley (P.D.), (et al.), *4750*
- annular flow, dispersion coefficient, thermal diffusion, Achwal (S.K.) Shenoy (A.V.), *5620*
- models, oscillations, rayleigh taylor instability, stabilization, Chakraborty (B.B.), *8825*
- gravity waves (surface), nonlinear analysis, spectra, Crawford (D.R.), Lake (B.M.), *11574*
- flow irregularities, surface waves, vortices, Keller (J.J.), Escudier (M.P.), *11583*
- bottom irregularities, edges, gravity waves (finite depth), Miles (J.W.), *11584*
- ducts, flexible walls, water hammer, Tait (R.J.), Moodie (T.B.), (et al.), *11604*
- rossby waves, rotating bodies, turbulent flow, Legras (B.), *11616*
- ionic flow, nonlinear characteristics, oscillations, plasma, relativity, Chian (A.C.-L.), *11834*

displacement gages, measurements (dynamic), surface waves, Breckenridge (F.R.), Greenspan (M.), *9340*

dissipation, modeling, pore pressure, soils, Verruijt (A.), *411*
- dynamic properties, friction, vibration (forced), Plakhtienko (N.P.), *2316*
- hysteresis, linearization, random excitation, structural optimization, Grossmayer (R.L.), Iwan (W.D.), *2318*
- damping, dynamic response, mathematical models, Pisarenko (G.S.), Boginich (O.E.), *3362*
- automobiles, dynamic response, highways, roughness, Velinsky (S.A.), White (R.A.), *3384*
- friction (solid solid), moon, planetary satellites, stochastics, tides, Cappallo (R.J.), Counselman (C.C.) III, (et al.), *3913*
- material testing, plastic behavior, plastic flow, Saix (C.), Jouanna (P.), *3995*
- experimental mechanics, friction, vibration (forced), Karius (D.), *4408*
- experimental mechanics, materials properties, vibration, Khilchevskii (V.V.), Vasilevich (D.I.), *4418*
- bending, rods, stresses (normal), vibration (torsional), Khilchevskii (V.V.), Vasilevich (D.I.), *5208*
- shells (fluid-filled), submerged bodies, vibration (free), viscous effects, Su (T.C.), *5217*
- cylindrical bodies, oscillating bodies, vibration, viscous effects, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5233*
- boundary layer (atmospheric), turbulence (geophysical), Fairall (C.W.), Markson (R.), (et al.), *5945*
- elastodynamics, nonlinear waves, Gulyaev (V.I.), *6336*
- eddies, oceanography, Harrison (D.E.), *8022*
- shock waves, similarity methods, Imshennik (V.S.), *9634*
- convection, heat addition, laminar flow, velocity profiles, Jaluria (Y.), *8681*
- space frames, space structures, space vehicle structures, Hughes (P.C.), *8851*
- ocean air interaction, turbulence (geophysical), Joyce (T.M.), *8983*
- hydrodynamic stability, Kallen (E.), Wiin-Nielsen (A.C.), *8987*
- drag coefficient, ocean air interaction, reynolds stresses, wind, Large (W.G.), Pond (S.), *10872*

dissociation, compressible flow, nonequilibrium flow, Sharma (V.D.), *2619*
- catalytic surfaces, heat transfer, hydrogen, real gas effects, shock tubes, Nasser (A.E.M.), East (R.A.), *5562*
- gases, porous media, unsteady flow, Lippy (D.), Evans (R.D.), *5832*
- compressible flow, discontinuities, gases, Sharma (V.D.), *6710*
- boiling, chemical reactions, unsteady flow, Andrizhievskii (A.A.), Mikhalevich (A.A.), (et al.), *6975*
- characteristic methods, discontinuities, gases, Sharma (V.D.), Sharma (J.), (et al.), *9636*
- heat transfer, real gas effects, stagnation point, thermal instability, Agranat (V.M.), Bertsun (V.N.), (et al.), *9704*
- fluid mechanics, gases, moving surfaces, porous media, Verigin (N.N.), Khabibullin (I.L.), (et al.), *10691*
- compressible flow, hypersonic flow, Pandey (B.D.), Ram (R.), *11407*
- compressible flow, finite difference methods, numerical methods, shock waves, Charakhchyan (A.A.), *11431*

Distefano (J.J.) III, identification, observability, stochastic systems, Cobelli (C.), *2091*

distillation, energy conversion, solar cells, solar collectors, solar energy, Veziroglu (T.N.) ed., *1652, book*
- binary flow, heat transfer, mass transfer, Ito (A.), Asano (K.), *10666*

distributed parameters, dynamic analysis, matrix methods, state space techniques, Prepelita (V.), *110*
- control, design, thermal sciences, Breger (A.M.), Butkovskii (A.G.), (et al.), *139*
- optimal control, thermal diffusion, thermal stresses, Vigak (V.M.), Kostenko (A.V.), *177*
- controllability, optimal control, sensitivity, synthesis, temperature, thermal stresses, Poterasu (V.F.), *178*
- discrete systems, modal control, space vehicles, spinning bodies, Meirovitch (L.), Van Landingham (H.F.), (et al.), *198*
- beams, control, convection, modal control, observability, phase locked loops, Balas (M.J.), *203*
- regulator problem, resonance, Starikov (A.F.), *1146*
- optimal control, optimization, Mahapatra (G.B.), *1150*
- beams, dynamic analysis, vibration isolation, Wauer (J.), *2357*
- heat exchangers, heat transfer, mass transfer, optimal control, process control, sliding optimization, Dubrovin (O.F.), Galchinskiy (L.Yu.), *3190*
- maximum principle, nonlinear systems, Petrovacki (D.), *3194*
- algorithms, initial value problems, numerical methods, optimal control, parabolic equations, Winther (R.), *4207*
- complex variables, extended complex plane, linear systems, poles, transfer functions, zeros, Ferreira (P.M.G.), *4211*
- control, mobile control, optimal control, Butkovskii (A.G.), Pustylnikova (E.I.), *4261*
- optimal control, riccati equation, Huntley (E.), *4315*
- dynamic analysis, pantographs, vibration (forced), Manabe (K.), Morikawa (T.), *4416*
- beams, design (optimum), impulsive loading, inelasticity, structural support, Lepik (U.), *6508*
- control, linear systems, spectral analysis, Azarov (V.L.), Lupichev (L.N.), (et al.), *7236*
- estimation, flexible bodies, strings, Schaechter (D.B.), *7239*
- algorithms, control, differential games, hyperbolic equations, parabolic equations, position control, Korotkii (A.I.), Osipov (Iu.S.), *7240*
- boundary value problems, design (optimum), optimization, structural optimization, Haug (E.J.) eds., Cea (J.), *8440, book*
- stability theory, time delay systems, time lag, Zhang (D.-C.), *9168*
- control, hyperbolic equations, modal control, optimal control, selfadjoint systems, Meirovitch (L.), Baruh (H.), *9170*
- stability theory, time varying systems, Gil (M.I.), *9172*
- optimal control, singular perturbations, Shih (S.-C.), *10085*
- identification, nonlinear systems, walsh functions, Sinha (M.S.P.), Rajamani (V.S.), (et al.), *11058*
- damping, modal control, numerical methods, Meirovitch (L.), Baruh (H.), *11061*
- galerkin method, observers, Fujii (N.), Hirai (M.), *11062*
- adaptive systems, filters, stochastic systems, Watanabe (K.), Yoshimura (T.), (et al.), *11084*
- adaptive systems, control, stochastic systems, Tzafestas (S.G.), *11092*

distributed systems, eigenvalue problems, inverse problems, iterative methods, vibration, Barcilon (V.), Turchetti (G.), *27*
- damping, dynamic analysis, vibration, Beskos (D.E.), Boley (B.A.), *3347*
- beams, finite element techniques, lumped systems, Surana (K.S.), *8230*

Ditcher (A.K.), composite materials, laminates, nonlinear materials, numerical methods, stress strain relationships, Rhodes (F.E.), (et al.), *280*

Ditlevsen (O.), probability theory, reliability analysis, strength, *6515*

Dittrich (F.), see Lambert (L.), *7237*

Dittrich (G.), dynamic analysis, engines, nonlinear systems, vibration (parametric), vibration (torsional), Krumm (H.), *7404*

Divenot (A.), iterative methods, networks, watersheds, *8136*

divergence, buckling, flutter, follower forces, structural stability, Kounadis (A.N.), *1783*
- annuli, approximations (higher order), conical bodies, laminar flow, Renaud (M.F.), *3662*
- aerodynamic performance, airfoils, swept wings, Bland (S.R.), *3909*
- channels, free boundary, hydraulic jump, France (P.W.), *6596*
- buckling, flutter, follower forces, frames, stiffness, Kounadis (A.N.), Avraam (T.P.), *9804*

Dixit (L.A.), beams, vibration (forced), wave equations, *5206*
- dust, noncircular pipes, particle fluid flow, unsteady flow, viscous flow, *6653*

Dixon-Stubbs (P.J.), creep, experimental results, polymers, tension, *4349*

Djaoua (M.), corners, lifting bodies, two dimensional flow, variational methods, *8538*

Djordjevic (V.D.), gravity waves (finite depth), gravity waves (solitary), korteweg de vries equation, radial waves, solitary waves, *11568*
- gravity waves (finite depth), korteweg de vries equation, radial waves, rotational flow, similarity methods, Pavlovic (M.), *11569*

Djubek (J.), bearing capacity, bridges (box girder), imperfections, ultimate strength, Karnikova (I.), (et al.), *1446*

Djukic (D.S.), approximations, conduction (unsteady), least squares, variational methods, Atanackovic (T.M.), *2038*

Dmitriev (A.V.), see Blagonadezhin (V.L.), *92*

Dmitriev (L.M.), aerosols, chemically reactive flow, compressible flow, hypersonic flow, particle fluid flow, wakes, Markachev (Yu.E.), *11408*

Dmitriev (M.G.), optimal control, regulator problem, riccati equation, singular perturbations, *2119*

Dmitriev (S.N.), see Mamaev (V.S.), *8364*

Dmitriev (S.P.), geophysics, kalman filters, linearization, navigation, Shimelevich (L.I.), *184*

Dmitrieva (L.M.), see Zhigalko (Yu.P.), *8311*

Dmitrieva (Zh.N.), experimental methods, impact, nonlinear characteristics, plates (circular), Efimova (T.A.), (et al.), *10243*

Dmitriyev (V.M.), see Arays (Ye.A.), *7255*

Do (D.D.), chemical kinetics, chemical reactors, combustion, differential equations (ordinary), Weiland (R.H.), *5626*

Do Sanh, dynamic analysis, mathematical models, mechanical systems, *4144*

Doan-Kim-Son, artificial satellites, convection (free), plates (vertical), transition flow, turbulence (transport), turbulent flow, Coutanceau (J.), *9695*

Dobbyn (R.C.), see Fong (J.T.) eds., *11315, book*

Doblare (M.), earthquakes, seismic waves, simulation, spectra, Alarcon (E.), (et al.), *12071*

Dobrinskiy (V.I.), see Alekseyev (A.S.), *5875*

Dobronravov (D.N.), control, optimization, process control, rolling, rolling, Kun (L.A.), (et al.), *207*

Dobrovolskaya (G.V.), see Gamulya (G.M.), *9021*

Dobrucki (W.), dynamic analysis, mathematical models, rolling, vibration, Swiatoniowski (A.), *389*

- chip formation, drawing, friction, plastic flow, rolling, Odrzywolek (E.), *1341*

Dobrushkin (V.A.), see Gaiduk (S.I.), *4971*

Dobrynin (S.A.), approximation methods, dynamic response, vibration (random), Feldman (M.S.), *8285*

Dobryshman (E.M.), atmospheric circulation, boundary layer (atmospheric), ekman layer, *4054*

- atmospheric circulation, heat transfer (atmospheric), meteorology (physical), *4082*

Dobson (F.W.), see Snyder (R.L.), *12080*

Dockerty (G.J.), beams (intersecting), elastic waves, finite element techniques, Leech (C.M.), *5235*

docks, berthing, harbors, jetties, mathematical models, ship maneuvers, ships, Fontijn (H.L.), *7074*

Dodge (P.R.), see Booth (T.C.), *7890*

Dognon (M.), see Ravey (J.C.), *8494*

Dohara (N.), disks, heat transfer, navier stokes equation, oscillating bodies, second order analysis, *6617*

Doherr (K.-F.), oscillating bodies, parachutes, payloads, separated flow, stabilization, vortex flow, *7798*

Dohta (S.), fluidics, interaction, jets, Ohsaka (K.), (et al.), *4634*

Doi (M.), see Kambe (R.), *648*

Doi (O.), diffraction, plates, residual stresses, x ray techniques, Ukai (T.), *5323*

- contact problems, elastodynamics, finite element techniques, Asano (N.), *6369*

Dokumentation Rheologie, biomechanics, continuum mechanics, flow, fluid mechanics, rheology, *1482, book*

Dolgov (A.S.), diffusion, nonhomogeneous media, particles, Ostroushko (V.N.), *5424*

Dolinski (K.), bearing capacity, collapse, foundations, plastic behavior, slabs, Sawczuk (A.), *10176*

Dolmatov (B.K.), see Gordin (V.A.), *5957*

Dolzhanskiy (F.V.), see Glukhovskiy (A.B.), *5558*

Dolzhenkov (F.E.), see Belik (A.V.), *3502*

Dolzhenkova (G.G.), see Andrizhiyevskiy (A.A.), *805*

domes, arches, imperfections, nonlinear analysis, Wolde-Tinsae (A.M.), Huddleston (J.V.), *9267*

Dominguez (J.), offshore structures, structural response, wave loads, Alarcon (E.), *9459*

Donahue (J.F.), baroclinic waves, hydrodynamic stability, multilayer, stability theory, *3704*

Donald (A.M.), crack growth, dugdale model, films, micromechanics, optical techniques, polymers, Kramer (E.J.), *7500*

Donald (J.K.), see Shih (T.T.), *3439*

Donaldson (N.De N.), biocontrol, biphasic stimulation, design, mathematical models, *1173*

Donato (M.), see Moen (I.O.), *1745*

Donato (V.), blades, measurements (dynamic), steam turbines, vibration, Bannister (R.L.), (et al.), *3370*

Dondoshanskii (V.K.), dynamic analysis, gas turbines, rotating disks, *8317*

Done (G.T.S.), helicopters, vibration (forced), vibration isolation, *2352*

- see Rangacharyulu (M.A.V.), *2512*

Donea (J.), convection, finite element techniques, numerical methods, Giuliani (S.), *10588*

Doner (M.), crack initiation, data analysis, gas turbines, low cycle fatigue, prediction, stresses, Bain (K.R.), (et al.), *10328*

Dong (S.B.), see Oliver (W.A.), *5771*

- see Tessler (A.), *8236*

Donn (W.L.), see Weber (M.E.), *11916*

Donnelly (J.D.P.), free boundary, inequalities, invariant imbedding, variational methods, *1119*

Dooley (J.F.), collapse, critical load, structural stability, Galoussis (E.G.), *8259*

Dooley (L.W.), see Drees (J.M.), *2745*

Doolittle (A.K.), constitutive equations, liquids, thermodynamic functions, thermodynamic processes, *10552*

doppler effect, blood flow, experimental mechanics, flow measurement, Gill (R.W.), *1048*

- scattering, surface waves, wind-wave interaction, Tuteur (F.B.), Tung (H.), (et al.), *1646*
- acoustic measurements, combustion (oscillatory), combustors, Caveny (L.H.), Collins (E.L.), (et al.), *3868*
- distortion, loudspeakers, sound generation, Villchur (E.), Allison (R.F.), *3974*
- circulatory systems, experimental methods, flow measurement, Gill (R.W.), *4920*
- combustion, pressure measurement, solid propellants, Strand (L.D.), Magiawala (K.R.), (et al.), *5638*
- electric propulsion, estimation, random error, space vehicles, Asher (R.B.), Eller (T.J.), (et al.), *5714*
- sound speed, tracking, underwater acoustics, Wilcox (R.E.), *5762*
- blood flow, experimental methods, spine, White (D.N.), Ketelaars (C.E.J.), (et al.), *6024*
- axisymmetric flow, ultrasonics, velocity measurement, Lefebvre (J.-P.), *9672*
- underwater acoustics, Shensa (M.J.), *11998*

Dor (J.-B.), see Blanchard (A.), *5515*

Doraivelu (S.M.), ductility, lubricants, lubricants (liquid), steel, upset forging, Gopinathan (V.), *5991*

Dordain (J.-J.), flow measurement, liquid fuels, longitudinal stability, pogo phenomenon, rockets, unsteady flow, *9661*

Doremus (R.H.), corrosion fatigue, elliptical cracks, failure, fatigue, glass, *5286*

Dorfler (P.), cavitation, geometrical properties, hydraulic turbines, surge, vortex tubes, *5498*

Dorfman (A.L.), digital simulation, mixtures, two phase flow, *7960*

Dorfman (J.R.), see Van Beijeren (H.), *11439*

- see Van Beijeren (H.), *11453*

Dorogin (A.D.), aortic valve, heart, materials properties, viscoelastic materials, Maltsev (L.E.), (et al.), *1040*

Doroginin (V.V.), design (minimum weight), laminates, multilayer, optimization, tubes, *5164*

Dorogov (V.G.), lasers (gasdynamic), radiant interchange, spectroscopy, Demenik (I.V.), (et al.), *1708*

Dorot (V.L.), see Bassina (I.A.), *2639*

Dorrscheidt (F.), feedback, guidance, navigation, stability theory, time varying systems, Leuer (A.), *9169*

Doss (E.D.), see Pan (Y.-C.), *6863*

- see Ahluwalia (R.K.), *8826*

Dossenbach (O.), see Sigrist (L.), *1736*

Dost (S.), constitutive equations, dielectrics, thermoelasticity, *2215*

Dote (H.), experimental mechanics, space shuttle, structural analysis, windows, Theodore (K.T.), *6547*

Dotsenko (A.M.), correlation, crack growth, stochastics, stress intensity factor, Denisova (G.B.), *9388*

Dotsenko (S.F.), plane waves, pressure distribution, stratified flow, wave generation, *1600*

Doughty (S.), damping, dynamic properties, eigenvalues, vibration (torsional), *8323*

Dougill (J.W.), fracture, nonlinear materials, plastic behavior, Rida (M.A.M.), *9411*

Douglas (A.S.), see Freund (L.B.), *11161*

Douglass (R.W.), see Dallman (R.J.), *8720*

Douskos (C.N.), see Georgantopoulos (G.A.), *2884*

- see Georgantopoulos (G.A.), *5675*

Doutt (J.A.), see Frisk (G.V.), *5725*

Douty (R.), connections, design (optimum), joints, mathematical programming, steel, *10354*

Dover (W.D.), cracks, electrical instruments, nondestructive tests, Collins (R.), *10283*

Dovgal (A.V.), boundary layer, experimental results, hydrodynamic stability, perturbations, tollmien schlichting waves, Kozlov (V.V.), (et al.), *5463*

Dovganich (M.I.), see Volos (N.P.), *10203*

Dow (J.O.), finite element techniques, mathematical models, scale effects, Byrd (D.E.), *1131*

Dowden (J.), fluid boundaries, heat addition, layered media, rayleigh number, thermal instability, *6782*

Dowding (C.H.), blast effects, cyclic loading, fatigue, panels, plaster panels, shear loading, vibration, Beck (W.K.), (et al.), *7568*

Dowell (E.H.), see Horikawa (H.), *228*

- aeroelasticity, blunt bodies, models, nonlinear systems, oscillators, *3908*
- aerodynamic interference, control, flexible walls, influence coefficients, wind tunnels, *5514*

- airfoils, oscillating bodies, three dimensional flow, transient effects, transonic flow, two dimensional flow, *6718*
- modes, noise, shells (cylindrical), *6925*

Dowling (P.J.), see Webb (S.E.), *6227*
Downie (J.), see Roberts (J.B.), *1645*
Downs (T.), see Cheong-Siat-Moy (F.), *336*
downwash, aerodynamic performance, helicopters, hovering, rotors, wakes, Andrew (M.J.), *7796*
Dowson (D.), bearings (liquid lubricated), dynamics, rotors, vibration, Taylor (C.M.), *1029*

- see Ruddy (B.L.), *8801*
- see Hamrock (B.J.), *9032, book*

Dowson (D.) eds., adhesion, bearings, friction, lubrication, traction, Taylor (C.M.), (et al.), *1924, book*
Doyle (G.R.) Jr., dynamic stresses, heat shields, mathematical models, space shuttle, vibration (random), *11155*
Doyle (J.C.), feedback, frequency domain techniques, multivariable systems, synthesis, Stein (G.), *108*
Doyle (J.F.), crack tip geometry, error, fracture mechanics, photoelasticity, stress intensity factor, Kamle (S.), (et al.), *5317*

- beams, dynamic properties, rotary inertia, shear, vibration (free), *10199*

Doyle (W.S.), see Resende (L.), *9143*
Drabek (K.), analogies, kinematics, pedal curve, *34*
Drachinskii (A.S.), see Denisyuk (V.A.), *6432*
Drachman (B.), see Wang (C.-Y.), *5172*
drag, baffles, stilling basins, Ranga Raju (K.G.), Kitaal (M.K.), (et al.), *558*

- plates, stokes flow, two dimensional flow, viscous flow, Moon-Uhn Kim, Chang-Ho Son, *573*
- airfoil characteristics, delta wings, flaps, leading edge, vortex flaps, Marchman (J.F.) III, *683*
- crossflow, heat exchangers, pressure drop, Poskas (P.), Survila (V.), (et al.), *786*
- compressible flow, entropy, supersonic flow, wave drag, Wellmann (J.), *1522*
- camber, minimization, wings, Sachs (G.), *1623*
- boundary layer (thermal), heat transfer, polar fluids, stagnation point, Subhadra Ramachandran (P.), Mathur (M.N.), *1685*
- cylindrical bodies, grids, piers, piles, reynolds stresses, submerged bodies, Ball (D.J.), Hall (C.D.), *2585*
- bodies of revolution, navier stokes equation, rotating bodies, secondary flow, Majhi (S.N.), Vasudeviah (M.), *2603*
- damping, design, dynamic response, fluidstructure interaction, offshore structures, Fish (P.R.), Dean (R.B.), (et al.), *3569*
- drops, fluctuating flow, oscillations, reynolds number (small), Stewart (M.B.), *3623*
- airfoils, base pressure, subsonic flow, trailing edge, Gai (S.L.), Sharma (S.D.), *3725*
- cooling, nacelle, wind tunnels, wings, Corsiglia (V.R.), Katz (J.), (et al.), *3731*
- ejectable containers, falling bodies, trajectories, Studnicki (A.), Ronen (T.), *3733*
- creeping flow, non newtonian flow, porous surfaces, power law fluids, Kawase (Y.), Ulbrecht (J.J.), *4567*
- cylindrical bodies, linear theory, membranes, navier stokes equation, Hughes (B.D.), Pailthorpe (B.A.), (et al.), *4584*
- aerodynamic performance, cascades, nozzles, optimization, relaxation drag, slender bodies, Schilling (H.), *4625*
- asymptotic behavior, orbit decay, planetary atmospheres, Chakravarty (A.J.M.), *4760*
- external flow, heat transfer, transport phenomena, viscoelastic fluids, Mashelkar (R.A.), Marrucci (G.), *5383*
- additives, polymers, spherical bodies, structure, velocity profiles, Puris (B.I.), Polesskii (E.P.), (et al.), *5428*
- airfoils, optimization, subsonic flow, transonic flow, Zhigulev (V.N.), *5493*
- trains (railroad), tunnels, turbulent flow, Sud (I.), Chaddock (J.B.), *5497*
- experimental results, two phase flow, Balanin (B.A.), Zlobin (V.V.), *5812*
- offshore structures, random loading, wave loads, Tung (C.C.), *6538*
- bottom irregularities, erosion, icebergs, ocean, Lopez (R.), Chari (T.R.), (et al.), *6611*
- ducts, laminar flow, porous walls, variable fluid properties, Eroshenko (V.M.), Zaichik (L.I.), (et al.), *6658*
- aerodynamic performance, ballistics (exterior), control stability, missiles, Qasrawi (A.M.S.), East (R.A.), *6892*
- models, ship resistance, viscous effects, wakes, Townsin (R.L.), Wynne (J.B.), *7073*
- axisymmetric flow, connected bodies, spherical bodies, stokes flow, Wakiya (S.), *7669*
- harmonic analysis, ocean waves, offshore structures, Hamilton (J.), *7676*
- compressible flow, jets, nozzles, numerical methods, supersonic flow, Mikhail (A.G.), Hankey (W.L.), (et al.), *7688*
- induced drag, optimization, subsonic flow, wakes, wings, Kuhlman (J.M.), *7786*
- floating structures, ocean waves, ship motion, Chakrabarti (S.K.), *8040*
- aerodynamic interference, spherical bodies, walls, wind tunnels, Awbi (H.B.), Tan (S.H.), *8672*
- boundary layer (control), delta wings, leading edge, subsonic flow, Rao (D.M.), Johnson (T.D.) Jr., *9652*
- decelerators, friction, vehicles, Korst (H.H.), White (R.A.), *9658*
- aerodynamic loads, vegetation, wind loads, wind tunnels (environmental), wood, Johnson (R.C.) Jr., Ramey (G.E.), (et al.), *9662*
- bars, beaches, bottom irregularities, sediment transport, Holman (R.A.), Bowen (A.J.), *10400*
- analogies, asymptotic behavior, moving surfaces, plates, Burkina (R.S.), Vilyunov (V.I.), *10425*
- acceleration, pipe flow, unsteady flow, Ovsyannikov (V.M.), *10441*
- aerodynamic performance, delta wings, flaps, lift, Mattick (A.A.), Stollery (J.L.), *10498*
- automobiles, design (optimum), fuel economy, geometrical properties, Stapleford (W.R.), *10506*
- design (optimum), geometrical properties, trucks, Garry (K.P.), *10507*
- asymptotic methods, cylindrical bodies, porous media, viscous flow, Verma (P.D.), Vyas (H.K.), *11390*
- bodies of revolution, compressible flow, optimization, transonic flow, wave drag, Sigalov (G.F.), *11396*
- aerodynamics, bodies of revolution, supersonic flow, wing body combinations, Vasilchenko (V.I.), *11397*
- axisymmetric flow, compressible flow, hypersonic flow, supersonic flow, Khlopkov (Yu.I.), *11402*
- blunt bodies, compressible flow, hypersonic flow, optimization, rarefied gases, shape factors, Bunimovich (A.I.), Dubinskii (A.V.), *11405*
- hydrodynamics, kinetic theory, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11439*
- cylindrical bodies, hydrodynamics, kinetic theory, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11453*
- mechanical properties, slurries, spherical bodies, Tsai (S.-T.), *12018*
- dispersed flow, particle fluid flow, Oshima (N.), *12021*
- mass transfer, non newtonian flow, two phase flow, Kawase (Y.), Ulbrecht (J.J.), *12022*
- bubble dynamics, two phase flow, unsteady flow, Dymenko (S.K.), Kuchkin (V.N.), *12042*
- drops, two phase flow, Schneider (W.), *12044*

drag coefficient, aerodynamic performance, ballistics (exterior), rockets, Barbera (F.J.), *886*

- boundary layer (atmospheric), heat transfer (atmospheric), mass transfer, Greenhut (G.K.), Bean (B.R.), *981*
- boundary layer (atmospheric), ocean air interaction, ocean waves, wind-wave interaction, Ariel (N.Z.), Byutner (E.K.), (et al.), *983*
- cylindrical bodies, gravity waves (surface), submerged bodies, virtual mass, wave loads, Koterayama (W.), *1594*
- shaping, three dimensional flow, Dubinskii (A.V.), *1622*
- ballistics (terminal), optimization, recovery systems, reentry, Williamson (W.E.) Jr., *1793*
- porous surfaces, reynolds number (small), spherical bodies, Masliyah (J.H.), Polikar (M.), *3632*
- crossflow, tube bundles, virtual mass, Chakrabarti (S.K.), *3716*
- aerodynamics, spoilers, trucks, vehicles, wind tunnels, Menneron (J.-C.), *3732*
- channel flow, cylindrical bodies, floating bodies, free boundary, froude number, Zein (S.A.A.), *5388*
- blunt bodies, fall velocity, sedimentation, stability, Mehta (A.J.), Lee (J.), (et al.), *5391*
- artificial satellites, upper atmosphere, Goldfinger (A.D.), *5712*
- critical flow, cylindrical bodies, roughness, strouhal number, vortex shedding, wakes, Achenback (E.), Heinecke (E.), *6621*
- automobiles, friction (rolling), resistance, Roussillon (G.), *6726*
- bubble dynamics, contamination, two phase flow, Ishii (T.), Pei (D.C.T.), *6962*
- nonlinear analysis, offshore structures, virtual mass, wave loads, Debnath (L.), Rahman (M.), *7767*
- boundary layer (atmospheric), friction coefficient, friction velocity, ocean air interaction, reynolds stresses, roughness, turbulence (geophysical), Wu (J.), *8980*
- particle dynamics, reynolds number (small), spherical bodies, visualization, Boillat (J.L.), Graf (W.H.), *9541*
- impact, spherical bodies, surfaces, water, Moghisi (M.), Squire (P.T.), *9629*
- dissipation, ocean air interaction, reynolds stresses, wind, Large (W.G.), Pond (S.), *10872*
- channel flow, helical flow, magneto fluid dynamics, pumps, Kapusta (A.B.), Likhacheva (A.I.), (et al.), *11808*

drag reduction, entrance region, integral methods, pipe flow, turbulent flow, Embaby (M.H.), Verba (A.), *615*

- oscillatory flow, particulate flow, viscoelastic fluids, Mclaughlin (J.), *1490*
- non newtonian flow, surfactants, suspensions, Povkh (I.L.), Serdyuk (A.I.), (et al.), *3595*
- heat transfer, pipe flow, turbulent flow, Smith (R.), Edwards (M.F.), *3708*
- airplanes, wind tunnels, winglets, wings, Gilkey (R.D.), *3729*
- dilute solutions, hot film, polymers, Piau (J.-M.), *6590*
- non newtonian flow, polymers, transition, Tandon (P.N.), Kulshreshtha (A.K.), *6652*
- capillary flow, eddies, friction factor, Dschagarowa (E.), Bochossjan (T.), *6657*
- additives, jets, Hoyt (J.W.), Taylor (J.J.), (et al.), *6669*
- aerodynamic performance, automobiles, controllability, crossflow, lift, Gotz (H.), *6725*

- jets, polymers, slots, viscoelasticity, Fruman (D.H.), Galivel (P.), *7667*
- laminar flow, laser doppler velocimeters, polymers, rotating disks, Ulbrecht (J.J.), Gasparetto (C.A.), *7675*
- eddy viscosity, pipe flow, turbulence model, Edwards (M.F.), Smith (R.), *8572*
- dilute solutions, pipe flow, polymers, pressure drop, Leca (A.), Hubert (I.), (et al.), *8578*
- additives, dilute solutions, experimental results, micellar additives, Vocel (J.), Myska (J.), *8581*
- pipe flow, polyacrylamide, turbulent flow, viscous effects, weissenberg number, Kwack (E.Y.), Hartnett (J.P.), *8722*
- pipes, polymers, sewerage, Sellin (R.H.J.), Ollis (M.), *9504*
- axisymmetric flow, bodies of revolution, boundary layer, inverse method, Dalton (C.), Zedan (M.F.), *9941*

Dragani (R.), dynamic response, friction, nonlinear characteristics, vibration isolation, Sarra (M.), *8325*

Drago (R.J.), dynamic properties, experimental mechanics, gear trains, vibration (forced), Brown (F.W.), *7414*

Dragonette (L.R.), see Flax (L.), *907*

- cylindrical bodies, scattering, submerged bodies, surface waves, *4786*
- acoustic measurements, calibration, scattering, underwater acoustics, Numrich (S.K.), (et al.), *4801*

Dragos (L.), inviscid fluid, irrotational flow, singularities, uniform current, Homentcovschi (D.), *1502*

drainage, design (optimum), highways, networks, stormwater, Templeman (A.B.), Walters (G.A.), *3418*

- floods, Penning-Rowsell (E.C.), Chatterton (J.B.), *4043*
- embankments, erosion, hydrology, Gonchar (A.I.), Sribnyi (I.K.), *4046*
- embankments, phreatic surface, Stephenson (D.), *4462*
- mathematical models, porous media, soils, Polyakov (V.L.), *4838*
- groundwater, infiltration, reservoirs, Guzova (A.M.), *4842*
- gravity, oil removal, Hagoort (J.), *5859*
- cyclic loading, soils, Zienkiewicz (O.C.), Chang (C.T.), (et al.), *6387*
- discharges, finite difference methods, hydrographs, mathematical models, storage, Khan (S.I.), Takagi (F.), (et al.), *6599*
- groundwater, hydraulics, wells, Ollos (G.), *7975*
- aquifers, numerical methods, Rolfes (L.), *8949*
- bubble dynamics, coalescence, drops, film flow, plates, Lin (C.-Y.), Slattery (J.C.), *10405*
- conduction (heat), porous surfaces, Girol (A.P.), Mizyuk (V.G.), (et al.), *10688*

Dranchuk (P.M.), see Singhal (A.K.), *9893*

Dranga (M.), dynamic response, dynamics, matrices, mechanisms (planes), Manolescu (N.I.), *4551*

Draper (C.S.), inertial guidance, navigation, *5060*

Dravinski (M.), deformation, earth, faults, stress analysis, Trifunac (M.D.), *5864*

drawing, plastic flow, tubes, Durban (D.), *276*

- chip formation, friction, plastic flow, rolling, Dobrucki (W.), Odrzywolek (E.), *1341*
- deformation, dies, stress strain relationships, Hanaki (K.), Kato (K.), *1344*
- materials processing, measurements, residual stresses, Shimahashi (Y.), Saito (K.), *1399*
- dies, material testing, rolling, Al-Makky (M.M.), Woo (D.M.), *2397*
- flaws, forming, sheet metal, Ghosh (S.K.), *2400*
- photoelasticity, polymers, viscoplasticity, Nishitani (T.), *2471*
- thermal effects, thermoelasticity, tubes, wires, Asada (Y.), Mori (K.-I.), (et al.), *4004*
- coatings, dies, glass fibers, lubrication, Eichenbaum (B.R.), *4681*
- bingham number, dynamic analysis, reynolds number, strips, Camenschi (G.), Sandru (N.), *5279*
- aluminum alloys, wires, work hardening, Varma (S.K.), *6409*
- anisotropy, deep drawing, deformation (plastic), mechanical properties, Schmidt (W.), *7459*
- gravity, hydrodynamic stability, inertia, surface tension, Chang (J.C.), Denn (M.M.), (et al.), *7741*
- creep, deep drawing, forming, interface phenomena, plastics, Ohsawa (H.), Nishimura (H.), *8358*
- deep drawing, plastic flow, von mises flow rule, yield criteria, Zivanovic (S.), *8362*
- cooling, critical flow, glass, solidification, Kunitomo (T.), Ebisu (A.), *10596*

Drazin (P.G.), hydrodynamic stability, stability theory, Reid (W.H.), *6674*

Drees (J.M.), control, helicopters, rotors, springs, vibration, Dooley (L.W.), (et al.), *2745*

Dreher (A.), see Weber (H.), *10161*

Dreitser (G.A.), see Dzyubenko (B.V.), *787*

Dremin (A.N.), see Klimenko (V.Yu.), *4931*

- chemical kinetics, combustion, detonation, explosions, Nelin (V.M.), (et al.), *9825*
- fracture, impulsive loading, spallation, Molodets (A.M.), *10246*

Drenska (N.T.), cooling, difference equations, metals, parabolic equations, *2037*

Dresig (K.F.H.), beams, dynamic stresses, elastic foundations, vibration (free), Labes (M.), *8299*

drift waves, moored vessels, mooring, ship dynamics, waves, Flower (J.O.), *7077*

- magnetic field, nonhomogeneous media, plasma, stability theory, Shivamoggi (B.K.), *11839*

drilling, experimental results, finite element methods, residual stresses, strain analysis, Schajer (G.S.), *490*

- dynamic properties, rods, vibration (forced), Carlvik (I.), *2340*
- ocean bed, rocks, Ryall (P.J.C.), *5268*
- holes, residual stresses, strain measurement, Eggeman (G.W.), *5322*
- control, design, hydraulic machinery, numerical control, Glaser (D.J.), Nachtigal (C.L.), *6148*
- absorption, chemical kinetics, rocks, Mills (J.J.), Westwood (A.R.C.), *8353*
- elastic waves, optimization, rocks, rods, Gupta (R.), *9335*
- dynamic loads, experimental results, impact, rocks, Goldsmith (W.), Wu (W.-Z.), *9370*
- bending, drilling rods, ocean bed, rods, vibration, Aso (K.), Kan (K.), *11659*

Dring (R.P.), aerodynamics, axial compressors, blades, pressure distribution, rotors, three dimensional flow, Joslyn (H.D.), (et al.), *8656*

- film cooling, rotors, turbines, Blair (M.F.), (et al.), *10687*

Driscoll (R.J.), similarity methods, spectra, turbulence, turbulence model, velocity profiles, Kennedy (L.A.), *11542*

drives, belts, Gerbert (B.G.), *537*

- digital control, hydraulic machinery, Volosov (V.V.), Voronova (L.I.), (et al.), *2198*
- couplings, deformation, Fessler (H.), Stewart (R.W.), *2555*
- hydraulic machinery, optimal control, transducers, Karnopp (D.), *4554*

Droban (N.V.), acoustic waves, sound speed, steam, Zaytsev (V.P.), (et al.), *899*

Drobyshevski (E.M.), computing techniques, convection (benard), diffusion coefficient, magneto fluid dynamics, penetration, Kolesnikova (E.N.), (et al.), *6861*

drops, reynolds number (small), surface tension, two dimensional flow, Vanden-Broeck (J.-M.), *569*

- immiscible fluids, two phase flow, Molag (M.), Joosten (G.E.H.), (et al.), *944*
- axisymmetric flow, spherical bodies, stokes flow, viscous flow, Zinchenko (A.Z.), *1509*
- critical flow, dripping flow, reynolds number (small), Dunskii (V.F.), Nikitin (N.V.), *1512*
- contact angle, sliding, thin films, two dimensional flow, Hocking (L.M.), *1534*
- chains, diffusion, mass transfer, saturation, Polianin (A.D.), *1738*
- deformation, two phase flow, Krzeczkowski (S.A.), *1859*
- boundary conditions, interface phenomena, stokes flow, Haber (S.), Hetsroni (G.), *1860*
- interfaces, surface tension, Levan (M.D.), *1861*
- axial flow, evolution equations, Hinch (E.J.), *1863*
- bubble dynamics, liquid vapor interface, Mitrovic (J.), Stephan (K.), *1866*
- condensation (dropwise), evaporation, surfactants, Borzilov (V.A.), Klepikova (N.V.), (et al.), *1905*
- condensation, evaporation, gases, Rakhmatulina (I.Kh.), *2840*
- condensation, evaporation, Sadhal (S.S.), *2841*
- annuli, shear flow, Chan (P.C.-H.), Leal (L.G.), *2986*
- surface tension, viscous effects, Sherwood (J.D.), *3622*
- drag, fluctuating flow, oscillations, reynolds number (small), Stewart (M.B.), *3623*
- boiling, nucleate boiling, water, Maa (J.R.), Tunc (C.Y.), *3791*
- boiling, critical heat flux, dispersed flow, impact jets, impingement cooling, Monde (M.), *3793*
- convection (forced), critical heat flux, dispersed flow, heat transfer, turbulent flow, Yao (S.-C.), Rane (A.), *3795*
- evaporation, flames (laminar), Harpole (G.M.), *3948*
- oscillations, vortices, Zapryanov (Z.), Chervenivanova (E.E.), *4018*
- bifurcation, cooling towers, plumes, vortices, Chen (N.C.J.) Jung (L.), *4058*
- boiling, critical heat flux, entrainment, film flow, Ueda (T.), Inoue (M.), (et al.), *4702*
- evaporation, kinetics, mass transfer, numerical analysis, Larina (I.N.), Rykov (V.A.), *4726*
- collision models, two phase flow, Neizvestnyy (A.I.), Kobzunenko (A.G.), *4832*
- impact, stress analysis, Perelman (R.G.), Freishist (N.A.), *5251*
- impact, pressure distribution, solid boundaries, Yakovlev (V.Ya.), *5484*
- radiant interchange, scattering, Kolesnikov (P.M.), Cess (R.D.), *5582*
- reflection, scattered light, water, Popov (Yu.A.), *5583*
- clouds, meteorology, thermal explosions, Svirkunov (P.N.), Sedunov (Yu.S.), (et al.), *5584*
- heat transfer, liquid vapor mixture, mass transfer, mathematical models, Monaco (R.), *5610*
- collision models, jets, Segal (R.B.), Gaysinskiy (Yu.F.), *5819*
- atomization, scale effects, El-Shanawany (M.S.), Lefebvre (A.H.), *5822*
- aerosols, atmosphere, particle size, refraction, Mathai (C.V.), Harrison (A.W.), *5960*
- cooling, heat transfer, Mori (Y.H.), Nagai (K.), (et al.), *6825*
- entrainment, liquid fuels, pulsatile flow, two phase flow, Low (S.C.), Baruah (P.C.), *6967*
- annular flow, entrainment, Andreussi (P.), *6981*
- atomization, measurements, sprays, Picot (J.J.C.), Tomey (T.D.), (et al.), *6985*
- deformation, interface phenomena, shear flow, Flumerfelt (R.W.), *6990*
- experimental methods, particle size, steam, Georgiev (K.G.), Savostyanov (V.A.), (et al.), *7000*
- convection, dispersed flow, entrance region, heat transfer, tubes, two phase flow, Rane (A.G.), Yao (S.-C.), *7825*

- experimental methods, sprays, two phase flow, Ow (C.S.), Crane (R.I.), *7972*
- contact angle, surface profiles, surface tension, viscosity, Welygan (D.G.), Burns (C.M.), *8491*
- polymers, shear flow, Chin (H.B.), Han (C.D.), *8492*
- absorption, evaporation, radiant interchange, Harpole (G.M.), *8741*
- burners, evaporation, heat transfer, liquid liquid interface, Iida (Y.), Takashima (T.), *8772*
- combustion, vaporization, Law (C.K.), Chung (S.H.), (et al.), *8790*
- absorption, boundary layer, diffusion, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *8896*
- atomization, combustion, Lefebvre (A.H.), *8904*
- axisymmetric flow, bubble dynamics, Miksis (M.), Vanden-Broeck (J.-M.), (et al.), *8905*
- bubble dynamics, deformation, Vanden-Broeck (J.-M.), Keller (J.B.), *8907*
- concentration, diffusion, peclet number, wakes, Zhivotyagin (A.F.), *9539*
- boundary layer, critical heat flux, cylindrical bodies, trajectories, two phase flow, Lu (C.C.), Heyt (J.W.), *9690*
- condensation (dropwise), external flow, film flow, laminar flow, mist flow, Trela (M.), *9692*
- condensation (dropwise), condensation (filmwise), knudsen number, thermal contact resistance, Tanaka (H.), *9693*
- interfaces, two phase flow, Shankar (N.), Cole (R.), (et al.), *9880*
- impact, surface tension, Bechtel (S.E.), Bogy (D.B.), (et al.), *9881*
- deformation, interface phenomena, shear flow, Rallison (J.M.), *9882*
- bubble dynamics, coalescence, drainage, film flow, plates, Lin (C.-Y.), Slattery (J.C.), *10405*
- drying, experimental methods, ultrasonics, Toei (R.), Furuta (T.), (et al.), *10640*
- coagulation, evaporation, mathematical models, transport mechanisms, Novikov (V.S.), *10646*
- convection, evaporation, heat transfer, Rane (A.), Yao (S.-C.), *10651*
- bubbly flow, convection, mass transfer, Polyanin (A.D.), Sergeev (Yu.A.), *10657*
- combustion, evaporation, sprays, Umemura (A.), Ogawa (S.), (et al.), *10709*
- hydrodynamics, liquid liquid systems, Patel (P.D.), Theofanous (T.G.), *10826*
- rotational flow, shape, stability, Brown (R.A.), Scriven (L.E.), *10827*
- bubble dynamics, creeping flow, frequency response, unsteady flow, Stewart (M.B.), Morrison (F.A.) Jr., *11362*
- film flow, hydrodynamic stability, jets, viscous flow, Abramov (Yu.I.), *11592*
- oscillations, rotational flow, zero g phenomena, Radyakin (N.K.), *11596*
- gravity, magneto fluid dynamics, stability theory, theory, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *11821*
- equilibrium, magneto fluid dynamics, shape, stability theory, Barkov (Yu.D.), Berkovskii (B.M.), *11822*
- deceleration, deformation, unsteady flow, Gonor (A.L.), Zolotova (N.V.), *12023*
- nozzles, shock tubes, two phase flow, Borisov (A.A.), Gelfand (B.E.), (et al.), *12024*
- diffusers, two phase flow, Deich (M.E.), Andriets (A.G.), (et al.), *12032*
- drying, tubes, two phase flow, Madejski (J.), *12037*
- drag, two phase flow, Schneider (W.), *12044*
- bubble dynamics, initial value problems, oscillations, Prosperetti (A.), *12046*

Drosdol (J.), see Panik (F.), *1459*

Drozdov (A.D.), bellman function, dynamic programming, linear systems, optimal control, *4299*

Drozdov (Yu.N.), friction (sliding), gears, lubrication (elastohydrodynamic), transmissions, wear, *3049*
- friction (sliding), lubricants (liquid), metals, scoring, viscosity, wear, Archegov (V.G.), *7081*
- contact stresses, friction (sliding), hardness, lubrication (hydrodynamic), scoring, viscosity, Archegov (V.G.), *10888*

Drucker (D.C.), plasticity, plates, taylor instability, *1301*
- constitutive equations, cyclic loading, pressure vessels, stress strain relationships, Palgen (L.), *8212*

Drugan (W.J.), see Rice (J.R.), *2441*

Drulanov (B.A.), continuum mechanics, plastic waves, shear waves, *5237*

Druzhinin (A.A.), condensation, evaporation, excitation, isotopes, lasers (gasdynamic), mixtures, Ptitsyn (G.A.), (et al.), *5612*
- diffusion, phase changes, Tunitskii (N.N.), *10654*

Dryabin (V.A.), discharges, granular media, hoppers, Galershtein (D.M.), (et al.), *6397*

drying, evaporation, phase changes, Szentogyorgyi (S.), *792*
- evaporation, mechanics, thermodynamics, Lampinen (M.), *800*
- evaporation, Szentgyorgyi (S.), Molnar (K.), *801*
- capillary flow, diffusion, evaporation, porous media, Molnar (K.), *3845*
- concrete, convection (forced), thermal effects, Gritsev (V.M.), Bykov (S.I.), *5573*
- annular flow, critical heat flux, film boiling, Sedler (B.), *9688*
- conductivity, contact problems, particle fluid flow, Schlunder (E.-U.), *10638*
- automatic control, mathematical models, Rock (H.), *10639*
- drops, experimental methods, ultrasonics, Toei (R.), Furuta (T.), (et al.), *10640*
- absorption, air conditioning, dehumidifying system, evaporated films, film flow, fins, low temperature, Peng (C.S.P.), Howell (J.R.), *10641*
- drops, tubes, two phase flow, Madejski (J.), *12037*

Drymonitou (M.A.), boundary layer, magneto fluid dynamics, numerical methods, plates (perforated), thermal effects, Geroyannis (V.S.), (et al.), *856*

Drzewiecki (T.M.) eds., fluidics, Franke (M.E.), *1169, book*

Dschagarowa (E.), capillary flow, drag reduction, eddies, friction factor, Bochossjan (T.), *6657*

Du Toit (C.G.), bottom irregularities, laser doppler velocimeters, ocean bed, oscillatory flow, Sleath (J.F.A.), *9517*

Du Val (R.W.), algorithms, controllability, helicopters, rotors, *6731*

duality, automatic control, geometric control, linear theory, time invariant systems, Fuhrmann (P.A.), *99*
- bifurcation, functional equations, nonlinear programming, variational methods, Sewell (M.J.), *2027*
- algorithms, inequalities, variational methods, Bermudez (A.), Moreno (C.), *2030*
- approximation theory, mathematical methods, Precupanu (T.), *4176*
- design (optimum), framed structures, minimax techniques, Imai (K.), Shoji (M.), *6510*

Duan (Z.-P.), attenuation, metals, modeling, shock waves (normal), *10231*

Duban (P.), cycles, helium, power generation, solar energy, turbomachinery, *5803*

Dubbelday (P.S.), acoustic waves, dynamic stresses, flexural waves, plates, reflection, shear, wave equations, Rudgers (A.J.), *5209*

Dubenets (V.G.), hamilton principle, shells (sandwich), vibration (forced), *4436*

Dubey (R.N.), cables, dynamic response, power generation, shock, transmission lines, vibration, Sahay (C.), *1272*

Dubinin (A.I.), see Vyalyshev (A.I.), *11954*

Dubinskii (A.V.), drag coefficient, shaping, three dimensional flow, *1622*
- see Bunimovich (A.I.), *11405*

Dubois (M.), balance system, calibration, wind tunnels, *2772*

Dubovik (A.V.), extrusion, heating, non newtonian flow, viscous effects, *3588*

Dubowsky (S.), see Sunada (W.), *7629*

Dubrovin (G.K.), see Antonenko (A.N.), *7029*

Dubrovin (O.F.), distributed parameters, heat exchangers, heat transfer, mass transfer, optimal control, process control, sliding optimization, Galchinskiy (L.Yu.), *3190*

Dubrovina (G.I.), see Volkov (S.D.), *3455*
- see Volkov (S.D.), *10292*

Dubrovskaya (L.I.), compressible flow, cylindrical bodies, fluid-structure interaction, internal flow, shock waves, Kim (A.V.), (et al.), *11410*

Duc (E.), heat transfer, mathematical models, temperature, *9718*

Duckett (R.A.), see Truss (R.W.), *7564*

Ducomet (B.), beams (open section), bending, elastic bodies, elastoplasticity, *9258*

duct flow, turbulence, turbulence (structure), two dimensional flow, Rajagopalan (S.), Antonia (R.A.), *650*
- asymptotic methods, elliptical bodies, Richardson (S.M.), *2791*
- cylindrical bodies, magneto fluid dynamics, pumps, theory, Kapusta (A.B.), Shamota (V.P.), *2894*
- fluid injection, noncircular pipes, visualization, Alimpiyev (V.I.), Kalinina (S.V.), (et al.), *3671*
- bifurcation, numerical analysis, two dimensional flow, Goldman (A.), *3676*
- buoyant flow, curved surfaces, laminar flow, recirculation, Chilukuri (R.), Humphrey (J.A.C.), *3785*
- cooling, heat transfer, plates (parallel), roughness, turbulent flow, Ichimiya (K.), Hasegawa (S.), (et al.), *3788*
- approximations, elliptic equations, magneto fluid dynamics, singularities, Nye (V.A.), *4747*
- integral methods, laminar flow, Khader (M.S.), *5442*
- heat transfer, turbulence, turbulence model, Malik (M.R.), Pletcher (R.H.), *5467*
- fins, fredholm equations, magneto fluid dynamics, velocity profiles, Ariel (P.D.), Aggarwala (B.D.), *5672*
- circulation, pulsatile flow, two dimensional flow, Sasaki (Y.K.), Reddy (J.N.), *6659*
- experimental results, flow obstructions, heat transfer, turbulence, turbulent flow, Sparrow (E.M.), Molki (M.), (et al.), *6689*
- acoustic emission, heat transfer, pipe flow, resonance, turbulent flow, unsteady flow, Andre (P.), Creff (R.), *6764*
- boundary value problems, sound fields, vibration (flow induced), Myers (M.K.), *6935*
- compressible flow, diffusers, numerical methods, swirl flow, Deckker (B.E.L.), Jeffries (C.), (et al.), *7693*
- entrance region, fluid injection, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *7723*
- flow reversal, hydrodynamic stability, porous media, unsteady flow, Bau (H.H.), Torrance (K.E.), *7840*
- conduction (heat), pulsatile flow, thermal loading, Baskov (V.B.), Platonov (E.G.), (et al.), *7849*
- inviscid fluid, vortex flow, Kazhikhov (A.V.), *8567*
- channel flow, laminar flow, shock waves, wakes, Byrkin (A.P.), Shchennikov (V.V.), *8568*
- fins, friction factor, heat transfer, turbulent flow, Scott (M.J.), Webb (R.L.), *8613*
- liquid metals, magneto fluid dynamics, nonuniform flow, thermoelectric phenomena, Shercliff (J.A.), *8812*
- compressible flow, perturbation methods, three dimensional flow, Kraiko (A.N.), Shironosov (V.A.), *9553*

- nonequilibrium flow, supersonic flow, Ermolin (N.E.), Fomin (V.M.), *9555*
- cellular motions, circulation, counterflow, Kimura (S.), Bejan (A.), *9703*
- ducts (variable area), heat transfer, laminar flow, nusselt number, transition flow, turbulent flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- counterflow, film flow, heat transfer, mass transfer, roughness, Fujita (H.), Takahama (H.), (et al.), *10581*
- non newtonian flow, polar fluids, Sawada (T.), Tanahashi (T.), *11503*
- compressional waves, flexible walls, propagation velocity, Amenzade (R.Yu.), *11631*

ducted fans, design (optimum), gas turbines, turbofan engines, Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5660*

ducted propellers, elliptical bodies, velocity profiles, vortex sheets, George (M.F.), *5400*

ductile fracture, crack growth, j-integral, path integrals, steel, Zahoor (A.), Abou-Sayed (I.S.), *1375*

- crack initiation, yield condition, Saka (M.), Shoji (T.), (et al.), *1380*
- fracture, plasticity, porous media, Oyane (M.), Sato (T.), (et al.), *2446*
- crack growth, crack retardation, fracture criteria, jintegral, Woo (C.W.), Kuruppu (M.D.), *2453*
- crack initiation, plasticity, rings, rotating disks, Tomkins (B.), Atkins (A.G.), *3431*
- elastoplasticity, fracture, j-integral, material testing, surveys, Landes (J.D.), Begley (J.A.), (et al.), *3460, book*
- materials properties, void fraction, Melander (A.), Stahlberg (U.), *3465*
- nucleation, void growth, Le Roy (G.), Embury (J.D.), (et al.), *4497*
- circumferential cracks, j-integral, pipes, stability theory, Zahoor (A.), Kanninen (M.F.), *5303*
- steel, triaxial loading, Beremin (F.M.), *5306*
- acoustic emission, triaxial loading, Shoji (T.), Khan (M.A.), (et al.), *5307*
- crack control, crack initiation, cracking, stress analysis, Georgiev (M.N.), Morozov (E.M.), *5341*
- brittle fracture, crystals, grain boundaries, metallurgy, molybdenum alloys, Denisyuk (V.A.), Drachinskii (A.S.), (et al.), *6432*
- crystals, forming, fracture mechanics, lattices, Chang (Y.W.), Asaro (R.J.), *6433*
- high temperature, prestrain, steel, Mutoh (Y.), Toyoda (M.), (et al.), *6450*
- fracture mechanics, fracture toughness, steel, Cox (E.P.), Lawrence (F.V.) Jr., *7527*
- crack growth, fatigue, fracture mechanics, fracture toughness, Sih (G.C.) eds., Valluri (S.R.), *8405, book*
- buckling (plastic), dynamic effects, imperfections, rings, Rajendran (A.M.), Fyfe (I.M.), *9286*
- crack initiation, crack propagation, high cycle fatigue, microcracks, Nisitani (H.), Takao (K.-I.), *9389*

ductility, buckling, force limiting devices, trusses, Hanaor (A.), Schmidt (L.C.), *1448*

- bending, tests, welded joints, Welding Research Council, *1475*
- erosion, particles, wear, Humphrey (J.A.C.), *1930*
- aluminum alloys, erosion, metals, Bellman (R.) Jr., Levy (A.), *3039*
- alloys, brittle materials, fracture, transition, Schulson (E.M.), *3264*
- abrasion, brittle materials, friction (sliding), hardness, wear, Beckmann (G.), Westermier (G.), *4106*
- hardness, steel, wear, Sorokin (G.M.), Oleinikov (N.E.), (et al.), *4516*
- beams, multistory frames, seismic loading, Mukudai (Y.), Matsuo (A.), *5892*
- lubricants, lubricants (liquid), steel, upset forging, Doraiveiu (S.M.), Gopinathan (V.), *5991*
- cyclic loading, plastic behavior, shells (cylindrical), Mozharovskii (N.S.), Bobyr (N.I.), *6186*
- cast steel, charpy tests, fracture control, microstructures, steel, Fortner (E.) eds., Praeger (M.), *6476, book*
- creep, deformation, nuclear reactors, testing equipment, tests, Kruglov (A.S.), Fazkullin (V.A.), (et al.), *6496*
- reinforced concrete, slabs, strength, Mirza (S.A.), Macgregor (J.G.), *9445*

ducts, acoustic measurements, acoustics, sound generation, Meyer (W.L.), Daniel (B.R.), (et al.), *900*

- analysis, friction factor, roughness, Pyle (R.), Novak (P.), *1563*
- cylindrical bodies, pressure measurement, wave loads, wavemakers, Knott (G.F.), Flower (J.O.), *1636*
- acoustics, gases, nonlinear waves, Kraiko (A.N.), Ni (A.L.), *1803*
- acoustics, modes, nonhomogeneous media, waveguides, Felsen (L.B.), *1804*
- barriers, sound propagation, Cummings (A.), *1806*
- acoustics, attenuation, automobiles, exhaust gases, silencers, Prasad (M.G.), Crocker (M.J.), *1813*
- attenuation, lagging, noise abatement, Smith (T.), Rae (J.M.), (et al.), *1820*
- bubble dynamics, dust, stochastic processes, two phase flow, De Socio (L.M.), Gaffuri (G.), (et al.), *1840*
- ducts (constant area), pipe flow, two phase flow, Prasad (N.K.), Chand (P.), (et al.), *1841*
- liquid gas mixture, one dimensional flow, transient, two phase flow, Hancox (W.T.), Ferch (R.L.), (et al.), *1848*
- absorption, cavities, porous media, silencers, sound propagation, Yoshida (H.), *2934*
- axisymmetric flow, contraction, two dimensional flow, Jordinson (R.), Rodger (J.G.), *3674*
- bifurcation, computing techniques, decay, discontinuities, Yaushev (K.K.), *3724*
- acoustic measurements, combustion, spectral analysis, Miles (J.H.), Raftopoulos (D.D.), *3957*
- end effects, noise abatement, orifices, sound fields, Pollack (M.L.), *4777*
- acoustic measurements, sound (random), sound fields, spectral analysis, Seybert (A.F.), Soenarko (B.), *4802*
- modes, pipes, sound propagation, vibration, Kerschen (E.J.), Johnston (J.P.), *5773*
- modes, noise, sound propagation, Kerschen (E.J.), Johnston (J.P.), *5777*
- acoustic measurements, sound fields, Davies (P.O.A.L.), Bhattacharya (M.), (et al.), *5779*
- acoustic loading, dynamic response, rods, vibration (forced), Lin (W.-H.), *6308*
- blood flow, nonaxisymmetric flow, stokes flow, Strigberger (J.), Plotkin (A.), *6647*
- drag, laminar flow, porous walls, variable fluid properties, Eroshenko (V.M.), Zaichik (L.I.), (et al.), *6658*
- scattering, underwater acoustics, Bucker (H.P.), *6904*
- shear flow, sound propagation, Mani (R.), *6910*
- absorption, modal analysis, sound propagation, Nilsson (B.), Brander (O.), *6926*
- bifurcation, modes, reflection, sound propagation, Nilsson (B.), Brander (O.), *6927*
- sound propagation, underwater acoustics, Weston (D.E.), *7933*
- boreholes, sound propagation, Schoenberg (M.), Marzetta (T.), (et al.), *7939*
- eigenvalue problems, sound propagation, Ko (S.-H.), *8861*
- scattering, sound propagation, Mohring (W.), *8864*
- acoustics, nonlinear characteristics, resonance, Rott (N.), *9845*
- acoustics, attenuation, resonance, Cote-Dunajewski (T.), *9846*
- developing flow, turbulent flow, wakes, Elliott (C.J.), Townsend (A.A.), *10455*
- sound propagation, walls, Cummings (A.), *10786*
- submerged bodies, virtual mass, wave absorbers, wave energy, Thomas (J.R.), *11602*
- dispersion relation, flexible walls, water hammer, Tait (R.J.), Moodie (T.B.), (et al.), *11604*
- bodies (liquid filled), compressional waves, flexible walls, Barclay (D.W.), Moodie (T.B.), (et al.), *11661*
- bifurcation, bodies (liquid filled), vibration (flow induced), Bajaj (A.K.), Sethna (P.R.), (et al.), *11671*
- absorption, attenuation, sound propagation, Krizan (P.), Kuscer (I.), *11917*
- ducts (variable area), sound propagation, Osipov (A.A.), *11918*
- cylindrical bodies, sound propagation, Fagerlund (A.C.), Chou (D.C.), *11926*
- damping, sound fields, vibration, walls, Loh (H.-T.), Reethof (G.), *11928*
- ducts (variable area), finite element techniques, sound propagation, Baumeister (K.J.), *11933*
- attenuation, exhaust gases, noise abatement, Panicker (V.B.), Munjal (M.L.), *11939*
- attenuation, exhaust gases, flow reversal, noise abatement, Panicker (V.B.), Munjal (M.L.), *11940*
- flow, sound propagation, Laan (J.N.), *11941*
- fluid conveyance, pumps, sound generation, Kojima (E.), Nagakura (H.), *11957*
- acoustics, attenuation, energy methods, noise abatement, Gaudefroy (A.), *11996*

ducts (constant area), ducts, pipe flow, two phase flow, Prasad (N.K.), Chand (P.), (et al.), *1841*

- entrance region, laminar flow, noncircular pipes, three dimensional flow, Del Giudice (S.), Strada (M.), (et al.), *3659*
- fourier series, magneto fluid dynamics, pressure gradient, viscoelastic fluids, Sengupta (P.R.), Bhattacharyya (S.K.), *4746*

ducts (curved), approximations (higher order), elliptical cross-section, noncircular pipes, pipe flow, Srivastava (R.S.), *611*

- laminar flow, navier stokes equation, turbulent flow, Buggeln (R.C.), Briley (W.R.), (et al.), *621*
- heat exchangers, pressure drop, swirl flow, Dzyubenko (B.V.), Dreitser (G.A.), *787*
- boundary layer, liquid metals, magneto fluid dynamics, theory, Arai (S.), Tomita (Y.), (et al.), *853*
- approximations (higher order), helical flow, laminar flow, Murata (S.), Miyake (Y.), (et al.), *1555*
- experimental results, secondary flow, transition, Wolff (M.), Cognet (G.), *2651*
- attenuation, bends, green function, sound propagation, El-Raheb (M.), Wagner (P.), *2936*
- laminar flow, secondary flow, turbulent flow, Taylor (A.M.K.P.), Whitelaw (J.H.), (et al.), *3673*
- laminar flow, porous surfaces, secondary flow, unsteady flow, Zapryanov (Z.), Matakiev (V.), *4618*
- particle fluid flow, perturbation methods, trajectories, Yeung (W.-S.), *4621*
- modes, sound propagation, Cabelli (A.), Shepherd (I.C.), *7935*
- channel flow, gases, three dimensional flow, Sepp (V.A.), *9688*
- coils, heat exchangers, laminar flow, pipe flow, secondary flow, Balejova (M.), Cakrt (J.), (et al.), *9576*
- gravity, hodograph methods, irrotational flow, Chow (W.L.), Chan (P.C.T.), *10439*

- blades, laminar flow, secondary flow, turbulent flow, Kreskovsky (J.P.), Briley (W.R.), (et al.), *10439*
- channel flow, non newtonian flow, power law fluids, screw machinery, slip flow, Pervadchuk (V.P.), Yankov (V.I.), (et al.), *10442*
- attenuation, sound propagation, Rostafinski (W.), *10785*
- biomechanics, flow reversal, pressure gradient, pulsatile flow, vortex flow, Chandran (K.B.), Yearwood (T.L.), *11485*
- coils, heat exchangers, turbulent flow, Vilemas (Yu.V.), Dzyubenko (B.V.), (et al.), *11490*
- modes, reflection, sound propagation, Shepherd (I.C.), Cabelli (A.), *11934*

ducts (variable area), experimental results, sudden expansion, transition (reverse), Vallette (P.), Lebouche (M.), (et al.), *2644*
- approximations (higher order), pipe flow, viscoelastic fluids, Williams (E.W.), Javadpour (S.H.), *2646*
- heat transfer, navier stokes equation, sudden expansion, viscous flow, Kharin (B.E.), Dvortsov (V.N.), *3784*
- compressional waves, damping, oscillatory flow, Yanko (A.K.), Korolev (P.V.), *4658*
- extended surfaces, heat exchangers, heat exchangers (cartridge), rotating fluids, Margittai (T.B.), *4717*
- conical flow, flow reversal, pressure gradient, swirl flow, Gogolev (I.G.), Korolev (P.V.), *6654*
- sound propagation, three dimensional formulation, Osipov (A.A.), *6929*
- one dimensional flow, sound propagation, Mani (R.), *7936*
- conical bodies, dynamic response, frequency domain techniques, unsteady flow, Muto (T.), Kinoshita (Y.), (et al.), *8574*
- axisymmetric flow, constrictions, pulsatile flow, unsteady flow, Latinopoulos (P.), Ganoulis (J.), *8582*
- acoustic waves, compressible flow, nozzles, transmission, Miles (J.H.), *8862*
- channels (closed), diffusers, stratified flow, turbulence, Mehta (P.R.), *9502*
- convergence, developing flow, power law fluids, velocity profiles, Jarzebski (A.B.), Wilkinson (W.L.), *10443*
- duct flow, heat transfer, laminar flow, nusselt number, transition flow, turbulent flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- experimental methods, liquid metals, magneto fluid dynamics, walls, Holroyd (R.J.), *10734*
- compressional waves, piping systems, resonance, Belik (N.P.), Chirva (L.G.), *11605*
- collapse, compressional waves, flexible walls, supercritical flow, Kececioglu (I.), Mcclurken (M.E.), (et al.), *11608*
- numerical methods, oscillatory flow, piping systems, Belik (N.P.), Chirva (L.G.), *11629*
- ducts, sound propagation, Osipov (A.A.), *11918*
- ducts, finite element techniques, sound propagation, Baumeister (K.J.), *11933*

Dudarev (E.F.), see Kulagina (V.V.), *8416*

Dudderar (T.D.), see Simpkins (P.G.), *4709*

Dudin (A.N.), multirate service system, optimal control, optimization, queue theory, *6144*

Dudin (G.N.), aerodynamic heating, boundary layer (three dimensional), friction (skin), hypersonic flow, leading edge, Neiland (V.Ya.), *598*

Dudkin (L.M.), algorithms, identification, iterative methods, Kasparson (V.A.), *4214*

Dudnikov (E.E.), see Venets (V.I.), *2156*

Dudowicz (J.), chemical thermodynamics, dilute solutions, statistical mechanics, thermodynamics (statistical), *6756*

Dudragne (G.), contact stresses, fatigue, grinding, microstructures, rolling contact, Fougeres (R.), (et al.), *12096*

Dudukovic (M.P.), green function, heat addition, nonuniform flow, slabs, *1699*

Dudzinski (P.), articulated vehicles, kinematics, sliding, slipping, vehicles, wheels, *8096*

Duffey (R.B.), see Sun (K.H.), *9879*

Duffey (T.A.), cavities, elastic bodies, shells (spherical), transient effects, transient loading, Johnson (J.N.), *7420*
- data analysis, lasers, stress strain relationships, velocimeters, Karpp (R.R.), (et al.), *9422*

Duffy (J.), see Chiem (C.Y.), *2236*
- kinematics, manipulators, mechanisms (planes), mechanisms (spatial), robotics, *3568, book*
- see Sugimoto (K.), *6048*
- see Sugimoto (K.), *7630*

dugdale model, crack arrest, crack opening displacement, dynamic fracture, Achenbach (J.D.), Neimitz (A.), *3471*
- crack growth, fracture mechanics, griffith cracks, survey, viscoelastic materials, Kaminskii (A.A.), *5301*
- crack growth, films, micromechanics, optical techniques, polymers, Donald (A.M.), Kramer (E.J.), *7500*
- fracture criteria, fracture mechanics, pipelines, welded structures, De Wit (R.), Smith (J.H.), *7531*
- crack opening displacement, cylindrical bodies, edge cracks, Gray (T.G.F.), *8403*
- crack growth, polymers, viscoelastic materials, Kaminskii (A.A.), *8410*

Dugger (G.L.), see Pandolfini (P.P.), *4716*
- energy conversion, ocean, thermal effects, Francis (E.J.), (et al.), *5671*

Dugundji (J.), see Chen (L.-T.), *5797*
- see Crandall (S.H.), *7401*

Duhamel (P.), composite structures, conduction (heat), layered media, slabs, thermal contact resistance, Gosse (J.), *8732*
- see Mailliat (A.), *9614*

Dukkipati (R.V.), see Osman (M.O.M.), *9479*

Dullforce (T.A.), see Faw (R.E.), *3807*

Dulnev (G.N.), heat transfer, nonhomogeneous media, thermal diffusion, variable thermal properties, Sigalov (A.V.), *1697*
- annular flow, cooling, lasers, transient loading, Gurev (Yu.L.), (et al.), *5540*
- control, mathematical models, temperature, thermostats, Egorov (V.I.), (et al.), *6824*

Dulney (G.N.), heat transfer (combined modes), thermophysical properties, transforms, transient effects, Zavgorodnii (V.I.), (et al.), *2812*

Dumbleton (J.H.), biological joints, friction, prosthetic devices, tribology, wear, *10882*

Dumitrescu (H.), boundary layer (turbulent), friction (skin), separation, Cleja (V.), (et al.), *4612*
- boundary layer, computing techniques, laminar flow, navier stokes equation, transition, Savulescu (S.N.), *7706*
- see Savulescu (T.N.), *8611*

Dumont (J.P.), composite materials, cylindrical bodies, elastic constants, polymers, strength, textiles, *8220*

Dunaev (A.V.), see Kaminer (A.A.), *8833*

Dunayevsky (V.), boundary layer, crack propagation, dynamic fracture, elastoplasticity, perturbation methods, Achenbach (J.D.), *5308*

Duncan (D.), see Weisman (J.), *1850*

Duncan (D.R.), see Wire (G.L.), *6550*

Duncan (J.P.), computer graphics, human body, moire methods, surface profiles, Dean (D.P.), (et al.), *1958*

Duncan (P.E.), see Eatock Taylor (R.), *6540*

Duncan Fama (M.E.), rocks, strain gages, strain measurement, stress strain relationships, Pender (M.J.), *3487*

Dundurs (J.), see Comninou (M.), *5793*
- see Gomez (C.), *8186*
- see Comninou (M.), *9042*
- elasticity, friction, stress concentration, Comninou (M.), *10288*

Dung (N.L.), see Erlmann (K.), *3427*
- deformation (finite), extrusion, finite element techniques, forming, plasticity, *5272*

Dungar (R.), constitutive relations, critical state, endochronic theory, sand, Nuh (S.), *9355*
- dams, dynamic analysis, earthquake effects, vibration (nonlinear), *10189*

Dunham (D.W.), see Farquhar (R.W.), *5706*

Dunin (S.Z.), cavities, rocks, rupture, stress analysis, Sirotkin (V.K.), (et al.), *6400*
- see Artyshev (S.G.), *9842*

Dunlap (R.), see Brown (R.S.), *4769*

Dunn (H.J.), aerodynamic loads, aeroelasticity, unsteady flow, wings, *1631*

Dunn (K.J.), see Bundy (F.P.), *2500*

Dunn (M.G.), axial turbines, blades, heat transfer, pressure measurement, walls, Hause (A.), *11738*

Dunn (P.F.), generators, liquid metals, magneto fluid dynamics, measurements, two phase flow, *10753*

Dunne (E.G.), analogies, complex variables, conduction (heat), waves, Mugler (D.H.), *8089*

Dunskii (V.F.), critical flow, dripping flow, drops, reynolds number (small), Nikitin (N.V.), *1512*

Dunsmuir (A.M.), algorithms, computer aided manufacturing, design, *2200*

Dunwoody (N.T.), brinkman number, convection (forced), non newtonian flow, pipe flow, Hamill (T.A.), *6789*

Duport, see Binder, *3603*

Durban (D.), drawing, plastic flow, tubes, *276*
- shells (spherical), shells (thick), thermal effects, thermoplasticity, *928*
- buckling (shear), plates (annular), plates (orthotropic), Stavsky (Y.), *4395*
- see Sitzer (M.R.), *6406*

Durbin (P.A.), blunt bodies, fluctuations, pressure, surfaces, turbulence, Hunt (J.C.R.), *2694*
- axisymmetric flow, turbulence (structure), turbulent flow, *8612*
- channel flow, dispersion, shear flow, turbulence, turbulence (transport), *9609*
- boundary layer (turbulent), dispersion, inhomogeneities, wind, Hunt (J.C.R.), *11520*

Durelli (A.J.), design (optimum), optimization, photoelasticity, *3517*
- see Erickson (M.), *6461*
- beams, boundary conditions, design (optimum), photoelasticity, plates (holed), slots, Rajaiah (K.), *6504*
- optimization, photoelasticity, plane stress, plates (holed), Rajaiah (K.), *6506*

Durkee (D.B.), failure, friction (sliding), scuffing, sliding, thermoelasticity, wear, Cheng (H.S.), *3037*

Durney (B.), eddies, oceanography, *4864*

Durnin (J.), ground effect, impedance, reflection, sound propagation, Bertoni (H.L.), *4794*

Durocher (L.L.), see Ciardullo (S.W.), *5144*

Durst (F.), ellipsoids, navier stokes equation, numerical methods, vortex rings, Schonung (B.), *9524*

Dushkin (P.K.), balloons, data acquisition, meteorology, weather forecasting, Belov (A.I.), (et al.), *4090*
Dussaud (M.), aquifers, mathematical models, storage, underground storage, Carriere (J.-F.), *9902*
dust, bubble dynamics, ducts, stochastic processes, two phase flow, De Socio (L.M.), Gaffuri (G.), (et al.), *1840*
- abrasion, blades, centrifugal compressors, Ris (V.F.), *2755*
- blunt bodies, supersonic flow, Golovachov (Yu.P.), Lunkin (Yu.P.), (et al.), *2992*
- noncircular pipes, particle fluid flow, unsteady flow, viscous flow, Dixit (L.A.), *6653*
- explosions, flame propagation, thermal diffusion, Nomura (S.-I.), Tanaka (T.), *6839*
- coal, combustion, flame propagation, pyrolysis, Krazinski (J.L.), Buckius (R.O.), (et al.), *7880*
- boundary value problems, initial value problems, stability, uniqueness, Jain (R.K.), Prabha (S.), *7961*
- laminar flow, noncircular pipes, particle fluid flow, unsteady flow, Gupta (M.), *8575*
- coal, combustion, models, pyrolysis, Kansa (E.J.), Perlee (H.E.), *8800*
- orbit stability, perturbation theory, solar pressure, stochastics, Bakshian (B.T.), Nazirov (R.R.), (et al.), *8843*
- hypersonic flow, slender bodies, Barron (R.M.), Wiley (J.T.), *8892*
- pipes, two phase flow, Radhakrishnamacharya (G.), Maiti (M.K.), *8895*
- particles, shock tubes, shock waves, Miura (H.), Glass (I.I.), *9874*

Duthie (G.), cylindrical bodies, elasticity (linear), vessels, White (G.C.), (et al.), *10163*
Dutoya (D.), aerothermodynamics, elliptic equations, finite volume method, fluid mechanics, turbomachinery, Michard (P.-J.), *5014*
Dutt (H.N.V.), airfoils, boundary layer, potential flow, velocity profiles, Sreekanth (A.K.), *9654*
Dutta (A.), see Ryan (M.E.), *544*
Dutta (S.), see Niyogi (P.), *1525*
Dutton (J.A.), atmospheric circulation, meteorology (physical), turbulence (geophysical), *12075*
Dutton (J.C.), approximations (higher order), nozzles, throats, transonic flow, Addy (A.L.), *4624*
Duva (J.), see Simmonds (J.G.), *4490*
Dvoinishnikov (V.A.), see Laryushkin (M.A.), *6672*
- free jets, shape, tubes, Laryushkin (M.A.), *11524*

Dvoiris (A.D.), boiling, heat exchangers, hydrocarbons, lng, natural gas, porous walls, Sirotin (A.G.), (et al.), *11770*
Dvorak (G.J.), fatigue, laminates, metallic composites, shakedown structures, Johnson (W.S.), *283*
Dvorchik (S.E.), see Boguslavskii (V.A.), *963*
Dvorkin (Ya.P.), fluid boundaries, impact, shells (cylindrical), *6370*
- see Sagomonyan (A.Ya.), *6371*
- see Sagomonyan (A.Ya.), *6372*

Dvornychenko (V.N.), guidance optimization, optimal control, rockets, steering, *7928*
Dvortsov (V.N.), see Kharin (B.E.), *3784*
Dvoryakovskiy (V.P.), atmospheric circulation, gravity waves, waveguides, Petrukhin (N.S.), (et al.), *4865*
Dvoryaninov (G.S.), boundary layer (atmospheric), heat transfer (atmospheric), ocean air interaction, surface waves, *5950*
Dwivedi (V.S.), creep rupture, high temperature, material testing, nickel alloys, *1410*
Dworski (J.G.), see Rattray (M.) Jr., *4866*
Dwyer (H.A.), boundary layer, computing techniques, laminar flow, three dimensional flow, *1543*
- closure, sensitivity analysis, turbulence (geophysical), turbulent flow, Peterson (T.), *7754*

Dyachkov (I.I.), see Kvitka (A.L.), *492*
- see Kvitka (A.L.), *3491*

Dyakov (A.P.), see Strunin (V.A.), *10703*
Dyban (E.P.), annular flow, augmentation, convection, cylindrical bodies, heat exchangers, heat transfer, Lesnikovskii (A.A.), (et al.), *8682*
Dye (R.C.F.), boundary layer (atmospheric), buildings (tall), wind, wind tunnels, *7063*
Dymek (F.), boundary value problems, elasticity (linear), rock mechanics, *9368*
Dymenko (S.K.), bubble dynamics, drag, two phase flow, unsteady flow, Kuchkin (V.N.), *12042*
Dymnikov (V.P.), atmospheric circulation, baroclinic instability, finite difference methods, hydrodynamic stability, *3018*
- atmospheric circulation, heat transfer (atmospheric), meteorology (physical), weather forecasting, Ishimova (A.V.), *4070*

Dymond (J.H.), mixtures, thermal effects, transport properties, viscosity, Young (K.J.), (et al.), *1658*
dynamic analysis, kinematics, lagrange equations, mathematical methods, Schrapel (H.D.), *7*
- kinematics, mathematical methods, Brunk (G.), *9*
- mathematical methods, rotating bodies, Koshlyakov (V.N.), *10*
- elastic bodies, mathematical methods, rotating bodies, Vilke (V.G.), *11*
- boilers, digital simulation, mathematical models, nonlinear theory, Roder (H.W.), Rosel (G.S.), *74*
- hysteresis, nonlinear systems, sensitivity, structural response, structures, Ray (D.), Pister (K.S.), (et al.), *106*
- distributed parameters, matrix methods, state space techniques, Prepelita (V.), *110*
- nonlinear systems, statistical theory, Potseluyev (A.V.), Topilskiy (S.V.), *122*
- flow, moment distribution, poisson flow, Penev (P.B.), Romanov (V.G.), *148*
- fluidics, pneumatic components, pumps, Baz (A.), Khafagy (S.), (et al.), *219*
- arches, frames, Henrych (J.), *300, book*
- mathematical methods, pendulums, vibration (parametric), Kozlov (V.V.), *358*
- mathematical methods, vibration (parametric), Krupenin (V.L.), *359*
- flexure, plates (isotropic), vibration (free), Voyiadjis (G.Z.), Baluch (M.H.), *368*
- railroads, vibration, Chudzikiewicz (A.), Kisilowski (J.), (et al.), *387*
- mathematical models, rolling, vibration, Dobrucki (W.), Swiatoniowski (A.), *389*
- design, Hager (R.W.), *392*
- dynamic response, protective devices, Kozhevnikov (S.N.), Nuribekov (I.A.-G.), *512*
- boundary roughness, film thickness, mathematical models, Vorontsov (Ye.G.), Yakhno (O.M.), *605*
- airplanes, kinematics, Hitch (H.), *1059*
- curvature, kinematics, mathematical methods, Veldkamp (G.R.), *1060*
- constraints, lagrange equations, Muschik (W.), *1061*
- derailment, railroads, statistical design, wheels, Cherchas (D.B.), *1062*
- lagrange multiplier, mathematical models, Hemami (H.), Weimer (F.C.), *1063*
- energy conservation, lagrange equations, Nicolae (V.), Chiroiu (V.), *1065*
- spherical bodies, viscoelastic materials, Vilke (V.G.), *1066*
- flexible bodies, satellites, Lips (K.W.), Modi (V.J.), *1067*
- hamiltonian equations, mathematical methods, Churchill (R.C.), Rod (D.L.), *1078*
- mathematical models, state space techniques, Mcclamroch (N.H.), *1140, book*
- aerodynamics, cables, nonlinear analysis, towing cables, Karlsen (L.K.), *1215*
- towing cables, Gilbert (N.E.), *1217*
- tubes, vibration (forced), Ertepinar (A.), Gurkok (A.), *1259*
- beams (flexural), shear loading, vibration (nonlinear), Nguyen Xuan Hung, *1263*
- nonlinear systems, random loading, vibration, Gopalsamy (K.), *1264*
- mathematical methods, strings, vibration, Synge (J.L.), *1270*
- foundations, vibration (forced), Gamer (U.), Pao (Y.-H.), *1283*
- analysis, failure, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *1464, book*
- frequency response, pipelines, pneumatic components, Matsumoto (Y.), Okazaki (M.), *1598*
- lagrange equations, mathematical methods, Baumgarte (J.), *1977*
- lagrange equations, mathematical methods, Muschik (W.), Poliatzky (N.), (et al.), *1979*
- lagrange equations, mathematical methods, Baumgarte (J.), *1980*
- kinematics, mathematical methods, moving media, Mcgill (D.J.), Kim (T.D.), *1981*
- lagrange equations, Whittaker (J.M.), *1982*
- chain links, chains, damping, matrix methods, Eiber (A.), Schiehlen (W.), *1983*
- constraints, lagrange equations, Hering (J.), *1984*
- energy conservation, lagrange equations, mathematical methods, Vujicic (V.A.), *1985*
- error, gyrocompasses, gyroscopes, identification, mathematical models, Potemkin (A.E.), *1989*
- kinematics, relativity, Asanov (G.S.), *1990*
- controllability, nonlinear analysis, observability, Baillieul (J.), *1993*
- linear systems, observers, process control, reliability analysis, Mironovskii (L.A.), *2082*
- model reduction, redundancy, time invariant systems, Britov (G.S.), Mironovskiy (L.A.), *2087*
- identification, linear systems, Braslavskii (A.D.), Shubladze (A.M.), *2094*
- cable nets, cables, networks, Batchelor (B. De V.), Gambhir (M.L.), *2257*
- elastoplasticity, plates (plastic), plates (rectangular), Raghavan (K.S.), Rao (S.S.), *2283*
- nonlinear analysis, perturbation methods, Zhermolenko (V.N.), *2317*
- strings, vibration, Cabannes (H.), *2326*
- hamilton principle, stability theory, Bailey (C.D.), *2329*
- buildings (tall), frequency response, structural response, vibration (free), Ellis (B.R.), *2347*
- cooling towers, finite element methods, frequency response, vibration (free), Cedolin (L.), Mang (H.A.), (et al.), *2348*
- bridges (highway), vehicles, Gupta (R.K.), Traill-Nash (R.W.), *2349*
- lagrange multiplier, many body systems, railroads, Knothe (K.), Mauer (L.), *2351*
- turbomachinery, vibration (forced), Sidorenko (M.K.), *2355*
- beams, distributed parameters, vibration isolation, Wauer (J.), *2357*
- frequency response, structural response, Geering (H.P.), *2359*
- offshore structures, statics, wave loads, Sarpkaya (T.), Isaacson (M.), *2543, book*
- offshore structures, stress analysis, towers, Bolotin (V.V.), Chirkov (V.P.), (et al.), *2544*
- nonlinear analysis, piping systems, Prachuktam (S.), Bezier (P.), (et al.), *2548*
- constraints, mechanisms, Levitsky (D.N.), *2552*
- hydraulic machinery, hydrodynamics, rotors, scale models, Bachmann (P.), *2760*

- kinematics, mathematical methods, Bottema (O.), Veldkamp (G.R.), *3080*
- gyrodynamics, satellites, Hiller (M.), Lehrle (T.), *3082*
- gyrodynamics, hamiltonian equations, kinematics, Tsopa (M.P.), *3086*
- airplanes, variable mass, Nita (M.M.), *3088*
- lyapunov's functions, rotating bodies, Arkhangelskaya (M.Yu.), *3089*
- nonlinear analysis, vibration (self excited), Yaroshevskii (V.A.), *3090*
- rotating bodies, Essen (H.), *3091*
- mathematical methods, pendulums, vibration (nonlinear), Samson (A.), *3092*
- heat transfer, hyperbolic equations, laplace transform, Korolkov (B.P.), Pupin (A.A.), *3115*
- computing techniques, modal analysis, nonlinear analysis, structures, Noor (A.K.), *3138*
- estimation, input-output relationships, inverse problems, Benyon (P.R.), *3164*
- adaptive systems, estimation, searchfree systems, Nachinkina (G.N.), Shnaidman (M.A.), *3203*
- beams (plastic), computing techniques, reinforced bodies, Laudiero (F.), *3279*
- cables, nonlinear analysis, offshore structures, Peyrot (A.H.), *3283*
- beams, ponding, roofs, vibration (free), Mansouri (A.H.), Chinn (J.), *3290*
- frequencies, girders (curved), Yoo (C.H.), Fehrenbach (J.P.), *3295*
- averaging, bifurcation, vibration (nonlinear), Holmes (C.), Holmes (P.), *3343*
- averaging, vibration (nonlinear), Nocilla (S.), *3344*
- frequency response, vibration (forced), Vulfson (M.N.), *3345*
- damping, distributed systems, vibration, Beskos (D.E.), Boley (B.A.), *3347*
- beams (variable cross section), bending, vibration (free), Trapezon (A.G.), *3356*
- manipulators, robotics, vibration (forced), Yudin (V.I.), *3357*
- plates (rectangular), vibration (free), Marita (Y.), *3367*
- shells (cylindrical), vibration (free), wirewound vessels, Greenberg (J.B.), Stavsky (Y.), *3374*
- cooling towers, vibration (free), Nelson (R.L.), *3381*
- tractors, vehicles, vibration (forced), Crolla (D.A.), *3385*
- damage, fatigue, random excitation, structural analysis, Kenny (R.A.), Chandra (S.), *3445*
- elastoplasticity, piers, reinforced concrete, seismic loading, Ozaka (Y.), Yanagida (T.), (et al.), *3533*
- gyrodynamics, maneuverability, rotating bodies, Chen (J.), Kane (T.R.), *3923*
- gyrodynamics, satellites, Rath (P.C.), Pal (J.), *4142*
- rigid bodies, rotating bodies, Johnston (G.W.), *4143*
- mathematical models, mechanical systems, Do Sanh, *4144*
- libration theory, mathematical methods, Bolotin (S.V.), Kozlov (V.V.), *4146*
- composite materials, elasticity (nonhomogeneous), hamilton principle, variational methods, Willis (J.R.), *4174*
- algorithms, hybrid simulation, stability theory, Allison (J.S.), Johnson (H.M.), *4252*
- numerical analysis, shells (of revolution), Sheinman (I.), Zamir (I.), *4374*
- equations of motion, shells (nonlinear), shells (orthotropic), Sokolovskaya (I.I.), *4377*
- control, vibration, Beards (C.P.), *4402, book*
- pendulums, vibration (forced), Zlatoustov (V.A.), Sazonov (V.V.), (et al.), *4404*
- distributed parameters, pantographs, vibration (forced), Manabe (K.), Morikawa (T.), *4416*
- beams, impulsive loading, vibration (forced), Levin (E.M.), Pankova (N.V.), *4417*
- acceleration waves, mathematical methods, membranes, Pop (J.J.), Wang (C.-C.), *4421*
- damping, optimization, vibration isolation, Thompson (A.G.), *4440*
- loads, seismic loading, structural analysis, thermal effects, wave loads, Brebbia (C.A.) eds., Gould (P.L.), (et al.), *4536, book*
- similarity methods, two phase flow, Entov (V.M.), Yarin (A.L.), *4630*
- kinematics, mathematical methods, Nayak (J.H.), Roth (B.), *4932*
- kinematics, mathematical methods, Hsia (L.M.), Yang (A.T.), *4933*
- kinematics, rigid bodies, Falk (S.), *4936*
- kinematics, spatial mechanisms, structural elements, Nitescu (P.N.), *4937*
- kinematics, lagrange equations, Gonzalez-Gascon (F.), *4939*
- kinematics, mechanisms (planes), Williams (R.J.), Rupprecht (S.), *4942*
- finite element methods, plates (reinforced), Miller (R.E.), *5146*
- plates (anisotropic), plates (sandwich), Ibrahim (I.M.), Farah (A.), (et al.), *5160*
- vibration, vibration (nonlinear), Klotter (K.), *5189, book*
- beams (cantilever), spinning bodies, vibration, Utku (S.), El-Essawi (M.), (et al.), *5202*
- nonlinear characteristics, rotating shafts, vibration (nonlinear), Yamamoto (T.), Ishida (Y.), (et al.), *5227*
- modal analysis, nonlinear analysis, substructuring, Bathe (K.-J.), Gracewski (S.), *5228*
- bingham number, drawing, reynolds number, strips, Camenschi (G.), Sandru (N.), *5279*
- bridges, floating structures, stochastic processes, wave loads, Langen (I.), Sigbjornesson (R.), *5356*
- plasticity, shear, snow, tracked vehicles, vehicles, Brown (R.L.), *5366*
- buoys, finite difference methods, force, sudden stop, Grossi (R.O.), Ercoli (L.), *5480*
- design, wind turbines, Kehl (K.), Keim (W.), (et al.), *5696*
- human body, kinematics, Dainis (A.), *6010*
- finite element methods, kinematics, structural elements, Van Der Werff (K.), *6050*
- bars, elastic bodies, hamiltonian equations, Buculei (M.), Bagnaru (D.), *6052*
- constraints, lagrange equations, mechanics, Hering (J.), *6053*
- gyrodynamics, rotating bodies, Galiullin (I.A.), *6054*
- control, elastic bodies, programmed motion, Zakrzhevskii (A.E.), *6055*
- derailment, experimental mechanics, rails, wheels, Sweet (L.M.), Karmel (A.), *6056*
- dynamic response, gyrodynamics, Liu (Y.-Z.), *6058*
- mathematical methods, mechanical systems, Rubanovich (E.M.), *6059*
- conservation laws, finite difference methods, hyperbolic equations, Harten (A.), TalEzer (H.), *6086*
- bending, finite element techniques, plates, Garnet (H.), Crouzet-Pascal (J.), (et al.), *6109*
- automatic control (optimal), optimal control, Burghes (D.N.), Graham (A.), *6124, book*
- biocontrol, electroencephalography, mathematical models, nervous system, nonlinear systems, nonlinear theory, Freeman (W.J.), *6149*
- biomathematics, epidemics, mathematical models, Gripenberg (G.), *6151*
- composite structures, plasticity, waves, Skovoroda (A.R.), Shapiro (G.S.), *6195*
- elastic behavior, variational methods, vibration (nonlinear), Lau (S.L.), Cheung (Y.K.), *6272*
- damping, particle dynamics, vibration (nonlinear), Gershman (M.D.), *6273*
- nonlinear analysis, vibration (self excited), Brommundt (E.), *6276*
- automobiles, highways, random excitation, Lindgren (G.), *6277*
- damping, many body systems, structural response, Bremer (H.), *6278*
- finite element methods, impedance methods, vibration (forced), Nagamatsu (A.), Ookuma (M.), *6281*
- dynamic response, marine risers, modal analysis, ocean, vibration (forced), Kirk (C.L.), Etok (E.U.), (et al.), *6291*
- numerical methods, structural analysis, Brusa (L.), Nigro (L.), *6318*
- cutting, deformation, fracture mechanics, glass fibers, reinforced plastics, Inoue (H.), Ido (M.), *6449*
- crack propagation, kinetic theory, stress corrosion, Krausz (A.S.), Mshana (J.), (et al.), *6453*
- buildings, structural analysis, three dimensional formulation, Humar (J.L.), Khandoker (J.U.), *6531*
- damping capacity, offshore structures, random loading, wave loads, Vandiver (J.K.), *6536*
- four bar linkage, kinematics, linkages, mechanisms (spatial), Oranescu (A.), Bocioaca (R.), *6560*
- mechanics, Desloge (E.A.), *7144*
- gyrocompasses, gyrodynamics, gyrotheodolites, Voronkov (N.N.), Kutyrev (V.V.), (et al.), *7148*
- gyrodynamics, rotating bodies, Zakrzhevskii (A.E.), *7150*
- elastoplasticity, finite amplitude, imperfections, shells, Ishizaki (T.), Bathe (K.-J.), *7216*
- oscillations, time invariant systems, transient effects, Kononyuk (V.A.), *7234*
- elastic bodies, linear systems, structural response, structures, vibration isolation, Ryaboi (V.M.), Genkin (M.D.), (et al.), *7244*
- discrete systems, synthesis, Perov (V.P.), *7245*
- composite materials, fibers, structural analysis, Moskvitin (V.V.), *7299*
- stress analysis, towing cables, Matuk (C.), *7315*
- elastoplasticity, large displacement, pipes, Heifetz (J.), Benjamin (M.), (et al.), *7362*
- nonlinear analysis, vibration (nonlinear), Arnold (T.W.), Case (W.), *7366*
- nonlinear analysis, vibration (nonlinear), vibration (self excited), Pivovarov (I.), *7371*
- probability theory, random excitation, Spanos (P.T.D.), Lutes (L.D.), *7374*
- friction (sliding), strings, vibration (forced), Cabannes (H.), *7379*
- flexure, plates (circular), vibration (free), Komissarova (G.L.), *7389*
- engines, nonlinear systems, vibration (parametric), vibration (torsional), Dittrich (G.), Krumm (H.), *7404*
- eigenvalues, vibration (free), vibration (torsional), Wang (C.C.), *7412*
- dynamic response, finite element methods, structural response, Nack (W.V.), *7417*
- finite element methods, flexibility, linkages, matrices, mechanisms (spatial), Sunada (W.), Dubowsky (S.), *7629*
- floating structures, Naftzger (R.A.), Chakrabarti (S.K.), *8039*
- kinematics, rigid bodies, Laub (A.J.), Shiflett (G.R.), *8093*
- hamiltonian equations, nonlinear analysis, Vujanovic (B.), *8095*
- cavities, gyrodynamics, spherical bodies, spinning bodies, Nunn (R.H.), Bloomer (J.W.) II, *8098*
- connected bodies, energy dissipation, gyrodynamics, rigid bodies, Rimrott (F.P.J.), *8099*
- gyrodynamics, gyroinertial systems, measurements (dynamic), Zakharin (F.M.), Kharitonov (M.A.), *8101*
- disks, finite element techniques, fourier series, Srinivasan (V.), Ramamurti (V.), *8152*
- control, dynamic properties, feedback, rotating bodies, rotors, vibration, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- biomathematics, cell behavior, fluid mechanics, mathematical models, Aldis (G.), Tognetti (K.), (et al.), *8178*
- displacement, structural response, transient loading, vibration, Poppleweil (N.), Scarth (D.A.), (et al.), *8277*

- acceleration, deceleration, random excitation, vibration (parametric), Dimentberg (M.F.), *8284*
- strings, vibration (free), vibration (nonlinear), wave engines, Cabannes (H.), *8290*
- beams, plates (nonhomogeneous), wave engines, Reismann (H.), Yamaguchi (T.), *8297*
- plates, rotary inertia, shear, vibration (nonlinear), Sathyamoorthy (M.), *8308*
- finite element methods, large displacement, plates, vibration (free), Akay (H.U.), *8310*
- plates (stiffened), shells (stiffened), Zhigalko (Yu.P.), Dmitrieva (L.M.), *8311*
- shells (long), vibration (free), Berdichevskii (V.L.), Le Khan Chau, *8314*
- gas turbines, rotating disks, Dondoshanskii (V.K.), *8317*
- crack propagation, cracks, finite element techniques, Mall (S.), *8421*
- circumnavigation, coordinate systems, kepler orbits, separation of variables, Broucke (R.), *8839*
- hamilton principle, linear systems, variational methods, Sarlet (W.), Engels (E.), (et al.), *9086*
- finite element methods, solid mechanics, Mang (Kh.), Fisher (U.), (et al.), *9138*
- analytical methods, time varying systems, Wu (M.-Y.), *9161*
- equations of motion, mathematical methods, vibration (nonlinear), Benson (D.C.), *9296*
- mathematical methods, vibration (nonlinear), Roseau (M.), *9297*
- random excitation, vibration (forced), vibration (parametric), Schmidt (G.), *9298*
- mathematical models, random loading, Bily (M.), Cacko (J.), *9300*
- damping, mathematical methods, vibration (free), Inman (D.J.), *9301*
- design (optimum), optimization, vibration isolation, Rao (S.S.), Hati (S.K.), *9302*
- beams (timoshenko), vibration (free), Bhashyam (G.R.), Prathap (G.), *9304*
- bessel functions, mathematical methods, vibration (free), Liu (X.-Z.), *9307*
- plates (rectangular), vibration (free), Darevskaya (E.V.), *9312*
- plates (circular), vibration (free), Lebedeva (N.K.), *9313*
- plates (annular), vibration (free), Rangaiah (V.P.), Sadasivan (S.), *9314*
- plates, vibration (free), vibration (self excited), Simcak (F.), *9315*
- blades, rotating disks, vibration (free), Irretier (H.), *9316*
- blades, helicopters, vibration (forced), Lucjanek (W.), Narkiewicz (J.), *9317*
- plates (circular), shells (cylindrical), vibration (free), Rott (W.), *9319*
- shells (ellipsoidal), shells (of revolution), vibration (free), Filippov (S.B.), *9321*
- prestressed structures, shells (cylindrical), vibration (free), Kukudzhanov (S.N.), *9322*
- rotating shafts, torque, vibration (parametric), Unger (A.), Brull (M.A.), *9324*
- chatter, cutting, mathematical methods, vibration (forced), De Canniere (J.), Van Brussel (H.), (et al.), *9325*
- harmonic waves, plates (sandwich), shells (sandwich), Khoroshun (L.P.), Ivanov (Yu.A.), *9327*
- descent, tractors, vehicles, Hunter (A.G.M.), *9462*
- algorithms, friction, gears, Majewski (L.), *9475*
- design, four bar linkage, mechanisms (spatial), velocity profiles, Osman (M.O.M.), Dukkipati (R.V.), *9479*
- hamiltonian equations, mathematical methods, Baruch (M.), Riff (R.), *10007*
- lagrange equations, mathematical methods, Pascal (M.), *10009*
- computer programming, digital simulation, Fischer (J.), Gerhardt (H.-D.), (et al.), *10058*
- graph theory, mathematical models, Tenenbaum (L.A.), *10078*
- eigenvalues, oscillating bodies, vibration, Schneider (J.), *10187*
- stability theory, vibration (nonlinear), Trujillo (D.M.), *10188*
- dams, earthquake effects, vibration (nonlinear), Dungar (R.), *10189*
- mechanical systems, vibration (nonlinear), Manevich (L.I.), Pilipchuk (V.N.), *10191*
- damping, hysteresis, vibration (forced), Fabries (M.), *10192*
- rigid bodies, vibration (torsional), Slawianowski (J.J.), *10193*
- averaging, random excitation, vibration (nonlinear), Spanos (P.-T.D.), *10195*
- computing techniques, mathematical methods, Wehage (R.A.), Haug (E.J.), *10197*
- fluid-structure interaction, gates, plates (rectangular), vibration, Casacci (S.), Caillot (G.), *10207*
- shells (cylindrical), shells (sandwich), vibration (free), Bespalova (E.I.), *10221*
- modal analysis, vibration, Natke (H.G.), *10226*
- airplane performance, derivatives, dynamic testing, modeling, Stalford (H.L.), *10510*
- lagrange equations, rigid bodies, Kuipers (M.), Van De Ven (A.A.F.), *10928*
- mathematical methods, Kozlov (V.V.), *10930*
- linear systems, stability theory, Johnson (C.D.), *11056*
- adaptive systems, design, feedback, Corless (M.J.), Leitmann (G.), *11090*
- buckling, frequencies, Meziere (Y.), *11126*
- impedance methods, plates (orthotropic), vibration (free), Busch-Vishniac (I.J.), *11127*
- shells (cylindrical), vibration (free), Takahashi (S.), Suzuki (K.), (et al.), *11133*
- fins, shells (cylindrical), shells (stiffened), vibration (free), Palamarchuk (V.G.), *11136*
- shells (sandwich), vibration, Kuznetsov (N.D.), Kartashov (G.G.), *11137*
- shells, structural response, transient effects, Malyshev (A.P.), *11139*
- damping, rotating shafts, vibration (forced), Muller (A.A.), *11140*
- critical speed, damping, rotating shafts, vibration (forced), Yanabe (S.), *11143*
- bearings (liquid lubricated), experimental mechanics, rotating bodies, stability theory, Iwatsubo (T.), Kawai (R.), (et al.), *11144*
- balancing, rotating shafts, Woomer (E.), Pilkey (W.), *11145*
- balancing, flexible bodies, rotating shafts, Shiohata (K.), Fujisawa (F.), *11146*
- beams (curved), rotary inertia, shear, vibration (free), Suzuki (K.), Takahashi (S.), *11148*
- plates (sandwich), vibration (free), Shalashilin (V.I.), Kolesnikov (I.Yu.), (et al.), *11149*
- computing techniques, eigenvalues, mathematical methods, Iyer (M.S.), *11152*
- computing techniques, structural analysis, Underwood (P.), Park (K.C.), *11154*
- discrete systems, newmark's method, numerical methods, structural analysis, Wood (W.L.), Bossak (M.), (et al.), *11331*
- artificial satellites, oscillations, solar arrays, space vehicle structures, Khoroshilov (V.S.), *11335*
- bodies of revolution, capsules, floating bodies, pipelines, rafts, rivers, Ginevskii (A.S.), Kolesnikov (A.V.), *11387*
- disabled ships, safety, ship performance, ship towing, Butt (J.A.), Lawrie (S.T.), (et al.), *12085*

dynamic behavior, digital simulation, magnetically suspended structures, railroads, state space techniques, vibration, Sommerer (J.), *73*

- finite element techniques, matrix methods, Okrouhlik (M.), *84*
- compression, plates (isotropic), vibration (forced), White (R.G.), Teh (C.E.), *369*
- shells (sandwich), shells (spherical), vibration (free), Lizarev (A.D.), Rostanina (N.B.), *378*
- machine design, vibration, Major (A.), *385, book*
- beams (plastic), rotary inertia, shear stress, Gomes De Oliveira (J.), Jones (N.), *407*
- impact, stress intensity factor, Kishimoto (K.), Aoki (S.), (et al.), *471*
- dynamic testing, transducers (displacement), Wedzicha (B.L.), Miles (R.E.), *489*
- asymptotic behavior, differential equations (ordinary), transient effects, Friedman (C.N.), *1076*
- mechanisms, rotating shafts, Stuhler (W.), *1280*
- damping, vibration, Inosov (S.V.), *1285*
- elastic waves, half space, Bedding (R.J.), Willis (J.R.), *1295*
- automobiles, maneuverability, steering, vehicles, Panik (F.), Drosdol (J.), (et al.), *1459*
- damping, rotors, vibration isolation, Kravtsova (E.V.), Poznyak (E.L.), *2356*
- shells (outer), steel, strain rate, thermal effects, torsion, Eleiche (A.-S.M.), *2487*
- beams (prestressed), prestressed concrete, Srinivasulu (P.), Sharma (P.C.), *2524*
- dynamic response, vehicles, Willumeit (H.-P.) ed., *2546, book*
- rigid bodies, Mangeron (D.), Irimiciuc (N.), *3085, book*
- beams (continuous), moving loads, Hayashikawa (T.), Watanabe (N.), *3358*
- bearings (journal), bearings (tilted pad), damping, vibration, Springer (H.), *4111*
- beams, reinforced concrete, stiffness, Johns (K.C.), Belanger (M.D.), *5351*
- arcjets, discharges, generators, plasma jets, Sergienko (A.S.), *5695*
- bearings (journal), dynamic stability, lubrication (hydrodynamic), Li (C.-H.), Rohde (S.M.), *5981*
- beams (flexural), moving loads, Raske (T.F.), *6207*
- buckling (nonlinear), imperfections, shells (spherical), Kao (R.), *6266*
- imperfections, plates (rectangular), vibration, Pasic (H.), Herrmann (G.), *6268*
- damping, experimental results, framed structures, multistory frames, wind loads, Lam (L.C.H.), Lam (R.P.), *6529*
- compressible flow, cylindrical bodies, magneto fluid dynamics, optimal control, Pavlov (E.G.), *6857*
- detonation (condensed phase), explosive solid interactions, impulsive loading, Mardashev (A.M.), *6889*
- creep, muscles, stress strain relationships, Phillips (C.A.), Petrofsky (J.S.), *7108*
- composite materials, laminates, mixture theories, waves, Benveniste (Y.), Aboudi (J.), *7142*
- anisotropy, composite materials, fibers, harmonic waves, orthotropic materials, Nemat-Nasser (S.), Yamada (M.), *7408*
- mechanical systems, unloading, Oosterloo (P.J.), *7418*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), whirling shafts, Mori (A.), Aoyama (K.), (et al.), *8066*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), perturbation methods, Murata (S.), Miyake (Y.), (et al.), *8067*
- elastodynamics, shells (nonlinear), Libai (A.), *8246*
- damping, elastomers, Klingenberg (R.), *8278*
- beams, galerkin method, vibration (nonlinear), Vaughan (N.D.), Adams (R.D.), *8293*
- pinned joints, seismic loading, structural response, Ballio (G.), Gobetti (A.), (et al.), *8321*
- finite element techniques, guyan reduction, thermal sciences, Bushard (L.B.), *9150*
- flexible bodies, modes, space vehicle structures, vibration, Hablani (H.B.), *9309*
- bridges (railroad), bridges (truss), impact, structural response, Wiriyachai (A.), Chu (K.-H.), (et al.), *9452*
- aerodynamic interference, airplanes, rolling motion, Sachs (G.), Fohrer (W.), *9659*

- plates (circular), shells (nonlinear), shells (of revolution), shells (viscoelastic), Sullivan (B.J.), Batterman (S.C.), *10154*
- balancing, rotating shafts, vibration (forced), Shiohata (K.), Fujisawa (F.), (et al.), *10216*
- heat shields, nonlinear characteristics, space shuttle, Housner (J.M.), Edighoffer (H.H.), (et al.), *11128*
- comminution, crushing, Krogh (S.R.), *12054*

dynamic contact, dynamic loads, gear teeth, Smith (J.D.), *1308*

dynamic effects, kalman filters, nonlinear systems, Yun (C.-B.), Shinozuka (M.), *513*
- forging, forming, high speed, inertia, materials properties, plane strain, Arora (K.L.), Sachdev (A.S.), (et al.), *1338*
- beams (timoshenko), elastic foundations, vehicles, winkler foundation, Newton (S.G.), Clark (R.A.), *1460*
- collision models, impact, Grigoryan (S.S.), *4458*
- damping, textiles, twisting, yarn, Lord (P.R.), Stuckey (W.C.), *7313*
- turbomachinery, vibration (forced), Busse (L.), Heiberger (D.), *7405*
- elastoplasticity, shakedown structures, thermal effects, work hardening, Konig (J.A.), Maier (G.), *8436*
- buckling (plastic), ductile fracture, imperfections, rings, Rajendran (A.M.), Fyfe (I.M.), *9286*
- acoustics, fluid-structure interaction, piping systems, Schwirian (R.E.), Karabin (M.E.), *10071*
- bubbly flow, liquid fuels, liquid vapor mixture, longitudinal stability, rockets, Kinelev (V.G.), Shkapov (P.M.), *11801*

dynamic fracture, crack propagation, elastodynamics, shear loading, Bui (H.D.), Ehrlacher (A.), *470*
- crack arrest, crack initiation, fracture mechanics, fracture toughness, Lereim (J.), *498*
- explosive loading, implosion, Didyk (R.P.), Semenyuk (E.A.), (et al.), *885*
- crack arrest, impact, shells (cylindrical), surface flaws, Popelar (C.H.), Gehlen (P.C.), (et al.), *1383*
- crack propagation, elastic waves, finite element techniques, Bilek (Z.), *2449*
- crack arrest, crack opening displacement, dugdale model, Achenbach (J.D.), Neimitz (A.), *3471*
- computing techniques, finite element techniques, stress intensity factor, viscoelastic materials, Aoki (S.), Kishimoto (K.), (et al.), *3476*
- fracture, plastics, plates, polymethyl-methacrylate, strength, Tsai (Y.M.), Chen (Y.T.), *4499*
- fracture mechanics, material testing, micromechanics, spallation, Golubev (V.K.), Novikov (S.A.), (et al.), *5291*
- boundary layer, crack propagation, elastoplasticity, perturbation methods, Dunayevsky (V.), Achenbach (J.D.), *5308*
- crack propagation, kinetic theory, Krausz (A.S.), *5309*
- brittle materials, crack propagation, damping, edge cracks, Brock (L.M.), *8407*
- composite structures, crack arrest, crack propagation, finite difference methods, Williams (J.H.) Jr., Lee (S.S.), (et al.), *8409*
- crack arrest, crack branching, crack propagation, multiple cracks, Theocaris (P.S.), *9413*
- crack initiation, finite difference methods, griffith cracks, plates (rectangular), Perl (M.), Shmuely (M.), (et al.), *10304*
- cracks, singular integral equations, stress intensity factor, twisting, Shindo (Y.), *10305*

dynamic interaction, bridges, moving loads, railroads, Chu (K.H.), Garg (V.K.), (et al.), *3382*
- impact, rigid bodies, Brach (R.M.), *6051*
- space vehicles, transient loading, vibration (forced), Chen (J.C.), Zagzebski (K.P.), (et al.), *6314*
- explosions, explosive loading, hydrodynamics, impulsive transfers, Shubin (G.R.), *7932*
- gear teeth, vibration isolation, Benton (M.), Seireg (A.), *8324*

dynamic loads, composite materials, crack arrest, interface cracks, stress intensity factor, Theocaris (P.S.), Milios (J.), *475*
- dynamic contact, gear teeth, Smith (J.D.), *1308*
- containment, reactor structures, structural analysis, Jaeger (T.A.) eds., Boley (B.A.), *1465, book*
- caustics, crack arrest, crack propagation, plates, Theocaris (P.S.), Milios (J.), *2451*
- duhamel's integral, floors, stress analysis, Becker (R.), *2541*
- film thickness, gears (spur), lubrication (elastohydrodynamic), surfaces, temperature, Wang (K.L.), Cheng (H.S.), *2561*
- gear teeth, gear trains, transmissions, Birjukov (L.V.), Krusev (S.D.), *2563*
- steel, tensile strength, tests, Kalner (D.A.), Basin (F.I.), *3497*
- gear trains, runge kutta method, transmissions (planetary), Jarchow (F.), Vonderschmidt (R.), *3575*
- bridges (highway), vehicles, Gupta (R.K.), *4438*
- charpy tests, crack resistance, fracture toughness, steel, strain energy, Basko (E.M.), Makhutov (N.A.), *4519*
- inelasticity, space frames, Uzgider (E.A.), *4540*
- containers (partially filled), excitation, fluid-structure interaction, membranes, sloshing, Bauer (H.F.), *4661*
- deformation, plates, reinforced bodies, slabs, Parker (D.F.), *6198*
- glass fibers, materials processing, textiles, Ko (F.), Bruner, (et al.), *6200*
- finite element techniques, shells (of revolution), Feijoo (R.A.), Jospin (R.J.), (et al.), *6235*
- railroad cars, statically indeterminate structures, substructuring, trains (railroad), vehicles, Balogh (V.), *6499*
- beams, deformation (plastic), materials properties, reinforced concrete, Popov (N.N.), Rastorguev (B.S.), (et al.), *6521*
- explosions, walls, Zhdan (S.A.), *7434*
- cyclic loading, dynamic stability, shells (conical), Massalas (C.), Dalamangas (A.), (et al.), *8273*
- adhesives, blades, bonding, steam turbines, strain gages, Petrie (E.M.), *8427*
- design, landing gears, longitudinal stability, stabilization, Allen (R.R.), O'Massey (R.C.), *8462*
- damping, design, gears (spur), runge kutta method, stiffness, Kasuba (R.), Evans (J.W.), *8471*
- aerodynamic performance, airplanes, flexible bodies, modeling, structural response, Perry (B.) III, Kroll (R.I.), (et al.), *8647*
- drilling, experimental results, impact, rocks, Goldsmith (W.), Wu (W.-Z.), *9370*
- misalignment, rolling, Kozachok (A.A.), *9473*
- design (optimum), pressurized pipes, reinforced bodies, reinforced concrete, Heinloo (M.), Kaliszky (S.), *10349*
- beams (timoshenko), deflections, design, gear teeth, transmissions, Nagaya (K.), Uematsu (S.), *10372*
- design, gear teeth, surface profiles, Hidaka (T.), Terauchi (Y.), (et al.), *10373*

dynamic plasticity, radial loading, tubes, Nakazawa (Y.), Yaji (S.), (et al.), *1302*
- crystals, shear loading, strain rate, Chiem (C.Y.), Duffy (J.), *2236*
- plasticity, shakedown structures, Auconi (F.), *8087*

dynamic programming, algorithms, maintenance, operations research, process control, Berzilovich (Ye.Yu.), Pavlenko (M.I.), (et al.), *1149*
- nonlinear systems, rotating bodies, time optimal systems, Akulenko (L.D.), *2089*
- air traffic control, airplanes, algorithms, control, Ben-Avraham (O.), Tabak (D.), *2181*
- optimal control, synthesis, terminal control, Akulenko (L.D.), *4288*
- bellman function, linear systems, optimal control, Drozdov (A.D.), *4299*
- algorithms, equipment replacement, optimal control, Evlanov (L.G.), Trubitsin (O.N.), *4309*
- algorithms, stochastic control, suboptimal control, synthesis, Batkov (A.M.), Grinchenko (S.T.), *6145*
- design (optimum), foundations, walls, Ladany (S.P.), *6511*
- computing techniques, linear programming, nonlinear programming, optimization, Rao (S.S.), *7177, book*
- optimization, penalty function, Rosenman (M.A.), Radford (A.D.), (et al.), *7178*
- decision theory, linear systems, optimization, time invariant systems, Hess (J.), Kagiwada (H.), (et al.), *8175*
- beams (cantilever), beams (variable cross section), design (optimum), Hamada (M.), Seguchi (Y.), (et al.), *8444*
- artificial satellites, optimal control, rigid bodies, Akulenko (L.D.), *9818*
- differential equations (partial), stochastics, Bensoussan (A.), Lions (J.-L.), *10022*
- decision theory, differential equations (partial), smoothing of data, transforms, Angel (E.S.), *10023*
- perturbation theory, stochastics, variational methods, Hopkins (W.E.) Jr., Blankenship (G.L.), *10027*
- algorithms, filters, image processing, nonlinear systems, signal processing, Scharf (L.L.), Elliott (H.), *11064*
- algorithms, multiobjective methods, numerical methods, Chankong (V.), Haimes (Y.Y.), (et al.), *11083*
- algorithms, control, reservoirs, Sniedovich (M.), *11085*

dynamic properties, compression, elastoplasticity, experimental results, metals, shock waves (normal), Astanin (V.V.), *399*
- human body, mass determination, measurements (dynamic), zero g phenomena, Sarychev (V.A.), Sazonov (V.V.), (et al.), *1064*
- mathematical methods, strings, vibration (nonlinear), Faulkner (M.G.), Mioduchowski (A.), (et al.), *1271*
- approximations, foundations, stiffness, Kitamura (Y.), Sakurai (S.), *1284*
- seismic loading, shock, vibration (forced), Polyakov (V.S.), *1286*
- rotating bodies, vibration, Wildheim (J.), *1288*
- metals, shock waves (normal), strain rate, Meyers (M.A.) eds., Murr (L.E.), *1299, book*
- nonlinear mechanics, vibration (nonlinear), Hagedorn (P.), *2314, book*
- dissipation, friction, vibration (forced), Plakhtienko (N.P.), *2316*
- damping, random loading, Kameswara Rao (C.V.S.), *2319*
- drilling, rods, vibration (forced), Carlvik (I.), *2340*
- elastic constants, mechanical properties, polymers, vibration, Mertz (K.), *2490*
- crystals, piezoelectrics, shock, single crystals, Novitskii (E.Z.), Korotchenko (M.V.), (et al.), *2499*
- biomechanics, bones, experimental methods, Frasca (P.), Harper (R.A.), (et al.), *3073*
- kinematics, vibration (free), Buculei (M.), Marghitu (D.), (et al.), *3081*
- kinematics, mechanisms, Meyer Zur Capellen (W.), Meyer Zur Capellen (F.), *3094*
- flexible bodies, structural response, vibration, Wodzicki (W.), *3349*
- pendulums, polymers, ropes, torsion, transducers (displacement), Rind (E.), Bryant (E.L.), *3510*

- measurements (dynamic), trucks, Krisper (G.), Reichweger (J.), (et al.), *4145*
- beams, vibration (free), Sundara Raja Iyengar (K.T.), Raman (P.V.), *4420*
- friction (sliding), vibration, Ivlev (V.I.), *5190*
- random loading, vibration (random), Fitzpatrick (J.A.), *5192*
- nonlinear analysis, vibration (random), wave interactions, Gurbatov (S.N.), *5193*
- shells (cylindrical), shells (of revolution), shells (stiffened), vibration, Moshenskii (N.L.), *5219*
- shear strength, soils, swell, Au (W.-C.), Chae (Y.S.), *5252*
- contact stresses, friction (rolling), rubber, tires, Sakai (H.), *5367*
- dislocations, Janszky (J.), *5522*
- bearings (hydrodynamic), finite element methods, reynolds equation, rotors, Birembaut (Y.), Peigney (J.), *5997*
- damping, vibration (nonlinear), Peleg (K.), *6274*
- experimental mechanics, vibration, Jahn (K.-D.), *6284*
- elastic constants, plates (annular), vibration (free), Elek (K.), Granat (J.), (et al.), *6298*
- experimental mechanics, gear trains, vibration (forced), Drago (R.J.), Brown (F.W.), *7414*
- continuous systems, diagnostics, reliability analysis, Mironovskii (L.A.), *8174*
- control, dynamic analysis, feedback, rotating bodies, rotors, vibration, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- high temperature, hopkinson bar, metals, shock waves, Tsoi (P.A.), Novikov (S.A.), (et al.), *8890*
- plates (stiffened), vibration (free), Aksu (G.), *9310*
- plates (reinforced), vibration (free), Fox (D.W.), Sigillito (V.G.), *9311*
- shells (conical), vibration (torsional), Tomar (J.S.), Gupta (D.C.), (et al.), *9318*
- reinforced concrete, shells (thick), spherical bodies, transient loading, Bak (G.), *9320*
- damping, eigenvalues, vibration (torsional), Doughty (S.), *9323*
- impact, materials properties, strain rate, Zukas (J.A.), Nicholas (T.), (et al.), *9350*
- elastic waves, porous media, stratification, waves, Barzam (V.A.), *9897*
- mathematical methods, sensitivity, transient loading, Ehle (P.E.), Haug (E.J.), *10008*
- beams, rotary inertia, shear, vibration (free), Doyle (J.F.), *10199*
- shells (cylindrical), vibration (free), Barron (R.), Villanueva (C.), *10212*
- experimental results, impact, rods, strain rate, Sengupta (A.K.), Wigglesworth (C.J.), (et al.), *10241*
- controllability, identification, linear systems, observability, structural response, Udwadia (F.E.), *11048*
- adaptive systems, one-armed bandit, optimal control, Kumar (P.R.), Seidman (T.I.), *11091*

dynamic response, approximation methods, large scale systems, mathematical models, Lamba (S.S.), Rao (S.V.), *183*

- beams, vibration, Fossman (R.), Sorensen (A.) Jr., *365*
- plates (stiffened), vibration (free), Lesnichaya (V.A.), Manevich (L.I.), *370*
- plates (anisotropic), plates (holed), vibration (forced), Tyagi (G.C.D.), Chadha (C.C.), *371*
- flexural waves, shells (cylindrical), vibration, wave engines, Fuller (C.R.), *374*
- eigenvalues, shells (cylindrical), vibration (free), El Raheb (M.), Babcock (C.D.) Jr., *376*
- rotating shafts, vibration (torsional), Pouyet (J.M.), Lataillade (J.L.), *379*
- nuclear reactors, vibration (flow induced), Wambsganss (M.W.), Mulcahy (T.M.), *383*
- elastic foundations, piles, vibration (forced), Aboul-Ella (F.), Novak (M.), *386*
- damping, vibration isolation, Hundal (M.S.), *390*
- damping, tubes, two phase flow, virtual mass, Carlucci (L.N.), *391*
- seismic loading, structural analysis, vibration, Kana (D.D.), *393*
- substructuring, vibration, Nelson (F.C.), *394*
- elastic waves, shells (stiffened), Mikhailov (A.M.), *397*
- dynamic analysis, protective devices, Kozhevnikov (S.N.), Nuribekov (I.A.-G.), *512*
- beams, impact, nonlinear structures, transient loading, Meredith (D.), Morman (K.N.) Jr., (et al.), *514*
- noise, noise (random), random excitation, Kiureghian (A.D.), *517*
- excitation, noise (random), random excitation, Gasparini (D.A.), Debchaudhury (A.), *518*
- bridges (box girder), cable stayed bridges, wind loads, Smith (I.J.), *519*
- railroads, springs, vehicles, Carman (R.W.), Kieres (K.C.), *532*
- aerospace vehicles, modal analysis, Niedbal (N.), *533*
- elastodynamics, hyperelastic materials, tubes, vibration (forced), vibration (free), Rogers (C.), Baker (J.A.), *1262*
- nonlinear theory, vibration (parametric), vibration (self excited), Tondl (A.), *1265*
- electrodynamics, ferroelectric devices, power generation, Hodgdon (M.L.), *1266*
- cables, power generation, shock, transmission lines, vibration, Dubey (R.N.), Sahay (C.), *1272*
- beams, shock absorbers, Bratt (J.F.), *1273*
- plates (sandwich), vibration (random), Ramachandra Reddy (C.V.), Ganesan (N.), (et al.), *1282*
- calibration, shock, transducers, vibration, Bouche (R.R.), *1289, book*
- cavities, sh waves, stress concentration, Wall (D.J.N.), Varadan (V.V.), (et al.), *1306*
- design (optimum), guideways, vehicles, Minnetyan (L.), Nelson (R.B.), (et al.), *1457*
- reactor structures, seismic loading, Jaeger (T.A.) eds., Boley (B.A.), *1463, book*
- computer programming, curve fitting, interpolation, linear systems, Collings (A.G.), Saunders (L.R.), *2050*
- computer programming, data analysis, fortran program, statistical theory, Maine (R.E.), *2055*
- beams, vibration (nonlinear), Watanabe (T.), *2315*
- random excitation, vibration (random), Kropac (O.), *2321*
- beams (elastic), vibration (nonlinear), Ichikawa (Y.H.), Konno (K.), (et al.), *2328*
- blades, rotors, vibration, Shaw (J.), Albion (N.), *2337*
- approximations, cylindrical bodies, El-Raheb (M.), Babcock (C.D.) Jr., *2338*
- nonlinear mechanics, rotating shafts, vibration (forced), Yamamoto (T.), Ishida (Y.), (et al.), *2341*
- soil structure interaction, structural response, Harada (T.), Kubo (K.), (et al.), *2345*
- plates, soil structure interaction, Savidis (S.A.), Richter (T.), *2346*
- motorcycles, simulation, vehicles, Black (S.H.), Taylor (D.L.), *2353*
- beams (flexural), pumps, vibration (forced), Stecco (S.S.), Janigro (A.), *2358*
- numerical methods, plates, Nikiforovskii (V.S.), Tetenov (E.V.), (et al.), *2377*
- dynamic behavior, vehicles, Willumeit (H.-P.) ed., *2546, book*
- arteries, cell behavior, muscles, shear stress, Dewey (C.F.) Jr., Bussolari (S.R.), (et al.), *3065*
- conveyors, particle dynamics, vibration (forced), Kogan (E.A.), *3342*
- damping, optimization, Oledzki (A.), *3348*
- networks, perturbation methods, ropes, vibration (nonlinear), Ivovich (V.A.), *3351*
- beams, geometric nonlinearities, vibration (forced), Masri (S.F.), Mariamy (Y.A.), (et al.), *3355*
- damping, dissipation, mathematical models, Pisarenko (G.S.), Boginich (O.E.), *3362*
- plates, shock waves, transient effects, vibration (forced), Coleby (J.R.), Mazumdar (J.), *3365*
- blades, turbomachinery, vibration (forced), vibration (random), Huang (W.-H.), *3368*
- dynamic stability, rotating shafts, stability theory, vibration (forced), Iwatsubo (T.), Kawai (R.), (et al.), *3372*
- elastic foundations, soil structure interaction, vibration (forced), Iguchi (M.), Luco (J.E.), *3375*
- rails, soil structure interaction, vibration (free), Moritoh (Y.), *3376*
- structural response, vibration (torsional), wind loads, Foutch (D.A.), Safak (E.), *3378*
- masonry, structural response, vibration (forced), Benedetti (D.), Castellani (A.), *3379*
- bridges (highway), vibration (forced), Gangarao (H.V.S.), Haslebacher (C.A.), *3383*
- automobiles, dissipation, highways, roughness, Velinsky (S.A.), White (R.A.), *3384*
- coatings, damping, tubes, vibration (free), Vinogradov (B.D.), Chernoberevskii (V.V.), *3388*
- axial loading, frames, Ovunc (B.A.), *3547*
- floating structures, offshore structures, random loading, wave loads, Etok (E.U.), Kirk (C.L.), *3556*
- fatigue, foundations, loads, offshore structures, resonance, Smith (I.M.), Molenkamp (F.), *3558*
- damping, design, drag, fluid-structure interaction, offshore structures, Fish (P.R.), Dean (R.B.), (et al.), *3559*
- pressure distribution, vehicles, vehicles (tracked), Garber (M.), Wong (J.Y.), *3561*
- rails, stability derivatives, wheels, Burton (T.D.), *4147*
- nonlinear mechanics, random excitation, vibration (random), Kimura (K.), Sakata (M.), *4405*
- random excitation, vibration (nonlinear), Dimentberg (M.F.), *4406*
- cables, vibration (forced), Geschwindner (L.F.) Jr., West (H.H.), *4409*
- beams, vibration (free), Westermo (B.D.), *4410*
- dynamics, matrices, mechanisms (planes), Dranga (M.), Manolescu (N.I.), *4551*
- kinematics, railroads, steering, Bell (C.E.), Hedrick (J.K.), *4940*
- kinematics, railroads, wheels, De Pater (A.D.), *4941*
- vibration (forced), vibration isolation, Bishop (R.E.D.), Mahalingam (S.), *5188*
- rods, shear stress, vibration, wave equations, Kiyasbeili (T.N.), *5207*
- damping, rotating bodies, vibration (forced), Matveev (V.V.), Zinkovskii (A.P.), *5214*
- shells (cylindrical), shells (shallow), vibration (free), Emmerling (F.A.), Kloss (R.A.), *5218*
- shells (cylindrical), shells (stiffened), vibration (free), Amiro (I.Ya.), Palamarchuk (V.G.), *5223*
- finite element methods, ship structures, vibration (forced), Camisetti (C.), Macco (A.), (et al.), *5229*
- fracture toughness, mathematical methods, nondestructive tests, ultrasonics, Fu (L.S.), *5315*
- towers, wind loads, Musio (G.), *5362*

- dynamic analysis, gyrodynamics, Liu (Y.-Z.), *6058*
- pendulums, vibration (nonlinear), vibration (parametric), Khue (L.N.), *6275*
- cables, vibration (free), Rosenthal (F.), *6285*
- cables, finite difference methods, vibration (free), Rega (G.), Luongo (A.), *6287*
- dynamic analysis, marine risers, modal analysis, ocean, vibration (forced), Kirk (C.L.), Etok (E.U.), (et al.), *6291*
- plates, vibration (free), Kuttler (J.R.), Sigillito (V.G.), *6292*
- acoustic loading, ducts, rods, vibration (forced), Lin (W.-H.), *6308*
- foundations, vibration (forced), vibration (torsional), Sankaran (K.S.), Krishnaswamy (N.R.), (et al.), *6310*
- automobiles, stability theory, trailers, Mikulcik (E.C.), *6312*
- frames, motorcycles, structural response, vehicles, Verma (M.K.), Scott (R.A.), (et al.), *6313*
- machinery, tools, vibration (self excited), Soavi (F.), *6315*
- tubes, viscoelastic waves, Moodie (T.B.), Haddow (J.B.), (et al.), *6339*
- moving loads, shells (cylindrical), shells (sandwich), Pozhuev (V.I.), *6344*
- cooling towers, vibration (free), Nelson (R.L.), *6522*
- cable stayed bridges, experimental mechanics, structural response, Augusti (G.), Chiarugi (A.), (et al.), *6524*
- damping, inertia, offshore structures, Eatock Taylor (R.), Duncan (P.E.), *6540*
- oscillations, roughness, vehicles, Hammond (J.K.), Harrison (R.F.), *6543*
- boundary integral methods, condensation, pressure vessels, reactor structures, shells (spherical), steam, Krieg (R.), Goller (B.), (et al.), *6549*
- cables, electric power, towers, vibration (forced), wind loads, Matheson (M.J.), Holmes (J.D.), *6872*
- foundations, seismic loading, Adeli (H.), Hejazi (M.S.), (et al.), *7032*
- multiple degree of freedom, random loading, seismic loading, Der Kiureghian (A.), *7038*
- gyrodynamics, rotating bodies, Bogaevskii (V.N.), Ostrer (L.A.), *7149*
- experimental mechanics, railroads, trains (railroad), Fries (R.H.), Cooperrider (N.K.), (et al.), *7151*
- buildings (tall), experimental mechanics, vibration (nonlinear), Masri (S.F.), Bekey (G.A.), (et al.), *7367*
- random excitation, vibration (random), Robson (J.D.), *7373*
- elastic behavior, vibration (parametric), Bolotin (V.V.), *7376*
- cables, experimental mechanics, networks, Argyris (J.H.), Aicher (W.), (et al.), *7380*
- filaments, vibration (free), Kurkin (V.I.), Medvedev (S.A.), *7382*
- beams, elastic behavior, seismic loading, Neubert (V.H.), Rangaiah (V.P.), *7383*
- beams (timoshenko), laplace transform, transient effects, Huntley (E.), Zinober (A.S.I.), *7385*
- inertia, plates (circular), plates (sandwich), vibration (free), Markus (S.), Nanasi (T.), *7391*
- rotating bodies, vibration (nonlinear), Adams (M.L.), *7403*
- elastoviscoplasticity, laminates, nonlinear analysis, work hardening, Aboudi (J.), Benveniste (Y.), *7407*
- finite element methods, long duration exposure facility, vibration (free), Edighoffer (H.H.), Sewall (J.L.), *7411*
- optimization, vibration isolation, Warburton (G.B.), *7416*
- dynamic analysis, finite element methods, structural response, Nack (W.V.), *7417*
- elasticity (nonlinear), existence theorems, nonlinear theory, uniqueness, Vilke (V.G.), *7424*
- damping, plasticity, plates, Kumar (A.), Hegde (M.), *7426*
- frequency domain techniques, gravity platforms, offshore structures, stochastic processes, vibration (random), wave loads, Sigbjornsson (R.), Smith (E.K.), *7614*
- automobiles, dynamic stability, maneuverability, steering, El-Gindy (M.), Ilosvai (L.), *7616*
- friction, piles, soil structure interaction, vibration, Akiyoshi (T.), *8014*
- approximation methods, vibration (random), Dobrynin (S.A.), Feldman (M.S.), *8285*
- cavities, damping, friable media, vibration (viscoelastic), Briskin (E.S.), *8286*
- harmonic balance, stability theory, Takahashi (K.), *8288*
- stability theory, vibration (parametric), Noah (S.T.), Hopkins (G.R.), *8289*
- beams, vibration isolation, Davidson (P.B.), Vance (O.L.), *8292*
- beams, flexure, thin walled structures, vibration (forced), Voveris (A.V.), Kalinin (V.S.), *8296*
- control, elastic bodies, mathematical methods, plates, Leipholz (H.H.E.), *8302*
- edge effects, plates (rectangular), vibration (forced), Mukhopadhyay (M.), *8309*
- bonding, elastic foundations, shells (cylindrical), Chonan (S.), *8313*
- plates (thick), vibration (free), Fridman (L.I.), *8315*
- friction, nonlinear characteristics, vibration isolation, Dragani (R.), Sarra (M.), *8325*
- seismic loading, soils, vibration, Gazetas (G.), *8349*
- modal analysis, piping systems, seismic loading, Krause (G.), *8467*
- conical bodies, ducts (variable area), frequency domain techniques, unsteady flow, Muto (T.), Kinoshita (Y.), (et al.), *8574*
- electromechanical components, mathematical methods, motors, startup, Myklebust (A.), *9087*
- eigenvalues, vibration (free), Soriano (H.L.), *9303*
- shock, transient effects, Krupenin (V.L.), *9305*
- beams, elastic foundations, moving loads, vibration (free), Apaydin (T.A.), *9328*
- floating bodies, ship structures, Kaul (M.K.), *9460*
- flexible bodies, rigid bodies, stiffness matrix, Huston (R.L.), *10012*
- vibration (forced), vibration (self excited), Asfar (K.R.), Nayfeh (A.H.), (et al.), *10190*
- elastic bodies, parallelepipeds, vibration (forced), Hill (E.V.K.), Egle (D.M.), *10200*
- bending (viscoplastic), blades, dynamic testing, matrix methods, steam turbines, Nahlik (A.), Pastia (A.), *10209*
- damping, shells (cylindrical), vibration (forced), Leissa (A.W.), Iyer (K.M.), *10213*
- balancing, flexible bodies, rotating shafts, Van De Vegte (J.), *10217*
- bearings (journal), rotating shafts, Prabhu (B.S.), Rao (B.V.A.), *10218*
- balancing, flexible bodies, rotating shafts, torque, Markert (R.), Pfutzner (H.), (et al.), *10220*
- computing techniques, stiffness matrix, Bahar (L.Y.), Law (G.E.), *10223*
- shock, structural analysis, vibration, Wiss (J.F.), *10225*
- crack opening displacement, finite element techniques, stress intensity factor, yield criteria, Betser (A.A.), Kobayashi (A.S.), (et al.), *10302*
- buckling, nonlinear analysis, snap-through, structural analysis, Kamat (M.P.), Hayduk (R.J.), *10362*
- heat exchangers (crossflow), mathematical models, numerical methods, weighted residual methods, Terasaka (H.), Kanoh (H.), (et al.), *10618*
- gust loads, magnetic levitation, modeling, suspension systems, vehicles, wind loads, Garg (D.P.), Barrows (T.M.), *10768*
- bearings (roller), kinematics, Savage (M.), Loewenthal (S.H.), *10929*
- axial turbines, blades, rotating disks, vibration, Michimura (S.), Nagamatsu (A.), (et al.), *11130*
- statistical design, vibration (forced), Tanaka (K.), Onishi (H.), (et al.), *11151*
- critical speed, rotating disks, vibration, Hinkel (H.M.), *11153*
- impulsive loading, nonlinear systems, Tumanov (Yu.A.), Lavrov (V.Yu.), (et al.), *11332*

dynamic stability, gyroscopic stabilization, perturbation methods, Kuzmina (L.K.), *15*

- follower forces, nonconservative systems, Bailey (C.D.), Haines (J.L.), *355*
- shells (cylindrical), shells (stiffened), springs, Palamarchuk (V.G.), *356*
- damping, vibration, Schneider (J.), *362*
- rigid bodies, rotating bodies, Chudnenko (A.N.), *1068*
- airplanes, mathematical models, trajectories, Young (J.W.), Schy (A.A.), (et al.), *1161*
- rails, vibration (parametric), wheels, Korb (J.), *1986*
- hamiltonian equations, stability theory, Leipholz (H.H.E.), *1987*
- gyrodynamics, spinning bodies, Singh (S.N.), *1988*
- eigenvalues, elastodynamics, Chelomei (S.V.), *2322*
- articulated structures, pipe flow, pipelines, vibration (parametric), Rousselet (J.), Herrmann (G.), *2719*
- bearings, damping, rotors, Lund (J.W.), *3053*
- beam columns, buckling (plastic), plastic behavior, Lepik (U.), *3340*
- dynamic response, rotating shafts, stability theory, vibration (forced), Iwatsubo (T.), Kawai (R.), (et al.), *3372*
- nonlinear structures, structural stability, vibration (torsional), Antonelli (R.G.), Meyer (K.J.), (et al.), *3377*
- buckling, hinged bodies, moving loads, portal frames, Zaslavsky (A.), *3541*
- aerodynamic loads, aeroelasticity (dynamic), bridges (suspension), Petre (A.), Sofronie (R.), *3910*
- automobiles, brakes, El-Gindy (M.), Ilosvai (L.), *4148*
- mathematical methods, nonlinear mechanics, splines, Jain (M.K.), *4149*
- stability theory, Thompson (J.M.T.), *4390*
- beams, vibration (forced), Guzev (V.V.), Nagaev (R.F.), *4419*
- helicopters, rotating bodies, Yen (J.G.), Mclarty (T.T.), *4439*
- lateral stability, vehicles, Huston (J.C.), Johnson (D.B.), *4546*
- bearings (journal), bearings (tilted pad), perturbation methods, Allaire (P.E.), Parsell (J.K.), (et al.), *4901*
- kinematics, mathematical methods, Karapetian (A.V.), *4938*
- stability theory, vibration (parametric), Takahashi (K.), *5195*
- ditching, helicopters, impact, ocean, Daidola (J.C.), Graham (D.A.), (et al.), *5368*
- bearings (journal), dynamic behavior, lubrication (hydrodynamic), Li (C.-H.), Rohde (S.M.), *5981*
- gyrodynamics, rotating bodies, Kovalev (A.M.), *6057*
- joints, stability theory, vibration (torsional), Kotera (T.), *6280*
- currents, cylindrical waves, fluid-structure interaction, Lee (T.S.), *6702*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), rotors, Gudskaya (E.G.), *7101*
- rails, vehicles, Bell (C.E.), Horak (D.), (et al.), *7146*
- differential equations (ordinary), structural analysis, Liubushin (E.A.), *7147*
- plates (anisotropic), plates (annular), torsion, Tani (J.), *7359*
- buckling, nonlinear analysis, shells (cylindrical), Brendel (B.), Ramm (E.), *7360*
- imperfections, impulsive loading, shells (cylindrical), transient loading, Zimcik (D.G.), Tennyson (R.C.), *7361*
- automobiles, dynamic response, maneuverability, steering, El-Gindy (M.), Ilosvai (L.), *7616*
- ship design, ship structures, Langenberg (H.), *7617*
- pipe flow, vibration (flow induced), Thompson (J.M.T.), Lunn (T.S.), *7773*

- shells (cylindrical), shells (thin), Sachenkov (A.V.), Bakhtieva (L.U.), *8270*
- cyclic loading, dynamic loads, shells (conical), Massalas (C.), Dalamangas (A.), (et al.), *8273*
- cyclic loading, shells (cylindrical), Shirakawa (K.), *8274*
- centrifugal compressors, rotors, unsteady flow, Vance (J.M.), Laudadio (F.J.), *8655*
- rotating bodies, wheels, Goncharenko (V.I.), Lobas (L.G.), (et al.), *9088*
- rotating bodies, spinning bodies, vibration (self excited), Rimrott (F.), *9089*
- columns, design (optimum), Hanaoka (M.), Washizu (K.), *9441*
- cams, oscillators, resonance, Cronin (D.L.), Labouff (G.A.), *9468*
- deaerators, liquid gas mixture, power plants, storage, tanks, Cranfield (R.R.), Wilkinson (D.H.), *9625*
- buckling, follower forces, lyapunov's functions, plates, Leipholz (H.H.E.), *10175*
- shells (cylindrical), shells (viscoelastic), thin walled structures, Koltunov (M.A.), Karimov (A.I.), (et al.), *10181*
- boilers, channel flow, liquid vapor mixture, vibration, Vlasov (S.M.), Ratnikov (E.F.), (et al.), *10486*
- guyed structures, structural stability, towers, Irvine (H.M.), O'Sullivan (M.J.), *11118*
- arches, frames, shells (cylindrical), Simitses (G.J.), Sheinman (I.), *11124*
- buckling, impact, plates (rectangular), Ari-Gur (J.), Singer (J.), (et al.), *11125*
- rotating shafts, vibration, Iwatsubo (T.), Okaue (M.), (et al.), *11141*
- crossflow, tube bundles, vibration (flow induced), Chen (S.S.), Jendrzejczyk (J.A.), *11647*
- fluid-structure interaction, incompressible flow, panels, Matsuzaki (Y.), *11651*
- crossflow, fluid-structure interaction, tube bundles, vibration (flow induced), Tanaka (H.), Takahara (S.), *11655*
- articulated structures, damping, pipe flow, vibration (flow induced), Sugiyama (Y.), Noda (T.), *11685*
- annular flow, hydroelasticity, pipelines, Kozarov (M.), Mladenov (K.), *11687*
- bodies (liquid filled), damping, rotors, Hendricks (S.L.), *11688*
- buoys, gravity waves (breaking), scale models, Nath (J.H.), Chester (S.T.), (et al.), *11695*

dynamic stresses, composite materials, fibers, rupture, Moskvitin (V.V.), Ovchinskii (A.S.), *285*
- blades, rotating bodies, vibration (free), Ramamurti (V.), Sreenivasamurthy (S.), *372*
- computer aided design, mathematical models, wind turbines, Kaza (K.R.V.), Janetzke (D.C.), *866*
- composite materials, fibers, fracture, Sakharova (E.N.), Ovchinskii (A.S.), *1210*
- impact, photoviscoelasticity, propagation, time dependence, Arenz (R.J.), Soltesz (U.), *1391*
- creep, glass fibers, laminates, Sarkisian (N.E.), Martirosian (M.M.), (et al.), *4359*
- beams, flexural waves, vibration, Hirano (Y.), Nagaya (K.), (et al.), *5204*
- acoustic waves, flexural waves, plates, reflection, shear, wave equations, Dubbelday (P.S.), Rudgers (A.J.), *5209*
- shells (cylindrical), vibration (forced), Ujihashi (S.), Itoh (A.), (et al.), *5221*
- diesel engines, failure, rotating shafts, vibration (torsional), Pasricha (M.S.), Carnegie (W.D.), *6303*
- experimental mechanics, ice mechanics, Maattanen (M.), *6309*
- beams (cantilever), damping, vibration (forced), Kume (Y.), Hashimoto (F.), (et al.), *7375*
- conical bodies, shock, vibration (torsional), Brepta (R.), Trnka (J.), *7386*
- cavities, elastic foundations, inclusions, punch problems, Kozhabekov (Zh.T.), *7409*
- beams, elastic foundations, vibration (free), Dresig (K.F.H.), Labes (M.), *8299*
- flow measurement, testing equipment, transducers, turbomachinery, Krause (L.N.), Fralick (G.C.), *10731*
- shells (cylindrical), shells (sandwich), vibration (nonlinear), Ertepinar (A.), Mengi (Y.), *11134*
- heat shields, mathematical models, space shuttle, vibration (random), Doyle (G.R.) Jr., *11155*
- cavitation, pressure, Overton (G.D.N.), Trevena (D.H.), *12034*

dynamic testing, measurements (dynamic), rails, wheels, Ahlbeck (D.R.), Harrison (H.D.), *16*
- experimental methods, vibration isolation, Walker (W.R.), *384*
- dynamic behavior, transducers (displacement), Wedzicha (B.L.), Miles (R.E.), *489*
- accelerometers, calibration, frequency response, Yu (Z.-M.), Li (W.-L.), (et al.), *1269*
- strain gages, strain measurement, thermal effects, Bagaria (W.J.), Sharpe (W.N.) Jr., *2479*
- experimental mechanics, holography, interferometry, vibration, Hazell (C.R.), *4437*
- elastoplasticity, shakedown structures, vibration, Ceradini (G.), *4513*
- internal combustion engines, measurements (dynamic), noise, Tschoke (H.), *4741*
- mechanical properties, plasticity, steel, strain, tension, Novikov (N.V.), Ulyanenko (A.P.), (et al.), *6475*
- stiffness matrix, vibration, Baruch (M.), *9329*
- dielectrics, transducers, vibration, Vomel (M.), *9331*
- cement stabilized soils, compression, concrete, elastic constants, soils, statics, tension, Kolias (S.), Williams (R.I.T.), *9427*
- bending (viscoplastic), blades, dynamic response, matrix methods, steam turbines, Nahlik (A.), Pastia (A.), *10209*
- airplane performance, derivatives, dynamic analysis, modeling, Stalford (H.L.), *10510*

dynamic viscoelasticity, impedance methods, viscoelasticity (dynamic), Martincek (G.), *261*
- creep, polymers, stress strain relationships, Bruller (O.S.), Kleinemeier (B.), *1191*
- constitutive equations, rayleigh problem, viscoelastic fluids, Soundalgekar (V.M.), Dasgupta (A.K.), *3589*

dynamics, constraints, continuum mechanics, differential geometry, discrete systems, Benenti (S.), Tulczyjew (W.M.), *1*
- bearings (liquid lubricated), rotors, vibration, Dowson (D.), Taylor (C.M.), *1029*
- bearings (gas lubricated), rotors, vibration, Marsh (H.), *1030*
- bibliography, bifurcation, mathematical methods, nonlinear mechanics, Holmes (P.J.) ed., *1072, book*
- asymptotic behavior, damping, oscillations, Philos (C.G.), Staikos (V.A.), *1080*
- displacement, fatigue, testing equipment, Balakovskii (O.B.), *2492*
- catalyzed ignition, kinetics, Kapila (A.K.), *2859*
- modeling, nuclear reactors, transient effects, Khatib-Rahbar (M.), Cady (K.B.), *2873*
- differential geometry, hamiltonian equations, mathematical methods, *3095, book*
- differential equations (ordinary), glass, materials processing, melting, Kobayashi (M.), Hujisawa (T.), (et al.), *3424*
- bearings (magnetic), bearings (thrust), rotors, Ulbrich (H.), Schweitzer (G.), (et al.), *4115*
- contact problems, finite element techniques, mesh generation, Asano (N.), *4202*
- machine elements, pneumatic components, Gogrichiani (G.V.), *4549*
- dynamic response, matrices, mechanisms (planes), Dranga (M.), Manolescu (N.I.), *4551*
- equations of motion, optimization, variable mass, Apykhtin (N.G.), Iakovlev (V.F.), *4757*
- bearings (foil), bearings (gas lubricated), high speed, rotors, Licht (L.), Anderson (W.J.), (et al.), *4905*
- hamiltonian equations, lyapunov's functions, stochastic systems, Benettin (G.), Galgani (L.), (et al.), *4954*
- cell-to-cell mapping, computer programming, nonlinear mechanics, probability theory, Hsu (C.S.), *4984*
- reliability, rigid bodies, Schrader (K.H.), *5036*
- airplane structures, crash dynamics, safety, Wittlin (G.), *5369*
- gravity, relativity, Anderson (I.M.), *6046*
- contact transformation, group theory, hamiltonian equations, n body problems, Bryant (J.), *6873*
- bifurcation, diffusion, reactors, stability theory, Pao (C.V.), *7173*
- computer algebra, navier stokes equation, Howard (J.C.), *7181, book*
- eigenvalue problems, finite element techniques, structural analysis, Papadrakakis (M.), *7194*
- linkages, mechanisms (spatial), screws, vector methods, Keler (M.L.), Beran (M.A.), *7626*
- cams, design, linkages, mechanisms, Kwong (C.W.), Wiederrich (J.L.), (et al.), *7627*
- bearings (tilted pad), lubrication (hydrodynamic), rotors, Malik (M.), Sinhasan (R.), *8059*
- bearings, rotors, turbomachinery, Fleming (D.P.), *8068*
- existence theorems, large scale systems, limit cycles, Skar (S.J.), Miller (R.K.), (et al.), *8103*
- asymptotic behavior, matched asymptotic expansions, nonconservative systems, oscillations, relaxation, van der pol equation, Grasman (J.), *8106*
- control, space vehicles, spinning bodies, Juang (J.N.), Balas (M.J.), *8852*
- bearings (tilted pad), design, high speed, rotors, Martelli (F.), Manfrida (G.), *9028*

Dynin (E.A.), dislocations, plasticity, shock waves (normal), *11158*

Dyshel (M.Sh.), buckling, cracks, fracture, plates, stability, tension, *7560*

Dyson (A.), cams, sliding, wear, *3040*

Dyson (B.F.), biaxial loading, cavities, compression, creep, modeling, tension, torsion, Verma (A.K.), (et al.), *4514*

Dysthe (K.B.), gravity waves (internal), gravity waves (surface), ocean waves, wave interactions, Das (K.P.), *1589*

Dyubua (P.P.), atmosphere, density, measurements, meteorology, temperature, Melnikov (A.N.), (et al.), *1920*

Dzene (I.Ya.), biological joints, bones, fracture, ultrasonics, Dzenis (V.V.), (et al.), *6032*

Dzenis (V.V.), see Dzene (I.Ya.), *6032*

Dzhafarov (E.M.), algorithms, mathematical programming, optimal control, regulator problem, Iskenderov (I.A.), *2155*

Dziecielak (R.), elastic waves, fluid injection, porous media, *5850*

Dziurski (A.), bearing capacity, bearings (roller), computer aided design, design, loads, Kania (L.), (et al.), *9977*

Dzugaev (V.V.), channel flow, conformal mapping, flow irregularities, separated flow, separation, *10436*

Dzygadlo (Z.), airplane performance, control, longitudinal stability, swept wings, Szendzielorz (C.), *1621*

- design (ultimate strength), numerical methods, plates, shells (axisymmetric), strength, Olejnik (A.), *10350*

Dzyuba (V.S.), see Tretyachenko (G.N.), *6265*

Dzyubenko (B.V.), ducts (curved), heat exchangers, pressure drop, swirl flow, Dreitser (G.A.), *787*
- see Vilemas (Yu.V.), *11490*
- augmentation, heat exchangers, heat transfer, tube bundles, viscous effects, leviev (V.M.), *11768*

E

Eagles (P.M.), cellular motions, convection (benard), thermal excitation, thermal instability, *5666*

ear, gravity, membranes, otolith membrane, Twizell (E.H.), *1950*
- biomechanics, cochlea, hydroelasticity, Holmes (M.H.), *1952*

Early (P.W.), crack propagation, finite difference methods, j-integral, Burns (S.J.), *2439*

Earnshaw (J.C.), see Byrne (D.), *11594*

earth, compressibility, phase changes, thermal expansion, Trubitsyn (V.P.), *964*
- boreholes, heat transfer, measurements, Yokota (T.), Kinoshita (H.), (et al.), *966*
- deformation, geodetic measurements, mantle, measurements, Kuchay (V.K.), Pevnev (A.K.), (et al.), *1878*
- alfven number, dispersion relation, magneto plasma dynamics, solar wind, Guleimi (A.V.), *2899, book*
- error, gravity, gravity anomalies, Tarakanov (Yu.A.), Cherevko (T.N.), *3006*
- convection, mantle, modeling, Dexiang (G.), Yinting (L.), (et al.), *3007*
- earth's crust, faults, sliding, stress concentration, viscoelasticity, Mukherji (P.), Pal (B.P.), (et al.), *4031*
- deformation, earth's crust, earthquake effects, Yunga (S.L.), *4032*
- computing techniques, gravity, gravity anomalies, three dimensional formulation, Kudrya (A.V.), *4033*
- elastic behavior, oscillations, rotating bodies, Molodenskiy (M.S.), *4035*
- magneto plasma dynamics, nonlinear waves, plasma, shock waves, Chang (T.T.S.), *5682*
- deformation, faults, stress analysis, Dravinski (M.), Trifunac (M.D.), *5864*
- error, magnetic field, magnetometers, measurements, Gu (Z.-M.), Huang (H.-I.), *5868*
- gravity, magnetic field, processing, Antonov (Yu.), *5871*
- attenuation, viscoelastic waves, Akopyan (S.Ts.), Zharkov (V.N.), (et al.), *5877*
- gravity, magnetic field, Strakhov (V.N.), *5878*
- gravimagnetic anomalies, gravity, inverse problems, magnetic field, Nikonova (F.I.), Tsurilskiy (A.V.), *5879*
- convection, mantle, Trubitsyn (V.P.), Vasilyev (P.P.), (et al.), *5882*
- gravity, gravity anomalies, optimization, Kobrunov (A.I.), *5887*
- gravity, mathematical models, Kozenko (A.V.), Maslov (I.A.), *7023*
- earthquakes, seismic waves, structure, Antonenko (A.N.), Dubrovin (G.K.), *7029*
- electromagnetic field, magnetic field, prospecting, Enenshteyn (B.S.), *7031*
- displacement, faults, Prescott (W.H.), *7998*
- continental drift, displacement, rotating bodies, Sconzo (P.), *7999*
- elasticity, magnetic field, tectonics, Sasai (Y.), *8000*
- earth's crust, magnetic field, mantle, Pecherskiy (D.M.), Nazarova (E.A.), (et al.), *8001*
- continental drift, displacement, magnetic field, paleomagnetism, Khramov (A.N.), *8002*
- oscillations, rotating bodies, Odaka (T.), *8005*
- mantle, modeling, stability, thermomechanical model, Gavrilov (S.V.), Zharkov (V.N.), *8006*
- density boundaries, elastic behavior, stress analysis, Trubitsyn (A.P.), Karasev (A.A.), *8007*
- approximation methods, gravimetrics, Strakhov (V.N.), *8009*
- gravity, heat transfer, transformation, Hagiwara (Y.), *8012*
- geoid anomalies, gravity, ocean, Mcadoo (D.C.), *8013*
- magneto fluid dynamics, modes, rotating bodies, spherical bodies, Gubbins (D.), *8816*
- energy conversion, geophysics, magneto fluid dynamics, models, Olson (P.), *8821*
- core-mantle boundary, mantle, reflection, seismic waves, Dey (S.), Addy (S.K.), *8954*
- in situ stress distribution, stress analysis, Nemirovsky (Yu.V.), Tyrymov (A.A.), *8956*
- creep, mantle, thermal waves, Birger (V.I.), Kovtunenko (S.M.), *9915*
- mantle, oscillating bodies, spherical waves, Odaka (T.), *11170*

earth dams, dams, displacement, settlements, Katzenbach (R.), Breth (H.), *521*
- earthquake effects, vibration, Abdel-Ghaffar (A.M.), Koh (A.-S.), *1880*

earth pressure, frozen ground, retaining walls, slopes, soil mechanics, Novikov (F.Ya.), *420*
- finite element methods, nonlinear programming, soil mechanics, Basudhar (P.K.), Vaisangkar (A.J.), (et al.), *3403*
- soils, Shankar (N.B.), *6392*
- granular media, retaining walls, Misra (B.), *6395*
- retaining walls, Phatak (D.R.), *7444*
- analytical methods, experimental results, soil mechanics, walls, Roth (W.H.), Crandall (L.), *9364*
- numerical methods, soil structure interaction, Gioda (G.), Jurina (L.), *9918*

earthquake effects, buildings, fatigue, floors, multistory frames, Wilson (J.C.), *970*
- dams, hydrodynamic pressure, Housner (G.W.), *971*
- dams, finite element methods, Priscu (R.), Stematiu (D.), (et al.), *972*
- earth dams, vibration, Abdel-Ghaffar (A.M.), Koh (A.-S.), *1880*
- buried structures, pipes, underground, Hindy (A.), Novak (M.), *1882*
- buildings, prestressed concrete, seismic waves, Thompson (K.J.), Park (R.), *1887*
- chimneys, elastoplasticity, Shiau (L.-C.), Yang (T.Y.), *1884*
- lifeline systems, reliability analysis, Tsuchiya (M.), Shibata (H.), *1885*
- prediction, spectra, Enescu (D.), Plavita (R.), *1886*
- nonlinear systems, vibration (random), Fujita (T.), Hattori (S.), *2320*
- shear walls, slabs, Paulay (T.), Taylor (R.G.), *3010*
- hydrodynamic pressure, ocean bed, submerged bodies, tanks, Tung (C.C.), *3011*
- deformation, earth, earth's crust, Yunga (S.L.), *4032*
- reliability design, Davidson (J.W.), Felton (L.P.), (et al.), *7034*
- lifeline systems, risk, Shinozuka (M.), Takada (S.), (et al.), *7035*
- fluids, oscillations, seismic loading, Seimov (V.M.), Trofimchuk (A.N.), *7039*
- cracking, dams, embankments, Lane (R.G.T.), *9365*
- dams, finite element techniques, pressure, reservoirs, Saini (S.S.), *9514*
- dams, dynamic analysis, vibration (nonlinear), Dungar (R.), *10189*

earthquake engineering, modeling, Anagnostopoulos (S.A.), *4037*
- buildings, safety, seismic loading, Aizenberg (Ya.M.), Neiman (A.I.), (et al.), *5894, book*
- columns, concrete, Seina (L.), Martin (I.), (et al.), *5895*
- buildings, Whitman (R.V.), Heger (F.J.), (et al.), *5896*
- nonlinear systems, Udwadia (F.E.), Kuo (C.-P.), *5898*
- dams, experimental mechanics, vibration (forced), Severn (R.T.), Jeary (A.P.), (et al.), *7608*

earthquake resistant structures, prediction, Sadovskiy (M.A.), Nersesov (I.L.), *5987*
- frames, multiple degree of freedom, stiffness, Capecchi (D.), Rega (G.), (et al.), *7040*
- isolation, wind loads, Kelly (J.M.), Chitty (D.E.), *7046*
- inelasticity, spectra, Lai (S.-S.P.), Biggs (J.M.), *7047*
- bearings, damping, rubber, Derham (C.J.), Thomas (A.G.), *8016*
- foundations, shear stress, soil structure interaction, underground, Meade (K.P.), Keer (L.M.), *9346*
- resonance, soils, structural response, Herzog (M.A.M.), *10853*
- design (optimum), nonlinear programming, Bhatti (M.A.), Pister (K.S.), *12070*

earthquakes, finite element techniques, oscillations, Artikov (T.U.), Khuzhaev (A.), *86*
- simulation, stochastic processes, time domain techniques, Hoshiya (M.), Chiba (T.), *147*
- simulation, Polhemus (N.W.), Cakmak (A.S.), *3012*
- inverse problems, iterative methods, layered media, Hawley (B.W.), Zandt (G.), (et al.), *3392*
- aftershocks, prediction, Varma (G.S.), *4845*
- faults, generation, modeling, Bykovtsev (A.S.), Chernov (G.P.), *4851*
- mantle, mechanisms, Vvedenskaya (A.V.), Golubeva (N.V.), *7027*
- earth, seismic waves, structure, Antonenko (A.N.), Dubrovin (G.K.), *7029*
- dams, hydrodynamic pressure, Yang (C.Y.), Chiarito (V.), *7044*
- spectra, structural response, Yang (J.N.), Liu (S.C.), *7048*
- crack propagation, earthquake source, rupture, Miyatake (T.), *8961*
- markov processes, prediction, probability, Nishioka (T.), Shah (H.C.), *8962*
- creep, faults, prediction, water levels, Wesson (R.L.), *9906*
- focal point, initiation, Katsumata (M.), Yoshida (A.), *9910*
- compressional waves, focal point, radiation, Blagoveshchenskaya (Ye.E.), *9911*
- compressional waves, initiation, models, Kopnichev (Yu.F.), *9912*
- initiation, models, seismic waves, Okada (Y.), *9913*
- electrical conductivity, initiation, Barsukov (O.M.), *9914*
- creep, deformation, faults, stochastic processes, Andrews (D.J.), *9917*
- fracture mechanics, modeling, time dependence, Das (S.), Scholz (C.H.), *10846*
- deformation, faults, simulation, Miyashita (K.), *10847*
- seismic waves, simulation, spectra, Doblare (M.), Alarcon (E.), (et al.), *12071*

Earwicker (M.J.), acoustics, arrays, noise, *3958*

East (R.A.), see Nasser (A.E.M.), *5562*
- see Qasrawi (A.M.S.), *6892*

Eastep (F.E.), see Marsh (J.E.), *3727*

Eatock Taylor (R.), damping, dynamic response, inertia, offshore structures, Duncan (P.E.), *6540*

Eaton (J.K.), see Westphal (R.V.), *8664*
- reattachment, subsonic flow, turbulent flow, Johnston (J.P.), *9568*

Eatwell (G.P.), green function, half space, layered media, Simmons (J.A.), (et al.), *10239*

Ebbesmeyer (C.C.), see Emery (W.J.), *7056*

Ebeling (K.J.), reverberation, sound fields, Freudenstein (K.), *5772*

Ebert (L.J.), see Kim (H.C.), *1209*

Ebin (D.G.), compressible flow, inviscid fluid, mathematical models, *11416*

Ebisu (A.), see Kunitomo (T.), *10696*

eccentric loading, matrix methods, second order analysis, space frames, structural analysis, Subramanian (N.), Chettiar (C.G.), *3548*
- columns, imperfections, Herman (H.), *7317*
- beams (box), plates, ultimate strength, Rerkshanandana (N.), Usami (T.), (et al.), *7352*
- columns, cracks, reinforced concrete, Bridge (R.Q.), *7505*
- computing techniques, contact stresses, foundations, Selvadurai (A.P.S.), *10254*

Ecer (A.), eulerian approach, hamilton principle, lagrangian approach, variational methods, viscous flow, *5012*

- see Akay (H.U.), *8589*
- cascades, compressible flow, finite element techniques, transonic flow, Akay (H.U.), *11393*
- see Akay (H.U.), *11404*

echos, acoustic measurements, flaw detection, nondestructive tests, plates, Golubev (A.S.), Verevkin (V.M.), (et al.), *8435*
- reflection, scattering, sound, Ueda (M.), Ichikawa (H.), *11967*
- panels, reflection, ultrasonics, Trivett (D.H.), *11973*

Eckbreth (A.C.), combustion, diagnostics, lasers (gasdynamic), scattering, Bonczyk (P.A.), (et al.), *3879*
- combustion (turbulent), lasers, stokes flow, thermal measurements, turbulence, *5632*

Eckels (P.W.), see Rabas (T.J.), *4719*

Ecker (J.G.), computing techniques, geometric programming, nonlinear programming, surveys, *53*

Eckert (E.R.G.), see Faghri (M.), *951*
- blades, heat transfer, rotating fluids, similarity methods, simulation, turbomachinery, *3802*
- bibliography, heat transfer, thermal sciences, thermodynamics, Sparrow (E.M.), (et al.), *4694*
- convection, heat transfer, *5568*
- heat transfer, mass transfer, moisture, porous media, Faghri (M.), *5623*
- see Dinulescu (H.A.), *5854*
- see Ito (S.), *11743*

Eckert (W.T.), aerodynamic interference, design, inlet flow, models, wind, wind tunnels, Mort (K.W.), *8669*

Eckstein (E.C.), see Beck (M.R.) Jr., *4919*

Economou (A.P.), see Kounadis (A.N.), *2285*

Ecsedi (I.), deformation, elasticity (linear), energy methods, strain energy, *2218*
- deformation, elasticity (linear), energy methods, strain energy, *2219*

eddies, boundary layer (turbulent), pressure gradient, Potemkin (V.F.), *594*
- burgers equation, turbulence model, Love (M.D.) 47034, *658*
- arrays, sound propagation, Baer (R.N.), *888*
- stratified flow, vortices, Johnson (E.R.), *978*
- baroclinic instability, coriolis forces, currents, geostrophic flow, ocean air interaction, Mcwilliams (J.C.), Holland (W.R.), (et al.), *1890*
- atmospheric circulation, meteorology (physical), Kabanov (A.S.), Shmerlin (B.Ya.), *1901*
- nonlinear theory, spectra, turbulence (isotropic), turbulence (structure), vortex rings, Tung (T.C.), Adrian (R.J.), *2687*
- aerodynamic excitation, jets, noise (aerodynamic), shear flow, turbulence, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- currents, meandering, oceanography, upwelling, Chew (F.), *4051*
- oceanography, rossby waves, Henrotay (P.), *4854*
- oceanography, Durney (B.), *4864*
- circulation, currents, oceanography, Holland (W.R.), *4874*
- circulation, currents, hydrodynamic stability, oceanography, Haidvogel (D.B.), Holland (W.R.), *4875*
- bottom irregularities, spectra, turbulence (geophysical), Holloway (G.), *4876*
- oceanography, Seidov (D.G.), *4878*
- sound propagation, underwater acoustics, Baer (R.N.), *5731*
- particles, suspensions, Alquier (M.), Gruat (J.), (et al.), *5811*
- atmospheric circulation, gravity waves (internal), kelvin-helmholtz instability, Klostermeyer (J.), *5934*
- capillary flow, drag reduction, friction factor, Dschagarowa (E.), Bochossjan (T.), *6657*
- diffraction, sound propagation, underwater acoustics, Munk (W.H.), *6912*
- boundary layer (atmospheric), Emery (W.J.), Ebbesmeyer (C.C.), (et al.), *7056*
- dissipation, oceanography, Harrison (D.E.), *8022*
- circulation, oceanography, Niiler (P.P.), *8974*
- vortices, Flierl (G.R.), Larichev (V.D.), (et al.), *8979*
- ocean air interaction, oceanography, rotating fluids, stratification, Muller (P.), Frankignoul (C.), *8996*
- cylindrical bodies, finite difference methods, reynolds number (small), Smith (F.T.), *9540*
- circulation, oceanography, vorticity, Holland (W.R.), Rhines (P.B.), *10860*
- experimental methods, jets, shear flow, turbulence (structure), turbulent flow, Mumford (J.C.), *11545*
- random media, sound propagation, Newhall (B.K.), Jacobson (M.J.), (et al.), *11904*

Eddy (T.W.), acoustics, estimation, harmonic waves, *3960*

eddy currents, control, temperature, testing equipment, Blitz (J.), Razzak (G.A.), *1419*
- density, energy, ocean, oceanography, Kozlov (V.F.), Molchanova (L.A.), (et al.), *1895*
- bars, flaw detection, surface flaws, wires, Stumm (W.), *3508*
- bearings (ball), hardness, heat treatment, inspection, transducers, Melnikov (I.V.), Savikovskii (L.A.), (et al.), *6491*
- coatings, nondestructive tests, radiography, thickness, thin films, Goring (W.H.), *7577*

eddy diffusivity, heat transfer (atmospheric), radiation, turbulence (geophysical), Gay (C.), Thomas (G.E.), *5947*
- ocean, oceanography, White (W.), Bernstein (R.), *8019*
- circulation, oceanography, vorticity, Harrison (D.E.), *8977*
- rotating fluids, turbulence (geophysical), vorticity, Haidvogel (D.B.), Held (I.M.), *9004*

eddy viscosity, film cooling, fluid injection, injection, mixing length theory, Kikkawa (S.), Fujii (M.), *1666*
- pipelines, turbulent flow, unsteady flow, Kita (Y.), Adachi (Y.), (et al.), *3667*
- ekman layer, oceanography, rossby waves, Radach (G.), *4881*
- pipe flow, turbulent flow, Vasilescu (A.A.), Andrei (V.I.), *5438*
- impellers, mixing, tanks, turbulent flow, Hiraoka (S.), Fan (L.T.), *6651*
- drag reduction, pipe flow, turbulence model, Edwards (M.F.), Smith (R.), *8572*
- coasts, ekman layer, kelvin waves, oceanography, Mofjeld (H.O.), *8978*

Edel (K.-O.), rails, stress analysis, thermal effects, welded joints, *2526*

Edelen (D.G.B.), continuum mechanics, elasticity, nonlinear theory, variational methods, *1102*

Edelman (Z.), boiling, pipe flow, subcooled boiling, void fraction, Elias (E.), *10575*

Edenhofer (J.), channel flow, gravity waves (surface), numerical methods, unsteady flow, Schmitz (G.), *4666*
- characteristic methods, hyperbolic equations, matrices, unsteady flow, Schmitz (G.), *11392*

edge cracks, boundary value problems, wedges, Kipnis (L.A.), *240*
- elasticity, elliptical cracks, infinite medium, Vijayakumar (K.), Atluri (S.N.), *1361*
- crack propagation, cutting, fracture criteria, prediction, Maiti (S.K.), *2460*
- elastoplasticity, holography, Arkhipov (V.I.), *3454*
- crack growth, crack propagation, viscoelastic materials, Christensen (R.M.), Wu (E.M.), *3461*
- crack penetration, infinite medium, stress intensity factor, Maiti (M.), Paramguru (R.), *4492*
- piping systems, reactor structures, stability theory, Tada (H.), Paris (P.C.), (et al.), *4501*
- computer programming, singularities, three dimensional formulation, Hussain (M.A.), Coffin (L.F.), (et al.), *5021*
- bonded joints, composite materials, fracture, singular integral equations, stress intensity factor, Bakioglu (M.), *5127*
- j-integral, m integral, nondestructive tests, King (R.B.), Herrmann (G.), *5294*
- bending, caustics, stress intensity factor, Farahmand (B.), Raftopoulos (D.D.), *5297*
- elastic waves, scattering, Mendelsohn (D.A.), Achenbach (J.D.), (et al.), *6348*
- boundary integral methods, crack opening displacement, elastic behavior, stress intensity factor, variable properties (material), Atkinson (C.), Xanthis (L.S.), (et al.), *6441*
- plates, semi infinite media, stress analysis, Hasebe (N.), Inohara (S.), *7331*
- crack propagation, fatigue, material testing, microcracks, nickel alloys, Lankford (J.), Cook (T.S.), (et al.), *7476*
- laminates, plates (weakened), viscoelastic materials, Gorelik (A.V.), *7506*
- diffraction, elastic bodies, shear waves, Roy (A.), Visalakshi (N.), *8340*
- cylindrical bodies, interface cracks, penny shaped crack, stress intensity factor, Fan (Y.-X.), Fan (T.-Y.), (et al.), *8386*
- computing techniques, crack closure, Penkov (V.B.), Tolokomnikov (L.A.), *8389*
- elasticity, stress intensity factor, Bowie (O.L.), Freese (C.E.), *8391*
- crack opening displacement, cylindrical bodies, dugdale model, Gray (T.G.F.), *8403*
- brittle materials, crack propagation, damping, dynamic fracture, Brock (L.M.), *8407*
- infinite medium, shear loading, stress intensity factor, Hara (T.), *9404*

edge dislocations, complex variables, cracks, kinked crack, mixed mode loading, singular integral equations, Karihaloo (B.L.), *4500*
- elastodynamics, transforms, Markenscoff (X.), Clifton (R.J.), *6155*
- multiphase media, orthotropic materials, stress analysis, Wu (R.S.), Chou (Y.T.), *8191*
- creep, fracture, sliding, Wirmark (G.), Nilsson (J.-O.), (et al.), *9393*

edge effects, plates (rectangular), Thornton (D.R.), Conway (H.D.), *306*
- displacement, shells, Nair (S.), *313*
- landslides, seepage, Barron (R.A.), *952*
- plates, Hiba (M.), *1239*
- composite materials, reinforced openings, Partsevskii (V.V.), Petrovskii (A.V.), *2249*
- buckling, plates, structural stability, Cimetiere (A.), *2303*
- approximation methods, plates (rectangular), plates (stiffened), vibration, Laura (P.A.A.), Gutierrez (R.H.), *2330*
- jets, vortex rings, Ko (N.W.M.), *2673*
- plates (circular), plates (thick), singularities, Bulanov (G.S.), Shaldyrvan (V.A.), *4381*
- matrix methods, plates (rectangular), plates (simply supported), Hegedus (I.), *4386*
- shells, thermoelasticity (steady), Rogacheva (N.N.), *4813*
- convection (free), heat transfer, plane flow, Hatfield (D.W.), Edwards (D.K.), *5549*
- large displacement, nonlinear theory, plates (annular), Lebrun (M.), Bayada (G.), (et al.), *6231*
- buckling, plates (annular), saws, stability theory, vibration (forced), Srinivasan (V.), Ramamurti (V.), *6296*

E

- elastic waves, holes, Moodie (T.B.), Haddow (J.B.), (et al.), *6330*
- conduction (heat), conductivity, plates (circular), thermal measurements, Bode (K.-H.), *6796*
- anisotropic media, composite materials, stress concentration, wedges, Ting (T.C.T.), Chou (S.C.), *7269*
- finite element methods (hybrid), laminates, Spilker (R.L.), *7304*
- elastic foundations, plates (rectangular), rayleigh ritz method, vibration (free), Laura (P.A.A.), Grossi (R.O.), *7392*
- dynamic response, plates (rectangular), vibration (forced), Mukhopadhyay (M.), *8309*
- boundary layer, compressible flow, laminar flow, rotating disks, Toren (M.), Solan (A.), *8718*
- acoustics, impingement, jets, Holger (D.K.), Wilson (T.A.), (et al.), *9848*
- harmonic waves, propagation, waveguides, wedges, Grinchenko (V.T.), Meleshko (V.V.), *10228*
- noise, plates, sound generation, Amiet (R.K.), *10804*
- elastic waves, love waves, Pyatakov (P.A.), *11171*

Edgley (P.D.), see Franklin (R.N.), *4750*

Edighoffer (H.H.), dynamic response, finite element methods, long duration exposure facility, vibration (free), Sewall (J.L.), *7411*

- see Housner (J.M.), *11128*

Edmunds (J.M.), see Wellstead (P.E.), *186*

- see Postlethwaite (I.), *4225*

Edstrom (C.R.), beams, frequency response, vibration (forced), *5198*

Edward (D.C.), see Stanley (P.), *2470*

Edwards (A.D.), see Labib (F.), *10361*

Edwards (A.V.J.), digital simulation, jets, turbulent flow, Morfey (C.L.), *8598*

Edwards (C.), cracks, flaw detection, magnetic field, nondestructive tests, Palmer (S.B.), *1418*

Edwards (D.K.), anisotropic media, convection, cylindrical bodies, radiant interchange, solar radiation, *1695*

- monte carlo analysis, radiant interchange, radiation, *3825, book*
- see Hatfield (D.W.), *5549*

Edwards (H.W.), aerosols, orbits, zero g phenomena, *4016*

Edwards (M.F.), see Smith (R.), *3708*

- drag reduction, eddy viscosity, pipe flow, turbulence model, Smith (R.), *8572*

Edwards (R.V.), data analysis, laser doppler velocimeters, particulate flow, sampling, *4686*

effective elastic moduli, composite structures, delamination, interlaminar stresses, micromechanics, Salamon (N.J.), *288*

- anisotropy, composite materials, thermoplasticity, Stephenson (R.C.), Turner (S.), (et al.), *1834*
- composite materials, inclusions, micromechanics, nonhomogeneous media, Cleary (M.P.), Chen (I-W.), (et al.), *2224*
- adhesion, materials properties, metallic composites, resins, Spathis (G.D.), Sideridis (E.P.), (et al.), *5124*

Efimov (A.N.), identification, order statistics, probability theory, statistical theory, Kuteev (V.M.), *1098*

Efimov (B.G.), compressible flow, lasers (gasdynamic), mixing, nozzles, supersonic flow, Zakhyaziminskii (L.A.), *11403*

Efimova (T.A.), see Dmitrieva (Zh.N.), *10243*

Efremov (A.A.), biocontrol, blood flow, prosthetic devices, temperature control, Andrushchenko (L.I.), *6033*

Eftekhar (J.), cellular flow, conduction (heat), heat transfer, internal flow, Darkazalli (G.), (et al.), *7848*

Efthymiou (M.), numerical methods, ocean bed, pipelines, wave loads, Narayanan (R.), *3718*

- oscillating bodies, pipelines, submerged bodies, virtual mass, wave loads, Narayanan (R.), *10394*

Egan (W.J.) Jr., combustors, control, design, gas turbines, Reilly (R.S.), (et al.), *5654*

Eggeman (G.W.), drilling, holes, residual stresses, strain measurement, *5322*

Eghtesadi (K.), adaptive systems, attenuation, dipoles, noise abatement, Leventhall (H.G.), *912*

Egle (D.M.), see Hill (E.K.), *3984*

- see Hill (E.V.K.), *10200*

Eglit (M.E.), see Danilova (E.M.), *1331*

Egorov (I.V.), blades, spectral analysis, turbines, vibration, *5215*

Egorov (V.A.), blast effects, explosions, impulsive loading, transient loading, underground, Kolobashkin (V.M.), (et al.), *9833*

Egorov (V.I.), see Dulnev (G.N.), *6824*

Egorova (L.S.), see Vertogradskii (V.A.), *5533*

Egorushkin (S.A.), hydrodynamic stability, interface phenomena, magnetic stabilization, mathematical models, Tsypkin (A.G.), *1578*

Eguchi (K.), see Fujii (S.), *837*

Ehle (P.E.), dynamic properties, mathematical methods, sensitivity, transient loading, Haug (E.J.), *10008*

Ehler (A.W.), energy transport, laser plasma interaction, lateral stability, transport phenomena, wires, Begay (F.), (et al.), *3900*

Ehlers (F.E.), aerodynamics, compressible flow, supersonic flow, three dimensional flow, Epton (M.A.), (et al.), *8552*

Ehrenberg (J.E.), see Ewart (T.E.), *4792*

Ehrgott (J.Q.), see Jackson (J.G.) Jr., *4465*

Ehrlacher (A.), see Bui (H.D.), *470*

Eiber (A.), chain links, chains, damping, dynamic analysis, matrix methods, Schiehlen (W.), *1983*

Eichelberger (E.C.), impedance methods, shells (cylindrical), vibration (free), *10211*

Eichenbaum (B.R.), coatings, dies, drawing, glass fibers, lubrication, *4681*

Eichhorn (R.), bond number, contact angle, dimensional analysis, films, friction (skin), *1536*

- boundary layer (thermal), convection, crossflow, laminar flow, Hasan (M.M.), *4707*

Eidelman (S.), blast waves, gases, particulate flow, Oved (Y.), (et al.), *2725*

- blast waves, chemical kinetics, detonation (two phase), explosions, explosive loading, Sichel (M.), *9822*
- chemical kinetics, detonation, explosions, thermal explosions, Sichel (M.), *9823*

Eidsvik (K.J.), atmosphere, clouds, dispersion, models, *11522*

eigenvalue problems, distributed systems, inverse problems, iterative methods, vibration, Barcilon (V.), Turchetti (G.), *27*

- elasticity, finite element techniques, lagrange multiplier, stability (numerical), Malkus (D.S.), *76*
- eigenvalues, mathematical methods, sensitivity, structural analysis, Haug (E.J.), Rousselet (B.), *1070*
- approximation methods, beam columns, Ruge (P.), *1245*
- boundary value problems, inverse problems, sturm-liouville problems, Mclaughlin (J.R.), Handelman (G.H.), *1999*
- differential equations (ordinary), resonance, spinning bodies, stability theory, Kunitsyn (A.L.), Medvedev (S.V.), *2000*
- hamiltonian equations, korteweg de vries equation, mathematical methods, Alber (S.I.), *2005*
- finite element techniques, fluid-structure interaction, modal analysis, Daniel (W.J.T.), *2716*
- helical flow, magneto fluid dynamics, modes, stability theory, Lucas (R.J.), *2877*
- composite materials, computing techniques, elasticity, finite element methods, fracture, optimization, plasticity, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- composite materials, conduction (unsteady), discontinuities, variational methods, Nemat-Nasser (S.), Horgan (C.O.), *3110*
- matrix methods, rayleigh method, Macavei (F.), *4150*
- bifurcation, nonlinear theory, topological techniques, Alexander (J.C.), Antman (S.S.), *4946*
- fourier transform, stability theory, Malyutin (I.S.), *4987*
- finite difference methods, membranes, Kuttler (J.R.), *5006*
- plates, Ciarlet (P.G.), *5154*
- fluid-structure interaction, numerical methods, Muller (W.C.), *5479*
- acoustics (architectural), reverberation, Van Nieuwland (J.M.), Weber (C.), *5775*
- green function, image methods, potential theory, Terras (R.), Swanson (R.), *6077*
- containers (partially filled), hydroelasticity, sloshing, Kondo (H.), *6704*
- approximations, asymptotic methods, complex variables, differential equations (ordinary), sturm-liouville problems, Boyd (J.P.), *7158*
- iterative methods, matrix methods, mesh generation, newton method, Mccormick (S.F.), *7190*
- dynamics, finite element techniques, structural analysis, Papadrakakis (M.), *7194*
- channel flow, gravity waves, Ivashchenko (B.P.), Nikitin (S.K.), *7765*
- algorithms, boundary value problems, newton method, sturm-liouville problem, Bailey (P.B.), *8130*
- ducts, sound propagation, Ko (S.-H.), *8861*
- asymptotic methods, differential equations (ordinary), iterative methods, Gogokhiya (V.Sh.), *9095*
- laplace equation, poisson equation, Kuttler (J.R.), *9105*
- analogies, fredholm equations, Fernando (K.V.M.), Nicholson (H.), *9118*
- iterative methods, vibration, Johnson (C.P.), Craig (R.R.) Jr., (et al.), *9120*
- gravity waves (surface), harbors, wind-wave interaction, Papa (L.), *9620*
- mathematical methods, operators, transforms, Sirovich (L.), Knight (B.W.), *10030*
- group theory, mathematical methods, operators, transforms, Knight (B.W.), Sirovich (L.), *10035*
- algorithms, linear systems, linear theory, Van Dooren (P.M.), *11038*
- frequencies, gravity waves (internal), stratified flow, Tam (K.K.), *11623*
- compressible flow, fluid-structure interaction, shells, Simonov (I.V.), *11669*
- acoustics, dispersion, nonlinear waves, Banerjee (P.P.), Korpel (A.), *11936*

eigenvalues, analytical methods, computing techniques, matrix methods, Kalaba (R.), Spingarn (K.), (et al.), *20*

- dynamic response, shells (cylindrical), vibration (free), El Raheb (M.), Babcock (C.D.) Jr., *376*
- rotating bodies, vibration, Muller (P.C.), *381*
- eigenvalue problems, mathematical methods, sensitivity, structural analysis, Haug (E.J.), Rousselet (B.), *1070*
- linear systems, matrix methods, time varying systems, Wu (M.-Y.), *1991*
- differential equations (partial), inverse problems, nonlinear systems, scattering, Gerčzhikov (V.S.), Ivanov (M.I.), (et al.), *2007*

- computing techniques, electromagnetic waves, radiation, wiener-hopf technique, Siewert (C.E.), *2031*
- dynamic stability, elastodynamics, Chelomei (S.V.), *2322*
- modal analysis, rotating shafts, vibration, Matsushita (O.), Kikuchi (K.), (et al.), *2342*
- boundary layer, internal waves, unsteady state, Ryzhov (O.S.), Zhuk (V.I.), *2634*
- acoustic waves, cavities, resonance, tube bundles, Planchard (J.), *2948*
- matrix methods, stiffness matrix, transcendental equations, Hopper (C.T.), Simpson (A.), (et al.), *3093*
- discrete systems, linear systems, periodic systems, pole placement, Kono (M.), *3156*
- beams, bending, modal analysis, vibration (free), Zarek (J.H.B.), Gibbs (B.M.), *3352*
- beams (cantilever), vibration (free), Akesson (B.A.), Friberg (P.O.), *3354*
- beams (cantilever), vibration (forced), Dhole (A.), *3359*
- beams (curved), vibration (forced), Irie (T.), Yamada (G.), (et al.), *3361*
- rings, vibration (forced), Teichmann (D.), *3363*
- linear systems, matrix methods, stability theory, Vorotnikov (V.I.), Prokopev (V.P.), *4159*
- beams, vibration, Levinson (M.), *4411*
- beams (variable cross section), bending, experimental mechanics, vibration, Vasinyuk (I.M.), Kruk (B.Z.), (et al.), *4415*
- bending, blades, frequencies, steam turbines, vibration (torsional), Belohradsky (H.-J.), *4430*
- differential equations (partial), helmholtz equation, Bareket (M.), *4960*
- algorithms, cholesky algorithm, computer programming, matrices, optimization, Meirovitch (L.), Baruh (H.), *5001*
- beams (variable cross section), rotary inertia, stiffness matrix, vibration, To (C.W.S.), *5033*
- spinning bodies, vibration (forced), Osmont (D.), Simon (L.), *5225*
- boundary layer, riccati equation, semi infinite media, Bramley (J.S.), Sloan (D.M.), *6065*
- matrices, nonsymmetric matrices, optimization, stability theory, variational methods, Kalaba (R.), Spingarn (K.), (et al.), *6078*
- plates (rectangular), plates (sandwich), vibration (free), Antonenko (V.M.), Piskunov (V.G.), (et al.), *6307*
- group velocity, pulsatile flow, ray theory, shallow water, Tindle (C.T.), Bold (G.E.J.), *6612*
- composite materials, discontinuities, rayleigh ritz method, sturm-liouville problems, Bielak (J.), *7156*
- boundary value problems, differential equations (ordinary), singular perturbations, stiff systems, Mahony (J.J.), Shepherd (J.J.), *7157*
- helmholtz equation, inequalities, isoperimetric inequalities, Kohler-Jobin (M.-T.), *7163*
- discrete systems, pole placement, riccati equation, Mori (Y.), Shimemura (E.), *7228*
- elastic bodies, vibration, Rieder (G.), Zastrow (U.), *7378*
- dynamic analysis, vibration (free), vibration (torsional), Wang (C.C.), *7412*
- mathematical models, model reduction, spectral analysis, Allemong (J.J.), Kokotovic (P.V.), *8157*
- frequencies, modal analysis, vibration, Bugeat (L.P.), Lallement (G.), *8323*
- buoyancy, convection, hydrodynamic stability, liquids, surface tension, Rosenblat (S.), Homsy (G.M.), (et al.), *8603*
- dynamic response, vibration (free), Soriano (H.L.), *9303*
- damping, dynamic properties, vibration (torsional), Doughty (S.), *9323*
- dynamic analysis, oscillating bodies, vibration, Schneider (J.), *10187*
- averaging, shells (conical), shells (stiffened), vibration (free), Lesnichaya (V.A.), Pisanko (A.N.), *10214*
- design (minimum weight), design (optimum), simply supported structures, Karihaloo (B.L.), Parbery (R.D.), *10347*
- modes, ocean, sound propagation, Williams (A.O) Jr., *10782*
- computing techniques, dynamic analysis, mathematical methods, Iyer (M.S.), *11152*
- ferrous metals, liquid metals, magneto fluid dynamics, tensor methods, Radojevic (D.), *11828*
- sound propagation, underwater acoustics, waveguides, Arnold (J.M.), *11895*

Eikher (M.Sh.), see Kurbatkin (G.P.), *4086*

Einenkel (W.-D.), mixing, processes, suspensions, two phase flow, *6963*

Einstein (H.), see Chan (H.C.), *9372*

Eisenberg (M.A.), continuum mechanics, elasticity (linear), energy methods, solid mechanics, *4331, book*

Eisenhuth (J.J.), see Lauchle (G.C.), *1541*

Eisenstat (S.C.), see Schreiber (R.), *2058*

- see Weiser (A.), *6096*

Eitani (I.M.), see Pariseau (W.G.), *2392*

Eitelberg (E.), runge kutta method, stability (numerical), stiffness, stiffness matrix, *5016*

ejectors, mixing, pumps, supersonic flow, Ziv (A.), Wolfshtein (M.), *4679*

- cryogenics, injection systems, wind tunnels, Blanchard (A.), Dor (J.-B.), (et al.), *5515*
- airplanes, containers, ejectable containers, falling bodies, separation, trajectories, Maddox (A.R.), *8645*

Ekelchik (V.S.), see Afanasev (Yu.A.), *2971*

Ekilik (V.V.), absorption, hydrogen, hydrogen embrittlement, steel, Grigorev (V.P.), (et al.), *6427*

ekman layer, boundary layer (atmospheric), Panchev (S.), Atanasov (D.), *982*

- atmospheric circulation, boundary layer (atmospheric), Dobryshman (E.M.), *4054*
- circulation, ocean air interaction, oceanography, Rattray (M.) Jr., Dworski (J.G.), *4866*
- eddy viscosity, oceanography, rossby waves, Radach (G.), *4881*
- currents, ocean air interaction, rotating fluids, Pearce (B.R.), Cooper (C.K.), *8032*
- currents, mixing layers, ocean air interaction, rotating fluids, Csanady (G.T.), Shaw (P.T.), *8033*
- annular flow, boundary layer (thermal), convection, rotating fluids, thermal instability, Hignett (P.), Ibbetson (A.), (et al.), *8717*
- coasts, eddy viscosity, kelvin waves, oceanography, Mofjeld (H.O.), *8978*
- boundary layer (atmospheric), geostrophic flow, rotating fluids, James (I.N.), *8990*
- darcy flow, porous media, Verma (A.K.), *10830*
- circulation, geostrophic flow, ocean air interaction, oceanography, rossby waves, Semtner (A.J.) Jr., Holland (W.R.), *10863*
- ocean air interaction, oceanography, thermodynamics, Schopf (P.S.), *10866*

El Batanoni (F.), see Elwakil (S.A.), *1530*

El Hoeny (Y.A.H.), fluid power, hydraulics, piston driven flow, pumps, *2757*

El Mekki (O.M.), gravity waves, magneto fluid dynamics, planetary atmospheres, shear flow, wind, *8822*

El Raheb (M.), dynamic response, eigenvalues, shells (cylindrical), vibration (free), Babcock (C.D.) Jr., *376*

El Sawi (M.), boussinesq equation, dispersion relation, gravity waves, magneto fluid dynamics, propagation, Eltayeb (I.A.), *3892*

El Telbany (M.M.M.), experimental results, moving surfaces, noncircular pipes, turbulent flow, Reynolds (A.J.), *8570*

El-Essawi (M.), see Utku (S.), *5202*

El-Ghabaty (S.S.), see Hassan (S.D.), *340*

El-Gindy (M.), automobiles, brakes, experimental results, vehicles, Ilosvai (L.), *14*

- automobiles, brakes, dynamic stability, Ilosvai (L.), *4148*
- automobiles, dynamic response, dynamic stability, maneuverability, steering, Ilosvai (L.), *7616*
- maneuverability, response, steering, vehicles, Ilosvai (L.), *8463*

El-Hadik (A.A.B.), film cooling, heat transfer, injection, similarity methods, Barrow (H.), *9694*

El-Hawary (M.A.), boundary layer (turbulent), length-scale, turbulence, turbulence model, Nicoll (W.B.), *7749*

- convection, pipe flow, reynolds number (critical), thermal instability, *8713*

El-Karamani (A.M.), see Lomakin (V.A.), *2969*

El-Kashlan (M.), see Weaver (D.S.), *2712*

- see Weaver (D.S.), *3715*

El-Kayar (A.), bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, oil films, Salem (E.A.), (et al.), *1013*

- bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, thermal effects, Salem (E.A.), (et al.), *1014*
- bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, oil films, Salem (E.A.), (et al.), *1015*

El-Khatib (N.A.F.), permeability, porous media, two phase flow, *954*

El-Masri (M.A.), blades, cooling, gas turbines, high temperature, water, Louis (J.F.), *5657*

El-Nicklawy (M.M.), fibers, fizeau fringes, optical techniques, textiles, Fouda (I.M.), *7308*

- fibers, fizeau fringes, optical techniques, textiles, Fouda (I.M.), *7309*

El-Raheb (M.), containers (partially filled), coriolis forces, sloshing, spinning bodies, vorticity, Wagner (P.), *673*

- approximations, cylindrical bodies, dynamic response, Babcock (C.D.) Jr., *2338*
- attenuation, bends, ducts (curved), green function, sound propagation, Wagner (P.), *2936*
- acoustic loading, frequency domain techniques, piping systems, vibration (forced), *8295*

El-Refaie (M.F.), solar collectors, thermal loading, transient loading, unsteady flow, Hashish (M.A.), *9739*

El-Riedy (M.K.), convection (free), heat exchangers (crossflow), heat transfer, mass transfer, tube bundles, *728*

El-Sebakhy (I.S.), see Kennedy (J.B.), *2530*

El-Shaarawi (M.A.I.), annular flow, convection (free), laminar flow, nusselt number, Sarhan (A.), *2790*

El-Shanawany (M.S.), atomization, drops, scale effects, Lefebvre (A.H.), *5822*

El-Sherbiny (M.G.), fatigue, mesh generation, surface profiles, thin films, wear, Salem (F.B.), *7088*

El-Sherief (H.), algorithms, discrete systems, identification, multivariable systems, stochastic approximation, stochastic processes, Sinha (N.K.), *4238*

El-Shirbini (A.A.), see Rakopoulos (C.D.), *1857*

El-Shobokshy (M.S.), aerosols, measurements (dynamic), sampling, *12061*

El-Sirafy (I.H.), elastic behavior, moving loads, plates (annular), plates (circular), winkler foundation, *3302*

El-Sonbaty (I.), see Farkas (J.), *2166*

El-Taher (R.M.), similarity methods, ventilation, wall jets, *10453*

elastic behavior, corners, numerical methods, singular integral equations, stress intensity factor, Theocaris (P.S.), Ioakimidis (N.I.), *478*

- chip formation, contact stresses, cutting, Childs (T.H.C.), *1347*
- beam columns, elastica, large displacement, Ivanov (B.P.), Ilyukhin (A.A.), *2262*
- anchors, influence charts, soil structure interaction, Rowe (R.K.), Booker (J.R.), *2384*
- cracks, finite difference methods, j-integral, stress intensity factor, Vailkovskii (S.N.), Kurguzov (V.D.), *2432*
- bridges, prestressed concrete, slabs, waffle slabs, Kennedy (J.B.), ElSebakhy (I.S.), *2530*
- contact problems, contact stresses, inequalities, variational methods, Kravchuk (A.S.), Vasilev (V.A.), *3247*
- cellular structures, plates (anisotropic), shear lag, web openings, Evans (H.R.), Shanmugam (N.E.), *3292*
- moving loads, plates (annular), plates (circular), winkler foundation, El-Sirafy (I.H.), *3302*
- plates (circular), vibration, Laura (P.A.A.), Ficcadenti (G.M.), *3366*
- earth, oscillations, rotating bodies, Molodenskiy (M.S.), *4035*
- design (minimum weight), Fleury (C.), *4524*
- biomaterials, fixation agents, tissues, Fung (Y.C.), Sobin (S.S.), *4911*
- contact problems, finite element techniques, Sachdeva (T.D.), Ramakrishnan (C.V.), (et al.), *6114*
- computing techniques, contact problems, friction (solid solid), stiffness matrix, Sachdeva (T.D.), Ramakrishnan (C.V.), *6115*
- inclusions, infinite medium, nonhomogeneous media, stress concentration, Andreikiv (A.E.), Stadnik (M.M.), (et al.), *6164*
- dynamic analysis, variational methods, vibration (nonlinear), Lau (S.L.), Cheung (Y.K.), *6272*
- boundary integral methods, crack opening displacement, edge cracks, stress intensity factor, variable properties (material), Atkinson (C.), Xanthis (L.S.), (et al.), *6441*
- cracks, linear systems, nonlinear systems, penalty function, plates, Yagawa (G.), Aizawa (T.), (et al.), *6457*
- composite structures, missiles, random loading, stochastic systems, viscoelasticity, Weeks (G.E.), Cost (T.L.), *7301*
- dynamic response, vibration (parametric), Bolotin (V.V.), *7376*
- beams, dynamic response, seismic loading, Neubert (V.H.), Rangaiah (V.P.), *7383*
- density boundaries, earth, stress analysis, Trubitsyn (A.P.), Karasev (A.A.), *8007*
- equations of motion, kinematics, lagrange multiplier, mechanisms, Blejwas (T.E.), *8100*
- laplace transform, singular waves, tauberian theorems, time delay systems, Lokshin (A.A.), *8124*
- crack growth, crack opening displacement, creep, Pilkington (R.), Smith (E.), *8383*
- plates (circular), rayleigh ritz method, vibration, Laura (P.A.A.), Avalos (D.R.), (et al.), *9308*
- joints, models, rocks, Gerrard (C.M.), *9366*
- beams, solids (fluid immersed), vibration (random), Dinca (D.), *10194*
- crossflow, tube bundles, vibration (flow induced), Tangemann (H.), *10766*

elastic bodies, dynamic analysis, mathematical methods, rotating bodies, Vilke (V.G.), *11*

- hybrid construction, inclusions, infinite medium, inhomogeneities, Taya (M.), Chou (T.-W.), *279*
- acceleration waves, energy theorems, Borejko (P.), Chadwick (P.), *395*
- hydroelasticity, rotating shafts, surface profiles, Zak (M.), *1174*
- bifurcation, energy methods, stability theory, Corsanego (A.), Tafanelli (A.), *1244*
- beams (torsional), rods, torsion, Jenkins (J.T.), *2220*
- acoustics, resonance, scattering, sound fields, Flax (L.), Raju (P.K.), (et al.), *2935*
- acoustic waves, sound generation, spherical bodies, Hasegawa (T.), Ochi (M.), (et al.), *2939*
- optimization, shape factors, stress analysis, Oda (J.), Yamazaki (K.), *3519*
- heat exchangers, hydrodynamic stability, multifluid flow, separating wall, Hasegawa (E.), *3697*
- acoustic waves, scattering, spherical bodies, Bostrom (A.), *3938*
- green function, sound fields, sound generation, Kouzov (D.P.), *3939*
- cylindrical bodies, scattering, ultrasonics, Welton (P.J.), De Billy (M.), (et al.), *3950*
- cracks, inclusions, stress concentration, thermal stresses, Rokne (J.), Dhaliwal (R.S.), (et al.), *3990*
- floating structures, mooring, wave interactions, Yamamoto (T.), Yoshida (A.), (et al.), *4100*
- ocean waves, ship dynamics, ship motion, vibration, Bishop (R.E.D.), Price (W.G.), *4105*
- constitutive equations, mixture theories, multiphase media, nonhomogeneous media, Khoroshun (L.P.), *4131*
- finite element techniques, nonconservative systems, nonlinear analysis, Argyris (J.H.), Symeonidis (S.), *4197*
- plates, vibration (free), Romilly (N.), *4403*
- cracks, elliptical cracks, fracture mechanics, Erzhanov (Zh.S.), Garagash (I.A.), *4493*
- impulse, plates, sound generation, Mackertich (S.S.), Hayek (S.I.), *4766*
- acoustic waves, resonance, wave interactions, Fiorito (R.), Madigosky (W.), (et al.), *4779*
- lubrication (elastohydrodynamic), magneto fluid dynamics, rolling contact, Pytko (S.), Wierzcholski (K.), *4900*
- contact problems, finite element techniques, variational methods, Nguyen Dang Hung, De Saxce (G.), *5093*
- half space, rayleigh waves, seismic waves, Yakovenko (M.G.), *5870*
- bars, dynamic analysis, hamiltonian equations, Buculei (M.), Bagnaru (D.), *6052*
- control, dynamic analysis, programmed motion, Zakrzhevskii (A.E.), *6055*
- elastodynamics, kinematics, optimization, Atanackovic (T.M.), *6166*
- scattering, spherical bodies, torsional waves, Grilitskii (D.V.), Poddubnyak (A.P.), *6352*
- cylindrical waves, free boundary, reflection, Kasiak (M.), Wlodarczyk (E.), *6354*
- compressible flow, oscillations, panels, supersonic flow, Babin (O.A.), Vorobev (V.I.), (et al.), *6869*
- fluid-structure interaction, sound propagation, waveguides, Levitskii (L.A.), *6928*
- dynamic analysis, linear systems, structural response, structures, vibration isolation, Ryaboi (V.M.), Genkin (M.D.), (et al.), *7244*
- contact problems, contact stresses, numerical methods, Paul (B.), Hashemi (J.), *7268*
- lyapunov's functions, rods, stability theory, Chiorescu (G.), *7354*
- eigenvalues, vibration, Rieder (G.), Zastrow (U.), *7378*
- approximation methods, mathematical methods, singularities, vibration (forced), George (O.D.), *7398*
- cavities, shells (spherical), transient effects, transient loading, Duffey (T.A.), Johnson (J.N.), *7420*
- anisotropic media, love waves, nonhomogeneous media, Chander (S.), Gogna (M.L.), *7423*
- design (optimum), plates, Cheng (K.-T.), Olhoff (N.), *7589*
- bars, optimization, shape factors, torsion, Dems (K.), *7599*
- floating bodies, fluid-structure interaction, gravity waves (finite depth), plates, Bukatov (A.E.), *7770*
- bifurcation, flutter, limit cycles, modeling, oscillators, Thompson (J.M.T.), Lunn (T.S.), *7910*
- diffusion, finite element techniques, porous media, Kanok-Nukulchai (W.), Suaris (V.W.), *7997*
- frequencies, parallelepipeds, vibration (free), Gottlieb (H.P.W.), *8294*
- control, dynamic response, mathematical methods, plates, Leipholz (H.H.E.), *8302*
- diffraction, edge cracks, shear waves, Roy (A.), Visalakshi (N.), *8340*
- impact, resistance, structural analysis, Tagliacozzo (C.), *8344*
- cracks, residual stresses, Guz (A.N.), *8387*
- cylindrical bodies, diffraction, floating bodies, gravity waves (surface), Kudryavtsev (E.P.), *8625*
- beams (open section), bending, elastoplasticity, Ducomet (B.), *9258*
- large displacement, pertubation methods, rings, stick slip, Benson (R.C.), *9260*
- buckling (experimental), buckling (nonlinear), plates (rectangular), Fok Wing Chau, Yuen Ming Fai, *9288*
- boundary value problems, laplace equation, membranes, variational methods, Lefevere (A.-M.), *10149*
- dynamic response, parallelepipeds, vibration (forced), Hill (E.V.K.), Egle (D.M.), *10200*
- dispersion, nonlinear waves, one dimensional waves, Tokuoka (T.), *10232*
- cutting, elastic waves, lasers, supersonic flow, Borzykh (A.A.), *10242*
- acoustic waves, cavities, porous media, propagation, Junger (M.C.), *11922*
- acoustic waves, diffraction, plates, spherical bodies, Saadat (H.), Filippi (P.), *11989*

elastic constants, anisotropy, rolling, steel, Kitagawa (H.), *256*

- anisotropy, biomechanics, bones, ultrasonics, Van Buskirk (W.C.), Cowin (S.C.), (et al.), *1031*
- clay, field tests, shear waves, Abbiss (C.P.), *1318*
- fibers, graphite, tubes, Bauchau (O.A.), *1402*
- aging, polymers, Baum (J.S.), Schultz (J.M.), *1403*
- high temperature, refractories, ultrasonics, Bell (J.F.W.), Chen (J.Y.F.), (et al.), *1836*
- dislocations, orthotropic materials, stress concentration, strips, Krenk (S.), *2213*
- acoustic emission, resonance, Boileau (P.E.), Grenier (M.), (et al.), *2489*
- dynamic properties, mechanical properties, polymers, vibration, Mertz (K.), *2490*
- fibers, glass, thermal effects, Kobayashi (M.), Fujisawa (T.), (et al.), *2491*
- polymers, thermal properties, Golik (A.Z.), Zabashta (Yu.F.), (et al.), *2978*
- crystals, diamond, dispersion relation, micropolar media, Minagawa (S.), Arakawa (K.), (et al.), *3079*
- sand, saturation, strength, triaxial tests, Ricceri (G.), Soranzo (M.), *3399*
- knot size, laminates, wood, Wolfe (R.W.), Moody (R.C.), *3493*
- rods, vibration (viscoelastic), viscoelastic waves, Pritz (T.), *4447*
- elastic waves, liquid gas mixture, porous media, Vodak (F.), *4837*
- aorta, flexible walls, heart, pressure measurement, pulsatile flow, Gross (D.R.), Hunter (J.F.), (et al.), *4916*

- anisotropy, elasticity (nonlinear), Hiki (Y.), *5083*
- crystals, finite strain, Milstein (F.), *5085*
- layered media, reflection, sh waves, Coen (S.), *5243*
- aluminum alloys, composite materials, metallic composites, ultrasonics, Blessing (G.V.), Elban (W.L.), *5328*
- elasticity (nonhomogeneous), torsion, Gladwell (G.M.L.), Coen (S.), *6154*
- boundary value problems, elasticity (linear), Zavoichinskii (B.I.), *6157*
- dynamic properties, plates (annular), vibration (free), Elek (K.), Granat (J.), (et al.), *6298*
- cyclic testing, freezing, soils, Czajkowski (R.L.), Vinson (T.S.), *6389*
- copper, lattices, polycrystalline materials, shear, strain, Gairola (B.K.D.), Kroner (E.), *6468*
- blood flow, circulation, frequency response, laplace transform, Skidmore (R.), Woodcock (J.P.), *7120*
- fibers, high strength, organic fibers, polymers, Black (W.B.), *7280*
- porous media, rocks, Digby (P.J.), *7448*
- composite materials, cylindrical bodies, polymers, strength, textiles, Dumont (J.P.), *8220*
- elastoplasticity, hardness, indentation, Lawn (B.R.), Howes (V.R.), *8433*
- cement stabilized soils, compression, concrete, dynamic testing, soils, statics, tension, Kolias (S.), Williams (R.I.T.), *9427*
- insulating materials (acoustical), materials properties, transfer functions, Pritz (T.), *9676*
- composite materials, glass fibers, laminates, materials properties, Wagner (H.D.), Fischer (S.), (et al.), *10128*

elastic dislocations, continuum mechanics, elasticity, mathematical methods, tensor methods, Kunin (I.A.), *4943*

elastic foundations, contact problems, plates (circular), singular integral equations, Karasev (S.N.), *252*

- dynamic response, piles, vibration (forced), Aboul-Ella (F.), Novak (M.), *386*
- elasticity (linear), half space, layered media, Teshigawara (S.), *1178*
- boundary value problems, differential equations (partial), strips, Tsamasphyros (G.J.), Theocaris (P.S.), *1186*
- flexure, plates (orthotropic), plates (rectangular), Prakash (B.G.), *1227*
- plates (anisotropic), Toscano (R.), Maceri (A.), *1230*
- beams, railroads, vibration (free), Richard (J.), *1274*
- beams (timoshenko), dynamic effects, vehicles, winkler foundation, Newton (S.G.), Clark (R.A.), *1460*
- rods, Parnes (R.), *2260*
- beams, structural stability, Toscano (R.), Maceri (A.), *2295*
- inclusions, large displacement, plates, Watanabe (K.), *3303*
- beams, buckling, columns, Williams (F.W.), *3326*
- dynamic response, soil structure interaction, vibration (forced), Iguchi (M.), Luco (J.E.), *3375*
- beams, contact problems, creep, Uvarov (B.V.), *4361*
- beam columns, buckling, Teodorescu (P.P.), *4394*
- plates (stiffened), vibration (free), Singer (J.), Rand (O.), (et al.), *4424*
- plates (circular), vibration (free), Leissa (A.), Narita (Y.), *4426*
- plates (circular), plates (holed), vibration (free), Basu (U.), *4429*
- elasticity (linear), layered media, Slivker (V.I.), *5073*
- elasticity (linear), half space, Kavlakan (M.V.), Mikhailov (A.M.), *5075*
- beams (elastic), elasticity (nonlinear), Beaufait (F.W.), Hoadley (P.W.), *6209*
- ocean bed, pipelines, soil mechanics, stress analysis, underwater structures, winkler foundation, Hobbs (R.E.), *6551*
- bending (viscoelastic), plates (rectangular), thermoviscoelasticity, viscoelastic materials, Misra (J.C.), Samanta (S.), *6944*
- footings, smoke stacks, winkler foundation, Barvashov (V.A.), Fedorovsky (V.G.), *7321*
- boundary value problems, elasticity (linear), rings, Siemer (H.), Welskopf (H.), *7328*
- boundary value problems, plates (anisotropic), plates (nonhomogeneous), Kaczkowski (Z.), *7332*
- pendulums, stability theory, vibration (nonlinear), Breitenberger (E.), Mueller (R.D.), *7370*
- edge effects, plates (rectangular), rayleigh ritz method, vibration (free), Laura (P.A.A.), Grossi (R.O.), *7392*
- plates (skew), transient effects, vibration (free), Bhandari (N.C.), Juneja (B.L.), (et al.), *7396*
- arches, vibration (free), Plaut (R.H.), Johnson (E.R.), *7406*
- cavities, dynamic stresses, inclusions, punch problems, Kozhabekov (Zh.T.), *7409*
- beams, transient effects, vibration (torsional), Wada (H.), *7410*
- beams, plates, soil structure interaction, Wolfer (K.-H.), *7612*
- elasticity (linear), influence coefficients, rings, Hegedus (I.), *8235*
- beams (continuous), buckling, finite element techniques, framed structures, shafts, Bagci (C.), *8261*
- beams, dynamic stresses, vibration (free), Dresig (K.F.H.), Labes (M.), *8299*
- bonding, dynamic response, shells (cylindrical), Chonan (S.), *8313*
- boundary conditions, cylindrical bodies, vibration (forced), vibration (torsional), Wada (H.), *8322*
- beams, dynamic response, moving loads, vibration (free), Apaydin (T.A.), *9328*
- plates (isotropic), shear, vibration (free), Volos (N.P.), Dovganich (M.I.), *10203*
- plates, rings, structural analysis, structural optimization, Makeev (E.M.), Semenenko (V.P.), *11111*
- mindlin plates, plates (circular), vibration (free), Tomar (J.S.), Gupta (D.C.), *11129*

elastic waves, beams (curved), beams (prestressed), Farshad (M.), *396*

- dynamic response, shells (stiffened), Mikhailov (A.M.), *397*
- layered media, prestressed structures, Kalinchuk (V.V.), Poliakova (I.B.), *400*
- cracks, diffraction, Harris (J.G.), *402*
- diffraction, discontinuities, Shibahara (M.), Tateno (S.), (et al.), *403*
- discontinuities, half space, scattering, Neerhoff (F.L.), *404*
- electromagnetic loading, flaw detection, nondestructive tests, ultrasonics, Remezov (V.B.), Shkarlet (Yu.M.), *499*
- shock waves (normal), thermoelasticity, Ukeje (E.), *1291*
- penetration, plates, unloading, Barclay (D.W.), Moodie (T.B.), (et al.), *1292*
- half space, internal sources, Brock (L.M.), *1293*
- dynamic behavior, half space, Bedding (R.J.), Willis (J.R.), *1295*
- modal analysis, surface waves, Lapin (A.D.), *1297*
- electric effects, piezoelectric devices, surface waves, Cerowski (Z.), Opilski (A.), *1298*
- fracture, rock mechanics, shock waves (normal), Kosinski (W.), *1300*
- corners, cracks, diffraction, interference, Achenback (J.D.), Norris (A.N.), *1305*
- discontinuities, interface waves, Schoenberg (M.), *2365*
- random media, scattering, Bose (S.K.), Debnath (L.), *2366*
- cavities, half space, scattering, Bostrom (A.), Kristensson (G.), *2368*
- inclusions, scattering, Bostrom (A.), *2369*
- reflection, solid solid interface, transmission, Fokkema (J.T.), *2370*
- composite materials, impact, laminates, Takeda (N.), Sierakowski (R.L.), (et al.), *2376*
- crack propagation, dynamic fracture, finite element techniques, Bilek (Z.), *2449*
- granular media, porous media, saturation, Berryman (J.G.), *3000*
- elasticity (three dimensional), half space, Payton (R.G.), *3390*
- resonance, scattering, shear waves, spherical bodies, Brill (D.), Gaunaurd (G.), (et al.), *3947*
- crystals, elastodynamics, Olemskoi (A.I.), *4122*
- energy splitting, hyperbolic equations, radon transform, transforms, wave equations, Costa (D.G.), Strauss (W.A.), *4165*
- bars, dispersion, elasticity (three dimensional), Nagaya (K.), *4442*
- acoustic waves, boreholes, Yang (C.-I.), Yu (S.-M.), *4452*
- diffraction, elliptical cracks, Adler (L.), Achenbach (J.D.), *4454*
- acoustic emission, continuum mechanics, Pardee (W.J.), *4456*
- elastic constants, liquid gas mixture, porous media, Vodak (F.), *4837*
- continuum mechanics, rubber elasticity, Tokuoka (T.), *5234*
- beams (intersecting), finite element techniques, Dockerty (G.J.), Leech (C.M.), *5235*
- diffraction, wedges, Israilov (M.Sh.), *5245*
- fluid injection, porous media, Dziecielak (R.), *5850*
- theory, Babich (V.M.), *5874*
- biomechanics, bones, electroelasticity, piezoelectrics, Guzelsu (N.), Saha (S.), *6026*
- elasticity (three dimensional), nonhomogeneous media, Hudson (J.A.), *6323*
- beams (intersecting), impact, joints, Desmond (T.P.), *6325*
- residual stresses, stonely waves, Guz (A.N.), Zhuk (A.P.), *6329*
- edge effects, holes, Moodie (T.B.), Haddow (J.B.), (et al.), *6330*
- layered media, strips, Krasnushkin (P.E.), *6333*
- nonhomogeneous media, statistical continuum mechanics, Babkin (G.I.), Klyatskin (V.I.), (et al.), *6346*
- penny shaped crack, scattering, Visscher (W.M.), *6347*
- edge cracks, scattering, Mendelsohn (D.A.), Achenbach (J.D.), (et al.), *6348*
- nonhomogeneous media, scattering, Sato (H.), Matsumura (S.), *6351*
- acoustic emission, damage, microcracks, Rice (J.R.), *6355*
- numerical methods, transient effects, Gamby (D.), Lamy (R.), *6357*
- composite materials, inclusions, scattering, sound propagation, spherical waves, Berryman (J.G.), *6898*
- density, high pressure, high temperature, rocks, Levykin (A.I.), Vavakin (V.V.), *7026*
- half space, impact, lamb problem, Koshman (V.P.), *7421*
- honeycomb structures, layered media, Park (S.K.), Bertoni (H.L.), *7429*
- cracks, scattering, Shindo (Y.), *7431*
- cavities, scattering, spectral analysis, Sancar (S.), Pao (Y.-H.), *7432*
- cavities, scattering, spectral analysis, Sancar (S.), Sachse (W.), *7433*
- holes, mathematical methods, Tait (R.J.), Moodie (T.B.), *8327*
- cylindrical waves, surface waves, Pardee (W.J.), *8329*
- electroelasticity, thermodynamics, Naerlovic-Veljkovic (N.), *8330*
- acoustic emission, decay, dislocations, Clifton (R.J.), Markenscoff (X.), *8332*
- dislocations, half space, Brock (L.M.), *8335*
- acoustic waves, joints, structural elements, transmission, Rosenhouse (G.), Ertel (H.), (et al.), *8857*
- cavities, explosions, geomechanics, Vasilyev (Yu.I.), Molotova (L.V.), (et al.), *8955*
- phase changes, seismic waves, Grinfeld (M.A.), Movchan (A.A.), *8957*
- torsional waves, waveguides, Muller (P.), *9333*
- drilling, optimization, rocks, rods, Gupta (R.), *9335*
- composite materials, fibers, harmonic waves, Hlavacek (M.), *9344*
- harmonic waves, laminates, Shah (A.H.), Datta (S.K.), *9345*

- cracks, diffraction, fracture, lamb problem, Rokhlin (S.I.), *9347*
- cavities, cylindrical waves, interaction, Ulyanov (V.D.), *9349*
- dynamic properties, porous media, stratification, waves, Barzam (V.A.), *9897*
- nonlinear structures, rods, similarity methods, Seshadri (R.), Singh (M.C.), *10227*
- composite materials, propagation, random media, shear waves, Kinra (V.K.), Anand (A.), *10235*
- half space, layered media, reflection, scattering, Coen (S.), *10236*
- attenuation, dispersion, measurements (dynamic), Bondarenko (A.N.), Kondratev (A.I.), *10240*
- cutting, elastic bodies, lasers, supersonic flow, Borzykh (A.A.), *10242*
- porous media, propagation, saturation, Berryman (J.G.), *10841*
- propagation, shells (cylindrical), vibration, Guz (A.N.), *11138*
- impact, shells (conical), Barez (F.), Goldsmith (W.), *11157*
- anisotropic media, half space, propagation, Musgrave (M.J.P.), Payton (R.G.), *11164*
- anisotropic media, singularities, Pesiyak (M.Yu.), *11165*
- anisotropic media, half space, propagation, vibration, Osipov (I.O.), *11166*
- anisotropic media, damping capacity, propagation, Tarabrin (G.T.), *11167*
- edge effects, love waves, Pyatakov (P.A.), *11171*
- acoustic emission, plates, Ceranoglu (A.N.), Pao (Y.-H.), *11174*

elasticity, inequalities, plastic flow, plasticity, variational methods, Necas (J.), *51*
- eigenvalue problems, finite element techniques, lagrange multiplier, stability (numerical), Malkus (D.S.), *76*
- shells (of revolution), shells (thin), Delpak (R.), *328*
- buckling, catastrophe theory, elastic stability, shells, Hui (D.), Hansen (J.S.), *329*
- continuum mechanics, nonlinear theory, variational methods, Edelen (D.G.B.), *1102*
- finite element techniques, least squares, Zamani (N.G.), *1129*
- finite element techniques, isoparametric formulation, stress analysis, three dimensional formulation, Surana (K.S.), *1134*
- axisymmetric loading, finite element techniques, shells (axisymmetric), Surana (K.S.), *1135*
- edge cracks, elliptical cracks, infinite medium, Vijayakumar (K.), Atluri (S.N.), *1361*
- cracks, plates, singular integral equations, Kruger (K.H.), *1373*
- analysis, caustics, plane strain, plane stress, Theocaris (P.S.), Ioakimidis (N.), (et al.), *1397*
- finite element methods (hybrid), interpolation, materials properties, Spilker (R.L.), *2061*
- continuum mechanics, solid mechanics, structural analysis, Ugural (A.C.), Fenster (S.K.), *2208, book*
- boundary value problems, cracks, griffith cracks, Golecki (J.J.), *2429*
- design (optimum), harmonic analysis, inclusions, Richards (R.) Jr., Bjorkman (G.S.) Jr., *2510*
- composite materials, computing techniques, eigenvalue problems, finite element methods, fracture, optimization, plasticity, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- bounded variables, computing techniques, finite element methods, Kelly (D.W.), *3135*
- bending, finite element techniques, Tanenaiko (O.D.), *3141*
- boundary value problems, galerkin method, Agaev (G.N.), Gamidov (V.S.), *4168*
- collocation, computing techniques, singular integral equations, Ioakimidis (N.I.), Theocaris (P.S.), *4182*
- finite element techniques, mooney-rivlin materials, rubber elasticity, Ruas (V.), *4190*
- finite element techniques, finite strain, nonlinear characteristics, Malkus (D.S.), Fuller (E.R.) Jr., *4200*
- energy methods, fracture, fracture mechanics, pressure vessels, steel, Rosenfield (A.R.), Shetty (D.K.), *4518*
- modeling, ocean bed, viscoelasticity, Lambeck (K.), Nakiboglu (S.M.), *4844*
- continuum mechanics, elastic dislocations, mathematical methods, tensor methods, Kunin (I.A.), *4943*
- coordinate systems, mathematical methods, navier equation, Berger (B.S.), Curtis (D.M.), *4959*
- boundary value problems, orthogonal functions, viscoelasticity, Melnikov (V.P.), *4962*
- functional analyis, plasticity, solid mechanics, Necas (J.), Hlavacek (I.), *5068, book*
- beams, continuum mechanics, shells, solid mechanics, Reismann (H.), Pawlik (P.S.), *5069, book*
- computing techniques, multiple cracks, stress intensity factor, Vialaton (G.), Brunet (M.), (et al.), *5298*
- existence theorems, functional analyis, strips, uniqueness, Lebedev (L.P.), *6152*
- boundary value problems, constraints, incompressible media, Lazarev (M.I.), *6153*
- computing techniques, cracks, discontinuities, Ioakimidis (N.I.), *6455*
- computing techniques, cracks, singular integral equations, Boiko (A.V.), Karpenko (L.N.), *6458*
- friction (sliding), roughness, surface profiles, Phan-Thien (N.), *7083*
- earth, magnetic field, tectonics, Sasai (Y.), *8000*
- composite materials, plasticity, solid mechanics, Hopkins (H.G.) eds., Sewell (M.J.), *8179, book*
- energy release rate, fourier transform, griffith cracks, stress intensity factor, strips, Dhaliwal (R.S.), Singh (B.M.), *8390*
- edge cracks, stress intensity factor, Bowie (O.L.), Freese (C.E.), *8391*
- contact stresses, deflections, gear teeth, half space, Terauchi (Y.), Nagamura (K.), *8472*
- finite element methods (hybrid), stress analysis, transformation, Nath (B.), *9139*
- conduction (heat), differential equations (partial), finite element techniques, Gibert (P.), Gorge (Y.), *9142*
- friction, stress concentration, Dundurs (J.), Comninou (M.), *10288*
- acoustics, panels, plates (sandwich), Narayanan (S.), Shanbhag (R.L.), *11971*

elasticity (linear), boundary value problems, cracks, potential theory, three dimensional formulation, England (A.H.), *38*
- orthotropic materials, sheet metal, winding, Yagoda (H.P.), *236*
- boundary value problems, saint venant principle, strain energy, Biollay (Y.), *237*
- singularities, stress concentration, stresses, wedges, Dempsey (J.P.), *238*
- boundary elements, piezoelectrics, Tanaka (K.), Tanaka (M.), *242*
- shells (spherical), stamping, stress intensity factor, torsion, Aleksandrov (V.M.), Karpenko (V.A.), *244*
- contact problems, singular integral equations, uniqueness, variational methods, Panagiotopoulos (P.D.), Zastrow (U.), *254*
- biaxial loading, crack opening displacement, stress intensity factor, Gross (B.), *481*
- complex variables, contact problems, potential theory, Guz (A.N.), *1175*
- elastic foundations, half space, layered media, Teshigawara (S.), *1178*
- anisotropic media, existence theorems, uniqueness, Umanskii (S.E.), *1184*
- boundary value problems, periodic problems, uniqueness, Howell (K.B.), *2209*
- half space, inclusions, interference fits, Stagni (L.), *2211*
- deformation, energy methods, strain energy, Ecsedi (I.), *2218*
- deformation, energy methods, strain energy, Ecsedi (I.), *2219*
- beams (flexural), bending (elastic), shear, shear centre, Gyarmathy (K.), *2221*
- boundary elements, numerical methods, Bhattacharyya (P.K.), Symm (G.T.), *2225*
- analogies, differential equations (partial), Everstine (G.C.), *3075*
- boundary value problems, constraints, functional analyis, Rostamian (R.), *3228*
- cracks, half space, punch problems, Stallybrass (M.P.), *3232*
- corners, plates, re-entrant corners, stress intensity factor, Theocaris (P.S.), Prassianakis (J.), *3233*
- cracks, inclusions, Maiti (M.), Paramguru (R.), *3237*
- boundary value problems, variational methods, Kozak (I.), *3241*
- infinite medium, uniqueness, well-posedness, Galdi (G.P.), Rionero (S.), *4124*
- boundary value problems, infinite medium, uniqueness, Howell (K.B.), *4125*
- fracture, solid mechanics, stress analysis, Faupel (J.H.), Fisher (F.E.), *4330, book*
- continuum mechanics, energy methods, solid mechanics, Eisenberg (M.A.), *4331, book*
- cracks, plates (weakened), singular integral equations, Borshchuk (E.M.), *4336*
- singularities, solid mechanics, variational methods, Rozin (L.A.), *4338, book*
- energy methods, variational methods, virtual work methods, Kozak (I.), *4339*
- complex variables, holes, prisms, torsion, Bhargava (R.D.), Puranik (S.S.), *4341*
- anisotropic media, boundary integral methods, green function, half space, Kobayashi (S.), Nishimura (N.), *4344*
- beams, solid mechanics, torsion, Singh (P.N.), Jha (P.K.), *5070, book*
- composite materials, photoplasticity, shells, viscoelasticity, Kuznetsov (G.B.) eds., Shakirov (N.V.), *5071, book*
- biharmonic equation, boundary value problems, Evans (D.J.), Murphy (C.P.), *5072*
- elastic foundations, layered media, Slivker (V.I.), *5073*
- inclusions, infinite medium, Selvadurai (A.P.S.), *5074*
- elastic foundations, half space, Kavlakan (M.V.), Mikhailov (A.M.), *5075*
- boundary conditions, boundary value problems, Kozak (I.), *5076*
- couple stresses, functional analyis, Martynenko (M.D.), Shipka (I.G.), (et al.), *5077*
- half space, layered media, Amenzade (Yu.A.), *5078*
- complex variables, plates (holed), plates (holed), Theocaris (P.S.), Bardzokas (D.), *5086*
- contact problems, cylindrical bodies, rolling contact, Martirosyan (Z.A.), *5092*
- disks, holes, rings, Uspenskii (A.A.), *5166*
- isotropic materials, mathematical methods, tensor methods, vector methods, Smith (G.F.), *6060*
- boundary value problems, elastic constants, Zavoichinskii (B.I.), *6157*
- cylindrical bodies, green function, stress concentration, Hasegawa (H.), *6162*
- constraints, contact problems, functional analyis, Demkowicz (L.), *6165*
- finite element techniques, splines, Boyer (J.C.), Trompette (P.), *6171*
- boundary elements, plates, stress analysis, Sirtori (S.), *6172*
- shells (anisotropic), shells (cylindrical), Podlichuk (Yu.N.), *6224*
- plates (corrugated), plates (stiffened), Lau (J.H.), *6230*
- boundary value problems, elastostatics, integro differential equations, Heise (U.), *7186*

- boundary value problems, potential theory, Ton Tran-Cong, *7262*
- biharmonic equation, boundary value problems, singular integral equations, Heise (U.), *7271*
- biharmonic equation, differential equations (partial), Jaswon (M.A.), Shidfar (A.), (et al.), *7272*
- boundary value problems, elastic foundations, rings, Siemer (H.), Welskopf (H.), *7328*
- approximation methods, beams (elastic), boundary value problems, plates, Karpov (N.I.), *7329*
- membranes, prestressed structures, Turvey (G.J.), *7335*
- constitutive equations, shells, Markov (P.), *7338*
- corners, inclusions, stress concentration, Gomez (C.), Dundurs (J.), *8186*
- boundary value problems, rayleigh ritz method, Tereshchenko (V.Ya.), *8192*
- boundary value problems, laplace transform, Miletic (J.), *8193*
- elastic foundations, influence coefficients, rings, Hegedus (I.), *8235*
- axisymmetric loading, cylindrical bodies, Zlatin (A.N.), *8247*
- buckling, combined loading, rings, Schmidt (R.), *8262*
- boundary value problems, rock mechanics, Dymek (F.), *9368*
- plates (holed), plates (weakened), Kosmodamianskii (A.S.), Chernik (V.I.), *10145*
- boundary value problems, plates (thick), Misicu (M.), *10160*
- cylindrical bodies, vessels, Duthie (G.), White (G.C.), (et al.), *10163*

elasticity (nonhomogeneous), inclusions, inhomogeneities, torsion, Datta (S.), Kanwal (R.P.), *246*
- half space, stress concentration, winkler foundation, Calladine (C.R.), Greenwood (J.A.), *257*
- plates (anisotropic), stress analysis, Suzuki (S.), *317*
- anelasticity, magnetoelasticity, micropolar media, vibration, Hsieh (R.K.T.), Voros (G.), *1058*
- cylindrical bodies, inclusions, screw dislocations, Toya (M.), *1176*
- half space, inhomogeneities, stress concentration, Fujita (T.), Tsuchida (E.), *1177*
- thermal properties, thermoelasticity, Lomakin (V.A.), El-Karamani (A.M.), *2969*
- contact problems, half space, Singh (B.M.), Rokne (J.G.), (et al.), *3243*
- finite element methods, plates (nonhomogeneous), variational methods, Tsybenko (A.S.), Vashchenko (N.G.), (et al.), *3250*
- composite materials, dynamic analysis, hamilton principle, variational methods, Willis (J.R.), *4174*
- cylindrical bodies, nonhomogeneous media, torsion, Chakravorty (J.G.), *4340*
- anisotropic media, nonhomogeneous media, Jin (F.-S.), *5095*
- composite materials, couple stresses, elasticity (nonlocal), nonhomogeneous media, Chigarev (A.V.), *5096*
- elastic constants, torsion, Gladwell (G.M.L.), Coen (S.), *6154*
- laminates, nonhomogeneous media, stress concentration, Plevako (V.P.), *6170*
- crack growth, creep, micromechanisms, Venkateswaran (A.), Hasselman (D.P.H.), *7277*

elasticity (nonlinear), crystals, molecular theory, phase changes, Parry (G.P.), *2*
- cosserat solids, micromechanics, Brunk (G.), *3*
- deformation (finite), finite strain, stability, Sawyers (K.N.), Rivlin (R.S.), *232*
- deformation (finite), protoelasticity, sheet metal, Kydoniefs (A.D.), *233*
- deformation (finite), penny shaped crack, stress rupture, Selvadurai (A.P.S.), *234*
- variational methods, virtual work methods, Zhong-Heng (G.), *235*
- energy methods, strain energy, variational methods, Washizu (K.), *243*
- deformation, shells (of revolution), Myachenkov (V.I.), Yusov (V.N.), *316*
- arteries, biomaterials, tissues, Fung (Y.C.), *1039*
- beams (curved), bending (elastic), elastica, rods, Fosdick (R.L.), James (R.D.), *2216*
- large displacement, waves, Ziv (M.), *2362*
- material nonlinearities, shock waves (normal), Kulikovskii (A.G.), Shaposhnikova (E.I.), *2363*
- reflection, refraction, Grinfeld (M.A.), Movchan (A.A.), *2371*
- conservation laws, energy methods, path integrals, Simmonds (J.G.), Nicholson (J.W.), *3229*
- bearings, elastomers, loads, springs, Lehmann (D.), *3571*
- deformation (finite), finite strain, Aleksandrov (A.Ya.), Shushunov (V.V.), *4332*
- nonlinear structures, structural analysis, Szuladzinski (G.), *4343*
- acceleration waves, nonlinear waves, Lustman (L.), *4441*
- continuum mechanics, fluid mechanics, rheology, solid mechanics, Gurtin (M.E.), *4924, book*
- constitutive equations, deformation (finite), shock waves, thermodynamics (nonequilibrium), Malek-Madani (R.), *4925*
- elastodynamics, one dimensional waves, stability theory, Rivlin (R.S.), *4928*
- fluids, jump conditions, shock waves, Ting (T.C.T.), *4930*
- constitutive equations, continuum mechanics, deformation (finite), solid mechanics, Gurtin (M.E.), *5080, book*
- indentation, punch problems, Choi (I.), Shield (R.T.), *5081*
- nonlinear analysis, nonlinear methods, Grigolyuk (E.I.), Shalashilin (V.I.), *5082*
- anisotropy, elastic constants, Hiki (Y.), *5083*
- deformation (finite), holes, plane strain, plane stress, Varley (E.), Cumberbatch (E.), *5084*
- existence theorems, uniqueness, Kholmatov (T.), *6156*
- constitutive equations, continuum mechanics, kinematics, Casey (J.), Naghdi (P.M.), *6158*
- contact problems, sheet metal, shells (thin), Wang (C.Y.), *6167*
- beams (flexural), electrical analogies, Ovsyanko (V.M.), *6206*
- beams (elastic), elastic foundations, Beaufait (F.W.), Hoadley (P.W.), *6209*
- energy methods, variational methods, Zhong-Heng (G.), *7267*
- dynamic response, existence theorems, nonlinear theory, uniqueness, Vilke (V.G.), *7424*
- seismic waves, Grinfeld (M.A.), *8008*
- boundary value problems, cylindrical bodies, saint venant principle, Horgan (C.O.), Knowles (J.K.), *8181*
- boundary value problems, deformation (finite), Levin (V.A.), Tarasev (G.S.), *8183*
- sheet metal, springs, Wang (C.-Y.), *8234*
- asymptotic behavior, plates (nonhomogeneous), Kolos (A.V.), *8252*
- beam columns, cylindrical bodies, elasticity (three dimensional), Musaev (D.A.), *9291*
- crack opening displacement, finite amplitude, nonlinear analysis, Knowles (J.K.), *9405*
- asymptotic methods, buckling, plates, Rudev (A.N.), *11121*

elasticity (nonlocal), composite materials, couple stresses, elasticity (nonhomogeneous), nonhomogeneous media, Chigarev (A.V.), *5096*
- elastoplasticity, yield criteria, Eringen (A.C.), *6179*
- cracks, singularities, Atkinson (C.), *7523*
- asymptotic behavior, crack opening displacement, Atkinson (C.), *8394*

elasticity (three dimensional), beams (timoshenko), shear loading, shearing coefficient, Kelkel (K.), *295*
- crack propagation, stress intensity factor, Kassir (M.K.), *465*
- cracks, elliptical cracks, Sladek (J.), *466*
- airy function, anisotropic media, disks, plates (anisotropic), Zastrow (U.), *2226*
- cracks, plates (thick), singular integral equations, singularities, Folias (E.S.), *2434*
- fluidstructure interaction, hydroelasticity, Guz (A.N.), *2947*
- beams (flexural), cylindrical bodies, Kasano (H.), Oshima (H.), (et al.), *3230*
- boundary value problems, differential equations (partial), functional analyis, Tereshchenko (V.Ya.), *3231*
- indentation, semi infinite media, stress concentration, Fujita (T.), Tsuchida (E.), (et al.), *3235*
- compression, stability theory, Zubov (L.M.), *3320*
- elastic waves, half space, Payton (R.G.), *3390*
- axisymmetric loading, cylindrical bodies, Yoshino (T.), Utsugi (S.), *4333*
- bars, dispersion, elastic waves, Nagaya (K.), *4442*
- elastic waves, nonhomogeneous media, Hudson (J.A.), *6323*
- cylindrical bodies, saint venant principle, torsion, Khatiashvili (G.M.), *7259*
- contact problems, green function, half space, Jentsch (L.), *7261*
- coal, mining, Vashakmadze (T.S.), Gotsulyak (E.A.), (et al.), *8184*
- boundary integral methods, discontinuities, Hartmann (F.), *8185*
- boundary value problems, variational methods, Tereshchenko (V.Ya.), *8190*
- beam columns, cylindrical bodies, elasticity (nonlinear), Musaev (D.A.), *9291*
- functional analyis, hilbert space, mathematical methods, variational methods, Nowinski (J.L.), *10013*

elastodynamics, structural analysis, vibration, Magrab (E.B.), *364, book*
- crack propagation, dynamic fracture, shear loading, Bui (H.D.), Ehrlacher (A.), *470*
- dynamic response, hyperelastic materials, tubes, vibration (forced), vibration (free), Rogers (C.), Baker (J.A.), *1262*
- simple materials, variational methods, viscoelasticity (dynamic), Atanackovic (T.), *2217*
- dynamic stability, eigenvalues, Chelomei (S.V.), *2322*
- dyades, linkages, mechanisms (planes), Pelecudi (C.), Mitsis (S.), *2553*
- cracks, electroelasticity, piezoelectrics, scattering, shear waves, Sabbagh (H.A.), *3240*
- crystals, elastic waves, Olemskoi (A.I.), *4122*
- elasticity (nonlinear), one dimensional waves, stability theory, Rivlin (R.S.), *4928*
- half space, seismic waves, Koshman (V.P.), *5079*
- fracture, magnetic field, rods, Golovin (Yu.I.), Finkel (V.M.), (et al.), *5087*
- edge dislocations, transforms, Markenscoff (X.), Clifton (R.J.), *6155*
- boundary integral methods, laplace transform, stress concentration, Manolis (G.D.), Beskos (D.E.), *6160*
- elastic bodies, kinematics, optimization, Atanackovic (T.M.), *6166*
- dissipation, nonlinear waves, Gulyaev (V.I.), *6336*
- contact problems, finite element techniques, Doi (O.), Asano (N.), *6369*
- bimodulus materials, interface cracks, stress intensity factor, waves, Hanzawa (H.), Kishida (M.), (et al.), *6451*
- dynamic behavior, shells (nonlinear), Libai (A.), *8246*
- lasers, metals, thermal effects, thermoelasticity (transient), Scruby (C.B.), Dewhurst (R.J.), (et al.), *8877*
- caustics, crack growth, crack propagation, stress intensity factor, Theocaris (P.S.), Papadopoulos (G.A.), *9416*
- elastoplasticity, plates (annular), rotating disks, Weber (H.), Dreher (A.), *10161*
- crack tip geometry, stress intensity factor, surface flaws, Achenbach (J.D.), Brind (R.J.), *10290*
- finite element techniques, harmonic waves, Murakami (H.), Shioya (S.), (et al.), *11173*

elastomers, friction (sliding), polymers, space, vacuum, Silin (A.A.), *1005*
- composite materials, materials properties, Yevstratov (V.F.), Lykin (A.S.), (et al.), *3278*
- bearings, elasticity (nonlinear), loads, springs, Lahmann (D.), *3571*
- bearings (journal), chatter, vibration, water, Krauter (A.I.), *4890*
- damping, dynamic behavior, Klingenberg (R.), *8278*
- friction (solid fluid), seals, surfaces, wear, Varga (G.), Toth (O.), *8477*
- compression, fibers, material testing, tubes, Farris (R.), Filippov (A.), *10324*

elastoplasticity, finite element techniques, mesh generation, substructuring, Anand (S.C.), Shaw (R.H.), *80*
- constitutive equations, convexity conditions, functional analyis, Krawietz (A.), *266*
- internal stresses, perturbation methods, work hardening, Panzeca (T.), Polizzotto (C.), *269*
- imperfections, plates, Rhodes (J.), *270*
- forming, plasticity, stress analysis, Lee (E.H.), *273*
- finite element techniques, numerical methods, yield criteria, Tracey (D.M.), Freese (C.E.), *278*
- deformation, pressure vessels, shells (cylindrical), shells (plastic), Ohashi (Y.), Okouchi (T.), *312*
- compression, shells (cylindrical), Kovalenko (V.A.), Piskun (V.V.), (et al.), *322*
- compression, dynamic properties, experimental results, metals, shock waves (normal), Astanin (V.V.), *399*
- constitutive equations, deformation (finite), strain rate, Mandel (J.), *1051*
- bearings (ball), contact problems, spherical bodies, Shenderov (I.B.), *1198*
- cyclic loading, structural analysis, work hardening, Williams (D.P.), Topper (T.H.), *1201*
- high temperature, shells (thick), shells (thin), Levy (A.), *1205*
- clay, embankments, finite element methods, Cavounidis (S.), *1324*
- crack opening displacement, j-integral, thermal loading, Aoki (S.), Kishimoto (K.), (et al.), *1374*
- crack growth, crack opening displacement, stress intensity factor, yield criteria, De Koning (A.U.), *1378*
- chimneys, earthquake effects, Shiau (L.-C.), Yang (T.Y.), *1884*
- computing techniques, finite strain, Nagtegaal (J.C.), De Jong (J.E.), *2232*
- cyclic loading, shakedown structures, work hardening, Megahed (M.M.), *2238*
- cyclic loading, nonlinear materials, statically indeterminate structures, structural analysis, Erofeev (V.I.), Kondeikin (P.I.), *2242*
- dynamic analysis, plates (plastic), plates (rectangular), Raghavan (K.S.), Rao (S.S.), *2283*
- large displacement, panels (curved), structural stability, Stolyarov (N.N.), Pestrovskii (G.M.), *2307*
- deformation (plastic), finite element techniques, forging, materials properties, Hartley (P.), Sturgess (C.E.N.), (et al.), *2394*
- crack growth, crack tip geometry, finite element methods (hybrid), fracture mechanics, Rice (J.R.), Drugan (W.J.), (et al.), *2441*
- crack opening displacement, fracture mechanics, fracture toughness, residual strength, Schwalbe (K.-H.), *2442*
- cracking, finite element techniques, stress concentration, welding, Karppi (R.A.J.), Toyoda (M.), (et al.), *2461*
- algorithms, linear programming, plasticity, wolfe-markowitz algorithm, Smith (D.L.), *2507*
- deformation (plastic), finite element methods, plane strain, Corradi (L.), Gioda (G.), *3260*
- cylindrical bodies, expansion, finite strain, strain softening, Berest (P.), Nguyen (M.D.), *3262*
- half space, indentation, residual stresses, shakedown structures, Hills (D.A.), Ashelby (D.W.), *3263*
- incremental analysis, loads, stress analysis, Cheng (S.Y.), Hsu (T.R.), (et al.), *3271*
- deformation (plastic), inverse problems, shells (plastic), Burlakov (A.V.), Lvov (G.I.), *3307*
- collapse, imperfections, shells (plastic), shells (spherical), Kao (R.), *3322*
- buckling (experimental), buckling (plastic), shells (cylindrical), shells (plastic), Croll (J.G.A.), *3337*
- edge cracks, holography, Arkhipov (V.I.), *3454*
- ductile fracture, fracture, j-integral, material testing, surveys, Landes (J.D.), Begley (J.A.), (et al.), *3460, book*
- cracks, j-integral, Paris (P.C.), Ernst (H.), (et al.), *3463*
- crack propagation, yield condition, Dean (R.H.), Hutchinson (J.W.), *3464*
- shear walls, structural analysis, Pekau (O.A.), Gocevski (V.), *3513*
- constraints, design (optimum), displacement, optimization, Kaneko (I.), Maier (G.), *3515*
- buckling, columns, design (optimum), optimization, Amari (M.), Okumura (A.), *3521*
- beams, plates, Kamtekar (A.G.), *3525*
- frames, geometric nonlinearities, random loading, reliability analysis, Casciati (F.), Faravelli (L.), *3527*
- dynamic analysis, piers, reinforced concrete, seismic loading, Ozaka (Y.), Yanagida (T.), (et al.), *3533*
- mathematical programming, matrix methods, shakedown structures, Hung (N.D.), Palgen (L.), *3544*
- computer programming, finite element techniques, prandtl-reuss relations, Deb (S.R.), Barman (S.), (et al.), *4203*
- inequalities, integral inequalities, plasticity, Berezhnoi (I.A.), Iviev (D.D.), *4350*
- creep, finite element techniques, shells, Levy (A.), *4353*
- flexure, plastic behavior, shells (cylindrical), shells (shallow), Kolesnik (I.A.), Troshin (V.G.), *4372*
- axial loading, shells (cylindrical), shells (plastic), torque, Ermakov (S.V.), *4375*
- deformation, soils, Sporykhin (A.N.), *4464*
- forming, necking, nucleation, Chu (C.C.), Needleman (A.), *4471*
- computing techniques, finite element techniques, fracture, hardening, Hammel (J.W.), Bodisco (U.V.), (et al.), *4502*
- dynamic testing, shakedown structures, vibration, Ceradini (G.), *4513*
- trusses, uniqueness, White (D.L.), Hodge (P.G.) Jr., *4541*
- bonded joints, contact problems, diffusion bonding, half space, Kharitonova (A.N.), Sergeev (A.V.), (et al.), *4565*
- uniqueness, work hardening, Brovko (G.L.), *5108*
- boundary value problems, functional analyis, Brovko (G.L.), *5109*
- experimental results, rupture, yield criteria, Mozharovskii (N.S.), Bobyr (N.I.), (et al.), *5110*
- notch sensitivity, stress concentration, Molski (K.), Glinka (G.), *5300*
- boundary layer, crack propagation, dynamic fracture, perturbation methods, Dunayevsky (V.), Achenbach (J.D.), *5308*
- fracture mechanics, nuclear radiation, nuclear reactors, pressure vessels, radiation effects, Khan (M.A.), Shoji (T.), (et al.), *5370*
- plates (circular), thermal loading, welded joints, work hardening, Makhnenko (V.I.), Oleinik (V.A.), (et al.), *5796*
- finite element techniques, residual stresses, Arkhipov (A.N.), Temis (Yu.M.), *6116*
- elasticity (nonlocal), yield criteria, Eringen (A.C.), *6179*
- deformation (finite), strain analysis, Zhong-Heng (G.), *6181*
- deformation, micromechanics, stress strain relationships, Getman (A.F.), *6189*
- large displacement, nonlinear theory, plates (stiffened), Webb (S.E.), Dowling (P.J.), *6227*
- finite element techniques, nonlinear theory, plates (nonlinear), Gobetti (A.), *6234*
- bending, buckling (plastic), pressurized pipes, tubes, Fabian (O.), *6255*
- plastic behavior, structural optimization, variational methods, Cinquini (C.), Sacchi (G.), *6270*
- clay, mathematical models, Banerjee (P.K.), Stipho (A.S.), *6375*
- deformation (finite), soil consolidation, Carter (J.P.), Booker (J.R.), (et al.), *6386*
- creep, fatigue, life expectancy, structural design, Nikitenko (A.F.), Zaev (V.A.), *6431*
- computing techniques, fracture, newton method, Delorenzi (H.G.), *6446*
- cracks, finite element methods (hybrid), stress intensity factor, Kuna (M.), Bilek (Z.), (et al.), *6447*
- deformation, fatigue, piezoelectric devices, ultrasonics, Bajons (P.), *6464*
- deformation, framed structures, inelasticity, variable loading, work hardening, Tin Loi (F.), *6528*
- constitutive equations, porous media, rocks, Yamada (S.E.), Schatz (J.F.), (et al.), *7017*
- mathematical methods, torsion, unloading, Caffarelli (L.A.), Friedman (A.), *7165*
- dynamic analysis, finite amplitude, imperfections, shells, Ishizaki (T.), Bathe (K.-J.), *7216*
- beams (thin section), computer programming, shells (shallow), Larkin (L.A.), *7217*
- constitutive equations, finite strain, plasticity, Sidoroff (F.), *7281*
- deformation (finite), failure, torsion, Billington (E.W.), *7286*
- excavation, materials properties, mining, underground, Chugh (A.K.), *7288*
- boundary integral methods, deformation (plastic), Benitez (F.G.), Alarcon (E.), (et al.), *7294*
- cylindrical bodies, half space, rolling, Zarka (J.), Frelat (J.), *7295*
- bending, bimodulus materials, metallic composites, Akhmerov (A.F.), *7306*
- bending (plastic), cranes, girders (plate), Ballio (G.), Poggi (C.), (et al.), *7318*
- cylindrical bodies, forming, pressurized pipes, Riedel (D.), *7344*
- dynamic analysis, large displacement, pipes, Heifetz (J.), Benjamin (M.), (et al.), *7352*
- shells (axisymmetric), snap-through, Toi (Y.), Ishinabe (M.), (et al.), *7365*
- experimental methods, shock waves (normal), Astanin (V.V.), *7427*
- cables, waves, Adylov (K.A.), *7428*
- soils, stress strain relationships, Ohmaki (S.), *7436*
- crack growth, fatigue, fractographic tests, Kobayashi (H.), Sibuya (E.), (et al.), *7481*
- crack opening displacement, fracture criteria, j-integral, material testing, Havas (I.), Czoboly (E.), *7526*
- functional analyis, polycrystalline materials, Malyi (V.I.), *8208*
- boundary elements, half space, Telles (J.C.F.), Brebbia (C.A.), *8216*
- beams (flexural), deformation, shakedown structures, variational methods, Mazzarella (C.), *8232*
- creep, finite strain, pressure vessels, Betten (J.), *8254*
- deformation (finite), plates (stiffened), postbuckling behavior, ship structures, Matthies (H.), Payer (H.G.), *8276*
- acoustics, continuum theory, Johnson (G.C.), *8328*
- crack opening displacement, fracture criteria, j-integral, Willoughby (A.A.), Pratt (P.L.), (et al.), *8401*

- elastic constants, hardness, indentation, Lawn (B.R.), Howes (V.R.), *8433*
- dynamic effects, shakedown structures, thermal effects, work hardening, Konig (J.A.), Maier (G.), *8436*
- beams, deflections, frames, plasticity, yield condition, Bandyszewski (W.), Sawczuk (A.), *8438*
- shear walls, structural analysis, torsion, Coull (A.), Tawfik (S.Y.), *8457*
- half space, thermal shock, thermal waves, Nagrelli (V.E.), *8882*
- computing techniques, iterative methods, newton method, Atrek (E.), *9117*
- beams (open section), bending, elastic bodies, Ducomet (B.), *9258*
- inverse problems, rocks, tunnels, Gioda (G.), Maier (G.), *9369*
- constitutive relations, crack opening displacement, plane strain, Gao (Y.-C.), *9407*
- crack opening displacement, mixed mode fracture, Gai (Y.-C.), *9408*
- finite element techniques, fracture criteria, Beremin (F.M.), *9409*
- beams, bending, reinforced concrete, shear, Nakazawa (T.), Ohta (T.), *9444*
- interference fits, machine design, rotating bodies, Kollmann (F.G.), *9467*
- elbows, finite element techniques, pipes, Lazzeri (L.), *10068*
- elastodynamics, plates (annular), rotating disks, Weber (H.), Dreher (A.), *10161*
- buckling (nonlinear), columns, imperfection sensitivity, trusses, Byskov (E.), *10167*
- buckling, large displacement, pressurized components, shells, Galletly (G.D.), *10185*
- crack initiation, fatigue, Saanouni (K.), Bathias (C.), *10270*
- extensometers, fracture toughness, Williams (J.A.), Carlson (K.W.), *10279*
- crack growth, fracture criteria, Theocaris (P.S.), Andrianopoulos (N.P.), *10300*
- rock mechanics, strain softening, structural support, tunnels, Tanimoto (C.), Hata (S.), *10366*
- cylindrical bodies, pressure vessels, Aggarwal (S.K.), Nayak (G.C.), *10368*
- explosives, stress relieving, welded joints, Petushkov (V.G.), Fadeenko (Yu.I.), *10382*
- boilers, foundations, seismic loading, Nakao (Y.), Murase (Y.), (et al.), *10851*
- bearings (slider), finite element methods, iterative methods, lubrication (elastohydrodynamic), Cumier (A.R.), Taylor (R.L.), *10894*
- impact, shear waves, supersonic flow, Freund (L.B.), Douglas (A.S.), *11161*
- impact, numerical methods, viscoelasticity (dynamic), Mikkola (M.J.), Tuomala (M.), (et al.), *11175*
- channel flow, magneto fluid dynamics, stability theory, tensor methods, viscous flow, Simkhovich (S.L.), Ionochkina (L.I.), (et al.), *11809*

elastoviscoplasticity, alloys, constitutive equations, strain rate, Suliciu (I.), *1052*
- laminates, stiffness, work hardening, Aboudi (J.), *2250*
- birefringence, cyclic loading, photoelasticity, polymers, Nishitani (T.), Koike (Y.), *2466*
- dynamic response, laminates, nonlinear analysis, work hardening, Aboudi (J.), Benveniste (Y.), *7407*
- constitutive equations, pressurized pipes, thermal stresses, Inoue (T.), Nagaki (S.), (et al.), *7951*
- fracture mechanics, j-integral, shells (cylindrical), work hardening, yield condition, Carmignani (C.), Vitale (E.), *8151*
- constitutive equations, creep, viscoelastic materials, viscoplasticity, Katona (M.G.), *8195*
- cavities, excavation, tunnels, Nonaka (T.), *8199*
- buckling, half space, surface effect, Horii (H.), Nemat-Nasser (S.), *10184*

Elban (W.L.), see Blessing (G.V.), *5328*

Eldarov (F.G.), see Filippov (L.P.), *2780*

Eldred (C.H.), see Wurster (K.E.), *6888*

electric effects, elastic waves, piezoelectric devices, surface waves, Cerowski (Z.), Opilski (A.), *1298*
- condensation (dropwise), steam turbines, wet steam, Ryley (D.J.), Loftus (F.P.), *2752*
- aerosols, scattering, Kapustin (V.N.), Zagainov (V.A.), (et al.), *4833*
- ocean, sound generation, wave generation, Harker (K.J.), Fraser-Smith (A.C.), *5720*
- aerosols, measurements, optical techniques, properties, Straubel (H.), *8914*
- kinetic theory (relativistic), plasma, theory, vlasov equation, Milantev (V.P.), *9800*

electric power, motors, noise, noise abatement, Yang (S.-J.), *2937, book*
- motors, propulsion, ship performance, Rains (D.A.), Vanlandingham (D.J.), (et al.), *5965*
- cables, dynamic response, towers, vibration (forced), wind loads, Matheson (M.J.), Holmes (J.D.), *6872*

electric propulsion, argon, ionic propulsion, Ramsey (W.D.), *848*
- chemical propulsion, orbit transfer, vehicles, Rehder (J.J.), Wurster (K.E.), *849*
- doppler effect, estimation, random error, space vehicles, Asher (R.B.), Eller (T.J.), (et al.), *5714*

electric resistance, aluminum alloys, damage, material testing, steel, Cailletaud (G.), Policella (H.), (et al.), *7504*

electric spark discharge, cratering, cutting, data analysis, geometrical properties, stochastics, Pandit (S.M.), Rajurkar (K.P.), *1348*
- machining (electrochemical), water, Jeswani (M.L.), *3428*
- low density flows, velocity measurement, wind, Brown (J.H.), Good (R.E.), *8662*

electrical analogies, friction (solid solid), heat transfer (direct contact), thermal effects, Lenk (D.), Zscherpel (W.), *933*
- beams (flexural), elasticity (nonlinear), Ovsyanko (V.M.), *6206*
- computing techniques, discrete systems, graph theory, mathematical models, Savage (G.J.), Kesavan (H.K.), *8137*

electrical analysis, charpy tests, crack growth, steel, Okumura (N.), Venkatasubramanian (T.V.), (et al.), *5293*

electrical components, annular flow, cables, cooling, joints, thermal effects, Abdel Aziz (M.M.), Riege (H.), *7845*
- automatic control, fiber optics, helicopters, hydraulics, rotors, Kretz (M.), Larche (M.), *8649*

electrical conductivity, sedimentation, Gonzalez-Caballero (F.), Pardo (G.), (et al.), *1737*
- conducting fluid, two phase flow, Barnea (D.), Shoham (O.), (et al.), *2989*
- boundary layer, magneto fluid dynamics, numerical analysis, vortex flow, Kalis (Kh.E.), Kolesnikov (Yu.B.), *9786*
- earthquakes, initiation, Barsukov (O.M.), *9914*
- analysis, containers, discharges, liquids, Golovko (Yu.N.), *10736*
- channel flow, magneto fluid dynamics, temperature, theory, Vishnyakov (V.I.), Sultanov (I.F.), *11806*
- analytical methods, magneto fluid dynamics, velocity profiles, vortex flow, Kalis (Kh.E.), Kolesnikov (Yu.B.), *11832*

electrical instruments, automatic control, hydraulics, pumps, servomechanisms, valves, Green (W.L.), Sanger (D.J.), (et al.), *6734*
- cracks, nondestructive tests, Dover (W.D.), Collins (R.), *10283*

electrical properties, combustion, flames (diffusion), jets, Kidin (N.I.), Makhviladze (G.M.), *5633*
- induced polarization, rocks, Sidorov (V.A.), Yakhin (A.M.), *6403*
- axisymmetric flow, magneto fluid dynamics, mass transfer, solids with liquids, Polyanin (A.D.), Pryadkin (P.A.), *7897*
- laminates, mechanical properties, Kadotani (K.), Aki (F.), (et al.), *10132*
- discharges, plasma, theory, turbulence (transport), Ziganshin (R.R.), Ismagilov (R.Kh.), (et al.), *11831*

electro fluid dynamics, capillary flow, laminar flow, oscillatory flow, Sears (A.R.), Groves (J.N.), *553*
- chandrasekhar number, convection, magneto fluid dynamics, rayleigh number, Riahi (N.), *760*
- heat pipes, heat transfer, liquid vapor interface, wick, Bologa (M.K.), Kozhukhar (I.A.), (et al.), *791*
- diffusion, mathematical models, theory, two phase flow, Gogosov (V.V.), Naletova (V.A.), (et al.), *850*
- charged particles, inertia, one dimensional flow, two phase flow, Vatazhin (A.B.), Grabovskii (V.I.), *1774*
- chemical reactions, dielectrics, liquids, tubes, Pribylov (V.N.), Chernyi (L.T.), *2879*
- ion generators, liquid metals, nonlinear waves, theory, Gabovich (M.D.), Poritskii (V.Ya.), *2889*
- dispersion relation, perturbations, taylor instability, theory, Shchelkachev (M.V.), *3890*
- augmentation, heat transfer, liquids, Jones (T.B.), *5542*
- convection, inhomogeneities, nonlinear characteristics, stability theory, Zhakin (A.I.), *5674*
- colloids, hydrodynamics, particle fluid flow, spherical bodies, Adler (P.M.), *6580*
- annular flow, convection, dielectrics, heat transfer, laminar flow, Mizushina (T.), Ogino (F.), (et al.), *6768*
- approximations, coalescence, particles, turbulence (mechanisms), Lapiga (E.Ya.), Loginov (V.I.), *6862*
- film thickness, magneto fluid dynamics, squeeze films, Gupta (J.L.), Vora (K.H.), *7094*
- bearings (porous metal), film thickness, magneto fluid dynamics, squeeze films, Gupta (J.L.), Patel (K.C.), (et al.), *7095*
- dielectrics, statistical continuum mechanics, Gur (Y.), Ravina (I.), (et al.), *7643*
- fluid mechanics, permeability, porous media, rocks, Kormiltsev (V.V.), Khachay (O.A.), *8921*
- disks, oscillatory flow, plates (parallel), theory, Govardhan Reddy (K.), Seshagiri Rao (S.V.), *9783*
- elliptical bodies, particles, stability theory, suspensions, Tsebers (A.O.), *9796*
- porous media, thermodynamics (nonequilibrium), Blokhra (R.L.), Kohli (S.), *10843*
- particle fluid flow, rods, suspensions, Sherwood (J.D.), *11384*

electrochemical mass transfer, fluidized beds, reactors, Barthole-Delaunay (C.), Storck (A.), (et al.), *834*
- reaction rates, turbulence (transport), Storck (A.), Hutin (D.), *5621*

electrodynamics, dynamic response, ferroelectric devices, power generation, Hodgdon (M.L.), *1266*

electroelasticity, electromechanical components, piezoelectrics, Budgayci (N.), Bogy (D.B.), *3239*
- cracks, elastodynamics, piezoelectrics, scattering, shear waves, Sabbagh (H.A.), *3240*
- dielectrics, variational methods, Iannece (D.), Romano (A.), *5088*
- cracks, dielectrics, dispersion, Farat (K.), *5089*
- biomechanics, bones, elastic waves, piezoelectrics, Guzelsu (N.), Saha (S.), *6026*
- magnetoelasticity, piezoelectrics, thermoelectric phenomena, Parkus (H.) ed., *7265, book*

- elastic waves, thermodynamics, Naerlovic-Veljkovic (N.), *8330*
- bones, materials properties, piezoelectrics, Johnson (M.W.), Chakkalakal (D.A.), (et al.), *9051*

electromagnetic loading, elastic waves, flaw detection, nondestructive tests, ultrasonics, Remezov (V.B.), Shkarlet (Yu.M.), *499*
- calibration, flow measurement, geometrical properties, magnetic stabilization, Smigielski (J.), *4683*
- design, flow measurement, linearization, Smiegielski (J.), *5509*
- buckling, electromechanical components, transformer windings, Kojima (H.), Miyata (H.), (et al.), *6249*
- flow measurement, gases, isotope tracers, liquids, vortex shedding, Scott (R.W.W.) ed., *7811, book*
- calibration, flow measurement, meters, velocity profiles, Tsangaris (S.), Leiter (E.), *10535*

electromagnetic waves, computing techniques, eigenvalues, radiation, wiener-hopf technique, Siewert (C.E.), *2031*
- flow measurement, Springer (E.K.), *3765*
- reflection, shells (sandwich), shells (spherical), Bushnell (D.), *4370*
- acoustic waves, diffraction, scale models, scattering, Mei (C.C.), Tuck (E.O.), *4967*
- measurements (dynamic), mechanical instruments, Franceschetti (G.), Papas (C.H.), *5250*
- boreholes, measurements, soil stability, Laine (E.F.), Lytle (R.J.), (et al.), *6396*
- particles, scattering, suspensions, Bayvel (L.P.), Jones (A.R.), *8068, book*

electromechanical components, electroelasticity, piezoelectrics, Budgayci (N.), Bogy (D.B.), *3239*
- buckling, electromagnetic loading, transformer windings, Kojima (H.), Miyata (H.), (et al.), *6249*
- ceramics, piezoelectric devices, transducers, Aronov (B.S.), *6465*
- dynamic response, mathematical methods, motors, startup, Myklebust (A.), *9087*
- ceramics, piezoelectric devices, vibration (free), Aronov (B.S.), *11131*

electron beam welding, conduction (heat), welding, Miyazaki (T.), Giedt (W.H.), *8735*

electron beams, modes, numerical methods, plasma, turbulence (mechanisms), Kirk (J.), Weiland (J.), *865*
- excitation, lasers, plasma, spectral analysis, Ono (K.), Kamimoto (G.), (et al.), *5691*
- modeling, pinch effect, relativity, vlasov equation, Zharinov (A.V.), Chikhachev (A.S.), *9802*
- energy transport, heat addition, laser plasma interaction, thermodynamic processes, vacuum, Derzhiev (V.I.), Marchenko (V.S.), (et al.), *11840*

Eleiche (A.-S.M.), dynamic behavior, shells (outer), steel, strain rate, thermal effects, torsion, *2487*

Elek (K.), dynamic properties, elastic constants, plates (annular), vibration (free), Granat (J.), (et al.), *6298*

Elgammal (A.H.), annular flow, diffusers, inlet flow, swirl flow, Elkersh (A.M.), *9669*

Elghobashi (S.E.), see Megahed (I.E.A.), *2675*

Elias (E.), see Edelman (Z.), *10575*

Eliassen (A.), bottom irregularities, oceanography, rotating fluids, stratification, vorticity, *8973*

Elin (N.N.), tubes, turbulent flow, two phase flow, Klapchuk (O.V.), *4013*

Eliseev (V.D.), adaptive systems, modal control, model reference systems, *3208*

Eliseev (V.I.), asymptotic methods, immiscible fluids, jets, Sukhikh (L.I.), (et al.), *3687*

Eliseevnin (V.A.), arrays, layered media, underwater acoustics, *11909*

Elishakoff (I.), see Scheurkogel (A.J.), *8260*

Eliufoo (K.S.), see Swartz (S.E.), *3294*

Elkelish (M.S.), gas turbines, shells (thin), structural analysis, Elsawaf (A.), (et al.), *3883*

Elkersh (A.M.), see Elgammal (A.H.), *9669*

Elkin (A.I.), see Poklonskii (E.V.), *11807*

Elkjaer (H.P.), furnaces, heat exchangers, regenerators, swirl flow, *788*

Elkovskaya (T.M.), see Kanaun (S.K.), *1237*

Ellenbecker (M.J.), see Leith (D.), *6995*

Ellengorn (S.M.), see Busvich (Yu.A.), *6923*

Eller (T.J.), see Asher (R.B.), *5714*

Ellinas (C.P.), cooling towers, curvature, imperfection sensitivity, stress analysis, Croll (J.G.A.), (et al.), *2540*
- buckling, critical load, imperfections, shells (cylindrical), shells (stiffened), Croll (J.G.A.), *8272*

Elliott (C.J.), developing flow, ducts, turbulent flow, wakes, Townsend (A.A.), *10455*

Elliott (H.), see Scharf (L.L.), *11064*

Elliott (J.M.), see Singh (S.N.), *3901*

ellipsoids, reflection, shock waves, spherical bodies, Nosenko (N.I.), Sysoev (N.N.), (et al.), *681*
- ablation, heat transfer, three dimensional flow, Apshtein (E.Z.), Pilyugin (N.N.), *796*
- composite materials, penny shaped crack, reinforced bodies, Taya (M.), *4356*
- free boundary, oscillating bodies, ship motion, singularities, source distribution, Inglis (R.B.), Price (W.G.), *8037*
- bodies of revolution, deformation, integral methods, virtual mass, Apshtein (E.Z.), Kolotilova (N.G.), *8534*
- laplace equation, oscillating bodies, unsteady flow, viscous effects, Geissler (W.), Kienappel (K.), *8539*
- perturbation methods, reflection, shock waves, Gorbachev (L.P.), Sokolov (V.B.), *8635*
- navier stokes equation, numerical methods, vortex rings, Durst (F.), Schonung (B.), *9524*
- acoustic waves, scattering, Dassios (G.), *11979*

elliptic equations, boundary value problems, iterative methods, Benson (A.), Evans (D.J.), *62*
- iterative methods, matrices (sparse), three dimensional formulation, Lipitakis (E.A.), Evans (D.J.), *1122*
- algorithms, finite difference methods, Hornby (R.P.), Barrow (H.), *2047*
- boundary value problems, finite element techniques, galerkin method, rayleigh ritz method, Schreiber (R.), Eisenstat (S.C.), *2058*
- analog computation, differential equations (partial), optical techniques, parabolic equations, Cederquist (J.), Lee (S.H.), *2079*
- axisymmetric flow, jets, Megahed (I.E.A.), Elghobashi (S.E.), *2675*
- conduction (steady), finite difference methods, heat transfer, implicit procedure, Schneider (G.E.), Zedan (M.), *3118*
- digital simulation, flow measurement, time dependence, Essers (J.A.), *3121*
- chemical kinetics, chemically reactive flow, combustion, numerical methods, Greenberg (J.B.), Presser (C.), *3874*
- bifurcation, existence theorems, Brown (K.J.), Ibrahim (M.M.A.), (et al.), *4151*
- discharges, finite difference methods, flow measurement, manifolds, Majumdar (A.K.), *4589*
- approximations, duct flow, magneto fluid dynamics, singularities, Nye (V.A.), *4747*
- bifurcation, free boundary, plasma, tokamak, Sijbrand (J.), *4975*
- computing techniques, singularities, stability (numerical), Steinberg (J.), *5003*
- aerothermodynamics, finite volume method, fluid mechanics, turbomachinery, Dutoya (D.), Michard (P.-J.), *5014*
- finite element techniques, iterative methods, linear equations, Bank (R.E.), *5023*
- acoustics, boundary value problems, harmonic waves, time dependence, Neittaanmaki (P.), Picard (R.), *5026*
- boundary integral methods, singularities, stress intensity factor, Xanthis (L.S.), Bernal (M.J.M.), (et al.), *6085*
- collocation, computer programming, finite element methods, galerkin method, rayleigh ritz method, Weiser (A.), Eisenstat (S.C.), (et al.), *6096*
- diffraction, finite element techniques, hydrodynamics, infinite medium, Jami (A.), Polyzakis (M.), *6103*
- finite difference methods, interpolation, reynolds number (high), Han (T.), Humphrey (J.A.C.), (et al.), *6625*
- boundary value problems, green function, layered media, sturm-liouville problem, Popov (G.Ya.), Gribnyak (S.T.), *7303*
- computing techniques, fredholm equations, matrix methods, singularities, Christiansen (S.), *8119*
- crack opening displacement, deformation (finite), hyperbolic equations, Abeyaratne (R.), *8398*
- channel flow, hyperbolic equations, unsteady flow, vortex flow, Lyapidevskii (V.Yu.), *8507*
- boundary layer, boundary value problems, perturbation theory, singular perturbations, Jiang (F.-R.), *9108*
- asymptotic behavior, error, mesh generation, Rai (M.M.), Anderson (D.A.), *9127*
- finite element methods, infinite medium, mesh generation, Goldstein (C.I.), *9134*
- iterative methods, optimization, Tsurkov (V.I.), *10025*
- boundary value problems, singular perturbations, Zheng (Y.-S.), *10934*

elliptical bodies, coordinate systems, helmholtz equation, mathematical methods, Arscott (F.M.), Darai (A.), *37*
- boundary layer, laminar flow, three dimensional flow, Stock (H.W.), *1544*
- laminar flow, moving surfaces, noncircular pipes, viscous flow, Lal (K.), Chorlton (F.), *1568*
- magneto fluid dynamics, porous media, pressure gradient, tubes, Gupta (G.D.), *1773*
- asymptotic methods, duct flow, Richardson (S.M.), *2791*
- cylindrical bodies, oscillating bodies, secondary flow, vortex shedding, Tatsuno (M.), *3626*
- boundary conditions, buckling, compression, plates, Sato (K.), *4396*
- shells (cylindrical), structural stability, torsion, Konoplev (Yu.G.), Kopp (A.V.), *4398*
- aerodynamics, lifting surfaces, three dimensional flow, wings, Kida (T.), *4668*
- cylindrical bodies, oscillating bodies, unsteady flow, visualization, Hansen (S.B.), Taneda (S.), *4684*
- anisotropic media, laminates, plates, Bert (C.W.), *5126*
- numerical methods, oscillations, unsteady flow, vortex rings, Dhanak (M.R.), De Bernardinis (B.), *5398*
- ducted propellers, velocity profiles, vortex sheets, George (M.F.), *5400*
- composite materials, polymers, thermal expansion, Takahashi (K.), Harakawa (K.), (et al.), *7297*

- boundary layer (three dimensional), impulsive propulsion, separated flow, Wang (K.C.), Fan (Z.Q.), *8560*
- electro fluid dynamics, particles, stability theory, suspensions, Tsebers (A.O.), *9796*
- vibration (torsional), Mandal (B.N.), *10036*
- diffraction, sound generation, sound propagation, Demidov (V.P.), *12005*

elliptical cracks, cracks, elasticity (three dimensional), Sladek (J.), *466*
- edge cracks, elasticity, infinite medium, Vijayakumar (K.), Atluri (S.N.), *1361*
- boundary elements, cracks, plates, time dependence, Mukherjee (S.), Morjaria (M.), *2459*
- biaxial loading, crack branching, failure, Chang (K.J.), *3456*
- diffraction, elastic waves, Adler (L.), Achenbach (J.D.), *4454*
- cracks, energy density, plates (holed), Simmonds (J.G.), Duva (J.), *4490*
- cracks, elastic bodies, fracture mechanics, Erzhanov (Zh.S.), Garagash (I.A.), *4493*
- corrosion fatigue, failure, fatigue, glass, Doremus (R.H.), *5286*
- finite element techniques, plates (holed), stress intensity factor, Grandt (A.F.) Jr., *6445*
- flaws, fracture mechanics, transfer functions, Chang (R.), *6460*
- brittle fracture, thermal loading, Znachkovskii (O.Ya.), Rakovskii (V.A.), (et al.), *7491*
- finite element techniques, flaws, stress intensity factor, Newman (J.C.) Jr., Raju (I.S.), *7518*
- boundary integral methods, fracture mechanics, stress intensity factor, surface flaws, Athanassiadis (A.), Boissenot (J.M.), (et al.), *10287*
- infinite medium, stress intensity factor, Borodachev (A.N.), *10297*

Ellis (B.R.), buildings (tall), dynamic analysis, frequency response, structural response, vibration (free), *2347*
- foundations, seismic loading, soil structure interaction, *7036*

Ellis (F.W.), hydrology, roughness, runoff, watersheds, Ramsey (F.V.), (et al.), *3013*

Ellis (J.F.), attitude control, gyrodynamics, interferometry, Creswell (G.A.), *5704*

Ellis (R.A.), nozzles, propulsion, rockets, space vehicles, supersonic flow, Hammond (R.N.), (et al.), *6851*

Ellison (E.G.), see Priest (R.H.), *4477*

Ellison (M.S.), see Zeronian (S.H.), *2867*

Ellyin (F.), see Victor (F.), *4431*

Elmanovich (V.I.), see Kuksa (L.V.), *3140*

Elrod (H.G.), algorithms, bearings (hydrodynamic), cavitation, lubrication (hydrodynamic), *10891*

Elsawaf (A.), see Elkelish (M.S.), *3883*

Elsayed (M.M.), see Fathalah (K.A.), *9729*

Elsharkawi (K.), buckling, panels (flat), plates (stiffened), Walker (A.C.), *3335*

Elston (M.J.H.), see Baum (M.R.), *4548*

Eltayeb (I.A.), see El Sawi (M.), *3892*
- atmospheric circulation, gravity waves (internal), Kandaswamy (P.), *5935*

Elwakil (S.A.), boltzmann equation, iterative methods, pade approximation, El Batanoni (F.), (et al.), *1530*

Elzanowski (M.), continuum mechanics, functional analyis, stability theory, thermodynamics (nonequilibrium), *6041*

Elzoughby (A.A.), algorithms, computing techniques, gradient techniques, minimization, ridge-path method, Metwalli (S.M.), (et al.), *4995*

Eman (K.), chatter, digital control, process control, turning, Wu (S.M.), *437*

Emanuel (G.), expansion, piston driven flow, shock waves, *3720*

Embaby (M.H.), drag reduction, entrance region, integral methods, pipe flow, turbulent flow, Verba (A.), *615*

embankments, clay, elastoplasticity, finite element methods, Cavounidis (S.), *1324*
- centifuge tests, centrifugation, scale models, stability, Malushitsky (Yu.N.), *1329, book*
- dams, granular media, mine tailings, mining, Highter (W.H.), Tobin (R.F.), *2387*
- inclusions, soils, Andrawes (K.Z.), Mcgown (A.), (et al.), *3397*
- drainage, erosion, hydrology, Gonchar (A.I.), Sribnyi (I.K.), *4046*
- drainage, phreatic surface, Stephenson (D.), *4462*
- finite difference methods, nonlinear waves, reflection, wave interactions, Nasser (M.S.), *6511*
- cracking, dams, earthquake effects, Lane (R.G.T.), *9365*

Embury (J.D.), see Le Roy (G.), *4497*

Emelyanov (S.V.), estimation, filters, optimization, Golembo (B.Z.), *2172*

Emelyanova (L.S.), bearings (gas lubricated), bearings (spherical), lubricants (gas), optimization, *9976*

Emerry (R.J.), absorption, atmosphere, spectral analysis, spectroscopy, Moffat (P.H.), (et al.), *6755*

Emery (A.F.), crack penetration, crack propagation, fluid-structure interaction, pipes, Perl (M.), (et al.), *3466*
- see Gessner (F.B.), *4623*

Emery (W.J.), boundary layer (atmospheric), eddies, Ebbesmeyer (C.C.), (et al.), *7056*
- nonhomogeneous media, ocean, sound propagation, underwater acoustics, Reid (T.J.), (et al.), *10783*

emissions, combustors, gas turbines, Odgers (J.), *3870*
- combustors, gas turbines, mixing, Noyce (J.R.), Sheppard (C.G.W.), (et al.), *5540*
- dispersed flow, fluid mechanics, Kovenskii (V.I.), *5848*
- absorption, hydrocarbons, internal combustion engines, oil films, Carrier (G.), Fendell (F.), (et al.), *7873*
- combustion, hydrocarbons, oil films, spark ignition engines, Kaiser (E.W.), Lorusso (J.A.), (et al.), *7882*
- combustors, gas turbines, scale models, Roberts (P.B.), Kubasco (A.J.), (et al.), *7883*
- combustors, gas turbines, vaporization, Sjoblom (B.G.A.), *7884*
- catalyzed ignition, gas turbines, scale models, Anderson (S.J.), Friedman (M.A.), (et al.), *7885*
- combustion, gas turbines, swirl flow, Mestre (A.), *7887*
- chemical kinetics, combustors, Clark (W.D.), Folsom (B.A.), (et al.), *8797*

emissivity, radiant interchange, scattering, two phase flow, Adzerikho (K.S.), Antsulevich (V.I.), (et al.), *777*
- channel flow, convection, heat transfer (combined modes), radiation, Sparrow (E.M.), Shah (S.), (et al.), *782*
- convection (forced), heat transfer, nucleate boiling, Stephan (K.), Auracher (H.), *4700*
- absorption, cylindrical bodies, radiant interchange, radiation properties, Young (S.J.), *7861*
- heat transfer (combined modes), scattering, Marchenko (N.V.), Venyavkina (E.A.), *7865*
- radiant interchange, scattering, schuster number, surface effect, Gorban (I.A.), *9719*
- radiant interchange, reflection, scattering, Adzerikho (K.S.), Blokh (A.G.), (et al.), *9721*

Emmerling (F.A.), dynamic response, shells (cylindrical), shells (shallow), vibration (free), Kloss (R.A.), *5218*

Emori (K.), buildings, frames, reinforced concrete, seismic loading, Schnobrich (W.), *5890*

empirical methods, freon, heat transfer, nucleate boiling, Nishikawa (K.), Fujita (Y.), (et al.), *739*
- algorithms, graphical methods, probability theory, stochastics, Borodkin (L.I.), *1099*
- equations of state, gases, thermodynamic properties, Rogankov (V.B.), Chumachenko (A.V.), *1654*
- convection (free), cylindrical bodies, heat addition, Parsons (J.R.) Jr., Mulligan (J.C.), *2802*
- approximation methods, ceramics, quartz, thermal expansion, Rusovic (N.), Godecke (T.), *6757*
- inviscid fluid, plates, virtual mass, Payne (P.R.), *9543*
- damage (cumulative), fatigue, life expectancy, prediction, titanium, Adams (J.H.), *10327*
- turbulence, turbulence model, viscosity, Movchan (V.T.), *10469*

Emre (E.), linear systems, observers, realization, Silverman (L.M.), *4233*

Emsellem (Y.), see Dassonville (G.), *7050*

Emslie (A.G.), see Walker (I.W.), *4756*

end effects, hydrodynamic stability, rotating cylinders, stability theory, taylor vortices, Walton (I.C.), *2685*
- beam columns, buckling, imperfections, Chen (W.F.), *3324*
- couette flow, hydrodynamic stability, taylor number, Hocking (L.M.), Skiepko (J.), *4640*
- ducts, noise abatement, orifices, sound fields, Pollack (M.L.), *4777*
- cylindrical bodies, reynolds number (small), wakes, Slaouti (A.), Gerrard (J.H.), *7732*
- bars, beams, residual stresses, Schilling (C.G.), *9262*
- interface phenomena, magneto fluid dynamics, pipe flow, thermoelectric phenomena, Shercliff (J.A.), *10735*
- channel flow, magneto fluid dynamics, numerical methods, walled structures, Sarma (P.R.L.), Mittal (M.L.), (et al.), *10752*

Endler (B.S.), conduction (heat), conductivity, dispersed flow, spherical bodies, thermodynamic functions, viscosity, *6759*

Endo (K.), corrosion fatigue, crack growth, hydrogen embrittlement, low cycle fatigue, stress intensity factor, Komai (K.), (et al.), *7495*

endochronic theory, concrete, fracture, strain softening, Bazant (Z.P.), Shieh (C.-L.), *430*
- continuum mechanics, plasticity, work hardening, Valanis (K.C.), *2231*
- internal state variables, metals, work hardening, Wu (H.C.), Yip (M.C.), *3265*
- constitutive relations, critical state, sand, Dungar (R.), Nuh (S.), *9355*

endurance limit, environmental tests, fatigue, high cycle fatigue, life expectancy, nickel alloys, Mowbray (D.F.), Glaquinto (E.V.), (et al.), *443*
- disks, thermal loading, turbines, Getsov (L.B.), Nigin (A.A.), (et al.), *516*
- cyclic loading, fatigue, life expectancy, precipitation hardening, softening, Lee (J.K.), Bhat (S.P.), (et al.), *1353*
- ceramics, material testing, refractories, thermal fatigue, Lamon (J.), *3435*
- fatigue, plastics, Suvorova (Yu.V.), Viktorova (I.V.), (et al.), *4478*
- crack propagation, fatigue, stress intensity factor, Davenport (R.T.), Brook (R.), *4484*
- fatigue, gas turbines, high temperature, nickel alloys, Palienko (E.Ya.), *7475*
- estimation, fatigue, weibull statistics, Sakai (T.), Iwaya (T.), (et al.), *7511*
- aluminum alloys, correlation, fatigue, flexure, steel, ultimate strength, Stepnov (M.N.), Evstratova (S.P.), (et al.), *10330*
- accelerated testing, correlation, frequencies, high cycle fatigue, Kuzmenko (V.A.), *10339*

Enenshteyn (B.S.), earth, electromagnetic field, magnetic field, prospecting, *7031*
energy, explosive loading, finite element techniques, penetration, Tuft (D.B.), Murphy (M.J.), *1312*
- density, eddy currents, ocean, oceanography, Koziov (V.F.), Molchanova (L.A.), (et al.), *1895*
- energy (alternative sources), solar energy, wave energy, wood, Veziroglu (T.N.) ed., *1965, book*
- optimization, rolling, temperature, Herendi (R.), Voith (M.), (et al.), *2395*
- energy conservation, energy conversion, solar energy, Veziroglu (T.N.) ed., *2785, book*
- power generation, thermodynamic functions, thermodynamics (irreversible), Kotas (T.J.), *3769*
- forging, screw presses, tools, XiXian (J.), *4469*
- energy conservation, energy conversion, fuels, Krenz (J.H.), *4715, book*
- computer programming, computing techniques, heat transfer, mathematical models, numerical analysis, Lewis (R.W.), Morgan (K.), (et al.), *9149*

energy conservation, environmental control, mathematical models, Hirst (E.), *208*
- acoustic waves, aeroacoustics, fluid mechanics, Pierce (A.D.), *897*
- dynamic analysis, lagrange equations, Nicolae (V.), Chiroiu (V.), *1065*
- cooling towers, heat addition, heat exchangers, heat transfer, Cavaseno (V.) eds., Staff Of Chemical Engineering, *1712, book*
- dynamic analysis, lagrange equations, mathematical methods, Vujicic (V.A.), *1985*
- energy, energy conversion, solar energy, Veziroglu (T.N.) ed., *2785, book*
- energy storage, solar collectors, Wolfson (R.L.T.), Harvey (H.S.), *2832*
- cooling, energy conversion, energy storage, heating, Diamant (R.M.E.), Kut (D.), *3833, book*
- design (optimum), generators, heat exchangers, power plants, Aminov (R.Z.), Radchenko (E.V.), *3837*
- energy, energy conversion, fuels, Krenz (J.H.), *4715, book*
- energy storage, latent heat, solar energy, Shamsundar (N.), Srinivasan (R.), *5604*
- air conditioning, heat pumps, heating, solar energy, Veziroglu (T.N.) ed., *6818, book*
- energy storage, solar energy, solar ponds, Wittenberg (L.J.), Harris (M.J.), *6819*
- heat transfer, insulating materials (thermal), thermal properties, Turner (W.C.), Malloy (J.F.), *6823*
- fuels, gas turbines, jet engines, noise abatement, Gal-Or (B.) ed., *7805, book*
- energy storage, optimization, solar collectors, solar energy, Veziroglu (T.N.) ed., *7862, book*
- adsorption, cooling, latent heat, solar collectors, Peng (C.S.P.), Howell (J.R.), *8763*
- energy storage, solar collectors, solar ponds, Kooi (C.F.), *8765*
- energy storage, mathematical models, reservoirs, Ucer (A.S.), *9717*
- augmentation, radiant interchange, regenerators, waste heat, Chawla (O.P.), Khandwawala (A.I.), *9733*
- friction, lubrication, tribology, wear, Jost (H.P.), Schofield (J.), *9980*
- thermodynamic processes, thermodynamics, Paolino (M.A.), Burghardt (M.D.), *10544*
- compressors, exhaust gases, gas turbines, heat engines, heat exchangers, pipelines, Ludtke (K.), *10547*
- aquifers, energy storage, Yokoyama (T.), Umemiya (H.), (et al.), *10603*
- combustion, combustion chambers, fluidized beds, solid wastes, Hamm (J.R.), Keairns (D.L.), *10623*
- magneto fluid dynamics, navier stokes equation, nonlinear theory, uniqueness, Bershadskii (A.G.), *10747*

energy conversion, distillation, solar cells, solar collectors, solar energy, Veziroglu (T.N.) ed., *1652, book*
- boilers, cogeneration, design (optimum), gas turbines, steam power plants, Clifford (D.), Coates (R.), (et al.), *1766*
- energy, energy conservation, solar energy, Veziroglu (T.N.) ed., *2785, book*
- solar collectors, solar energy, wind power, Kreider (J.F.), Kreith (F.), *2831, book*
- cooling, energy conservation, energy storage, heating, Diamant (R.M.E.), Kut (D.), *3833, book*
- evaporation, geothermal energy, heat exchangers, Kodres (C.A.), Jacobs (H.R.), (et al.), *3834*
- critical heat flux, heat transfer, refrigeration, thermosyphons, Savchenkov (G.A.), Kunakov (V.G.), *3836*
- conductivity, convection (free), radiant interchange, solar collectors, Aranovitch (E.), *3842*
- heat engines, organic fluid, steam engines, Arques (P.), Gublin (F.), (et al.), *3887*
- heat engines, thermodynamic processes, Steimle (F.), *4690*
- geothermal energy, heat engines, thermodynamic functions, thermodynamic processes, Lamb (J.P.), Polansky (G.F.), (et al.), *4691*
- energy, energy conservation, fuels, Krenz (J.H.), *4715, book*
- ocean, power plants, solar energy, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *4718*
- solar cells, solar energy, Fonash (S.J.), *4722, book*
- radiant interchange, solar collectors, solar energy, Hildebrandt (A.F.), Dasgupta (S.), *4725*
- lasers, propulsion, radiation, solar energy, space, Billman (K.W.) ed., *5664, book*
- ocean, thermal effects, Dugger (G.L.), Francis (E.J.), (et al.), *5671*
- heat exchangers, ocean, power plants, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *5954*
- fluid power, hydraulics, Webb (D.R.) eds., Papadakis (D.N.), *7800, book*
- filamentary structures, inhomogeneities, magneto plasma dynamics, nonequilibrium effects, Petit (J.-P.), Billiotte (M.), *7899*
- magneto plasma dynamics, nonequilibrium effects, perturbations, three dimensional flow, Artemov (V.I.), Sinkevich (O.A.), *7900*
- convection, solar collectors, thermosyphons, Sodha (M.S.), Tiwari (G.N.), *8764*
- energy storage, heat transfer, packed beds, solar collectors, stratified flow, Phillips (W.F.), *8766*
- earth, geophysics, magneto fluid dynamics, models, Olson (P.), *8821*
- absorption, collision models, laser plasma interaction, resonance, Guillaneux (P.), *8832*
- diffraction, floating bodies, ocean waves, Haren (P.), Mei (C.C.), *9013*
- estuaries, pumps, reservoirs, tides, Robinson (I.S.), Perry (J.M.), *9521*
- ocean, rotating fluids, singularities, sinks, stratified flow, Whitehead (J.A.) Jr., Gershenfeld (N.), *10411*
- heating, solar collectors, solar ponds, Sodha (M.S.), Tiwari (G.N.), (et al.), *10633*

energy density, stonely waves, surface waves, Meleshko (V.V.), *1296*
- cracks, elliptical cracks, plates (holed), Simmonds (J.G.), Duva (J.), *4490*
- functional analyis, stresses, traction, Day (W.A.), *7132*
- concrete, fracture criteria, fracture mechanics, Petersson (P.E.), *7522*
- acoustic emission, crack growth, crack propagation, Mandorini (V.), Ghelardoni (E.), (et al.), *7528*
- slabs, thermoelasticity (transient), Day (W.A.), *8879*

energy dissipation, boundary layer (atmospheric), turbulence (geophysical), Tamopolskii (A.G.), Shnaidman (V.A.), *2959*
- air, entrainment, hydraulic structures, turbulence, Binder, Duport, (et al.), *3603*
- arteries, attenuation, blood flow, compressional waves, Bertram (C.D.), *6021*
- channel flow, free boundary, variational methods, Song (C.C.S.), Yang (C.T.), *7650*
- hydraulic structures, inlet flow, models, vortex flow, Hecker (G.E.), *7664*
- connected bodies, dynamic analysis, gyrodynamics, rigid bodies, Rimrott (F.P.J.), *8099*
- bottom irregularities, currents, gravity waves (shallow water), Christoffersen (J.B.), Jonsson (I.G.), *9626*
- beams, failure, reinforced concrete, Okada (K.), Koyanagi (W.), (et al.), *10360*

energy dissipators, collision models, offshore structures, ship maneuvers, Furnes (O.), Amdahl (J.), *993*
- oscillatory flow, pipe exit, pipe flow, wave engines, Knott (G.F.), Flower (J.O.), *8588*

energy methods, elasticity (nonlinear), strain energy, variational methods, Washizu (K.), *243*
- differential equations (ordinary), integration, nonlinear structures, structural analysis, Kamat (M.P.), Hayduk (R.J.), *1181*
- bifurcation, elastic bodies, stability theory, Corsanego (A.), Tafanelli (A.), *1244*
- brittle fracture, crack initiation, fracture toughness, inhomogeneities, Pranckevicius (G.), *1369*
- deformation, elasticity (linear), strain energy, Ecsedi (I.), *2218*
- deformation, elasticity (linear), strain energy, Ecsedi (I.), *2219*
- conservation laws, elasticity (nonlinear), path integrals, Simmonds (J.G.), Nicholson (J.W.), *3229*
- continuum mechanics, elasticity (linear), solid mechanics, Eisenberg (M.A.), *4331, book*
- elasticity (linear), variational methods, virtual work methods, Kozak (I.), *4339*
- elasticity, fracture, fracture mechanics, pressure vessels, steel, Rosenfield (A.R.), Shetty (D.K.), *4518*
- arches, axial loading, bending, buckling, Sladkov (S.I.), *5149*
- solid mechanics, strain energy, structures, Germain (P.), *6035*
- finite element methods (hybrid), structural stability, Murakawa (H.), Reed (K.W.), (et al.), *6236*
- elasticity (nonlinear), variational methods, Zhong-Heng (G.), *7267*
- finite difference methods, plates, Reipert (Z.), *7350*
- boundary elements, finite element methods, functional analyis, galerkin method, Fusco (F.B.) Jr., *9132*
- liquefaction, sand, seismic loading, Davis (R.O.), Berrill (J.B.), *9922*
- acoustics (architectural), statistical mechanics, Maidanik (G.), *10792*
- burners, flow irregularities, sound fields, Magiawala (K.R.), Culick (F.E.C.), *10793*
- acoustics, reverberation, Maidanik (G.), Mega (L.J.), *11930*
- acoustics, decay, reverberation, Kawakami (F.), Yamaguchi (K.), *11931*
- acoustics, noise abatement, Jessel (M.J.M.), *11995*
- acoustics, attenuation, ducts, noise abatement, Gaudefroy (A.), *11996*
- acoustics, finite element techniques, noise abatement, perforated bodies, Ross (D.F.), *11997*

energy spectrum, acoustics, rockets, vortex shedding, wave energy, Brown (R.S.), Dunlap (R.), (et al.), *4769*
- diagnostics, ionic flow, laser plasma interaction, measurements (dynamic), Chowdhury (S.S.), Clement (R.M.), (et al.), *5687*
- charged particles, ionic flow, laser plasma interaction, measurements (dynamic), Clement (R.M.), Davies (R.A.), (et al.), *5689*

- high temperature, measurements (dynamic), plasma (toroidal), tokamak, Nakamura (K.), Hiraki (N.), (et al.), *5692*

energy storage, conduction (heat), liquid solid interface, melting, phase changes, Henze (R.H.), Humphrey (J.A.C.), *768*
- energy conservation, solar collectors, Wolfson (R.L.T.), Harvey (H.S.), *2832*
- climatology, convection (forced), heat loss, radiation properties, Leduc (R.), Won (T.K.), *2836*
- heat pumps, heating, mathematical models, Schlosser (K.), Teislev (B.), *2837*
- cooling, energy conservation, energy conversion, heating, Diamant (R.M.E.), Kut (D.), *3833, book*
- storage, stratified flow, tanks, thermal effects, thermosyphons, Young (M.F.), Baughn (J.W.), *4714*
- solar energy, solar ponds, thermal diffusion, Poplawsky (C.J.), Incropera (F.P.), (et al.), *4723*
- convection (forced), freezing, phase changes, Hsu (C.F.), Sparrow (E.M.), *5577*
- heat exchangers, regenerators, Romie (F.E.), *5596*
- absorption, radiant interchange, solar collectors, solar ponds, thermal instability, Tabor (H.), *5602*
- energy conservation, latent heat, solar energy, Shamsundar (N.), Srinivasan (R.), *5604*
- composite structures, flywheels, optimization, Portnov (G.G.), Kulakov (V.L.), *6196*
- energy conservation, solar energy, solar ponds, Wittenberg (L.J.), Harris (M.J.), *6819*
- heating, mathematical models, solar energy, Rabinovich (M.D.), Fert (A.R.), *6820*
- energy conservation, optimization, solar collectors, solar energy, Veziroglu (T.N.) ed., *7962, book*
- concrete, convection (forced), fins, solar energy, Ortega (J.K.E.), Bingham (C.E.), (et al.), *7863*
- heat exchangers, mathematical models, solar collectors, solar energy, thermosyphons, Mertol (A.), Place (W.), (et al.), *8756*
- energy conservation, solar collectors, solar ponds, Kooi (C.F.), *8765*
- energy conversion, heat transfer, packed beds, solar collectors, stratified flow, Phillips (W.F.), *8766*
- optical techniques, radiant interchange, solar collectors, Gaul (H.), Rabl (A.), *8767*
- energy conservation, mathematical models, reservoirs, Ucer (A.S.), *9717*
- biot number, heat exchangers, optimization, packed beds, thermal regenerators, Schmidt (F.W.), Willmott (A.J.), *9730, book*
- solar collectors, solar ponds, transient loading, Sodha (M.S.), Bansal (P.K.), (et al.), *9737*
- cooling, cooling ponds, power generation, transient effects, Adams (E.E.), Koutsis (A.D.), *9741*
- convection, heat transfer (combined modes), hydrocarbons, reservoirs, storage, transient effects, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*
- aquifers, energy conservation, Yokoyama (T.), Umemiya (H.), (et al.), *10803*
- heat pumps, solar collectors, solar energy, Thomas (W.R.L.), *10634*
- numerical methods, packed beds, variable thermal properties, Gross (R.J.), Hickox (C.E.), (et al.), *10635*

energy theorems, acceleration waves, elastic bodies, Borejko (P.), Chadwick (P.), *395*

energy transport, channel flow, discharges, minimization, sediment transport, Chang (H.H.), *556*
- thermodynamic functions, thermodynamic processes, Kotas (T.J.), *2777*
- augmentation, entropy, heat exchangers, heat transfer, pressure drop, viscous effects, Bejan (A.), Pfister (P.A.) Jr., *2828*
- containment, plasma, theory, transport phenomena, D'Ambrogio (E.), Tessarotto (M.), *3899*
- laser plasma interaction, lateral stability, transport phenomena, wires, Ehler (A.W.), Begay (F.), (et al.), *3900*
- ocean air interaction, tides, Lappo (S.S.), Rozhdestvenskiy (A.Ye.), *4064*
- ocean air interaction, surface waves, wind-wave interaction, Makin (V.K.), *4987*
- greenhouses, solar radiation, Mcbean (E.A.), Haycock (D.), (et al.), *5606*
- chemically reactive flow, cycles, heat pumps, thermodynamic processes, Abelson (H.I.), Horowitz (J.S.), *6752*
- arcs, numerical methods, plasma, turbulence (transport), Galeev (Z.M.), Ziganshin (R.R.), (et al.), *6866*
- compressible flow, high temperature, similarity methods, unsteady flow, Korobeynikov (V.P.), *11419*
- electron beams, heat addition, laser plasma interaction, thermodynamic processes, vacuum, Derzhiev (V.I.), Marchenko (V.S.), (et al.), *11840*

Enescu (D.), earthquake effects, prediction, spectra, Plavita (R.), *1896*

Enflo (B.O.), acoustic waves, acoustics, burgers equation, nonlinear waves, sound propagation, *10784*

Engel (P.), bottom irregularities, channel flow, free boundary, friction (skin), sediment transport, Lau (Y.L.), *557*

Engel (Z.), see Czarnecki (S.), *3933*

Engelbrecht (J.), nonlinear waves, viscoelastic waves, viscoelasticity (dynamic), *1055*
- evolution equations, transient effects, two dimensional waves, *4444*

Engelgart (V.N.), see Barantsev (R.G.), *8636*

Engelman (M.S.), finite element techniques, fluid mechanics, incompressible flow, newton method, viscous flow, Strang (G.), (et al.), *1128*

Engels (E.), see Sarlet (W.), *9086*

Engibarian (A.A.), see Babloyan (A.A.), *327*

Engin (A.E.), biological joints, biomechanics, kinematics, shoulder, *1036*
- diagnostics, muscles, scattering, tissues, ultrasonics, Peindl (R.D.), (et al.), *9072*

Engin (H.), approximation methods, layered media, nonlinear waves, Askar (A.), (et al.), *3393*

engines, jets, near ground effects, vtol, Lummus (J.R.), *687*
- convection (forced), heat transfer, jets, pipe flow, swirl flow, Caton (J.A.), Heywood (J.B.), *735*
- internal flow, laser doppler velocimeters, piston driven flow, Morse (A.P.), Whitelaw (J.H.), (et al.), *1758*
- control, fuel economy, nonlinear programming, Rao (H.S.), Cohen (A.I.), (et al.), *2122*
- aerodynamics, airplanes, propellers, Larrabee (E.E.), *3750*
- hull propeller interaction, marine engineering, oscillations, Babitskii (V.I.), Nerubenko (G.P.), *4103*
- dynamic analysis, nonlinear systems, vibration (parametric), vibration (torsional), Dittrich (G.), Krumm (H.), *7404*
- design, expanders, expansion, Robinson (F.J.), *7624*
- magneto fluid dynamics, marine engineering, propulsion, superfluids, Khonichev (V.I.), Yakovlev (V.I.), *9787*

England (A.H.), boundary value problems, cracks, elasticity (linear), potential theory, three dimensional formulation, *38*

England (G.L.), concrete, creep, offshore structures, thermal stresses, *530*

England (R.H.), see Ito (Y.M.), *968*

Engler (R.H.), ultrasonics, velocity measurement, vortices, wind tunnels, Schmidt (D.W.), (et al.), *8663*

Engquist (B.), boundary conditions, compressible flow, transonic flow, unsteady flow, Majda (A.), *2622*
- compressible flow, entropy, finite difference methods, stability (numerical), transonic flow, Osher (S.), *7686*

enthalpy, phase changes, transforms, Wood (A.S.), Ritchie (S.I.M.), (et al.), *3823*

Entov (V.M.), counterflow, hydrodynamic stability, jets, liquids, Yarin (A.L.), *636*
- jets, polymers, thin films, viscoelastic fluids, Kestenboim (Kh.S.), (et al.), *1487*
- dynamic analysis, similarity methods, two phase flow, Yarin (A.L.), *4630*
- jets, non newtonian flow, suspensions, Kordonskii (V.I.), (et al.), *6586*

entrainment, laminar flow, pipe flow, swirl flow, Singh (M.P.), Sinha (P.C.), (et al.), *610*
- boundary layer, conical flow, diffusers, shape factors, Odukwe (O.), *625*
- air, energy dissipation, hydraulic structures, turbulence, Binder, Duport, (et al.), *3603*
- boiling, critical heat flux, drops, film flow, Ueda (T.), Inoue (M.), (et al.), *4702*
- air, suction, vortices, wells, Anwar (H.O.), Amphlett (M.B.), *5389*
- rotating cylinders, shear flow, viscoelastic fluids, viscoplasticity, Shulman (Z.P.), Baikov (V.I.), *6572*
- jets, plumes, Schneider (W.), *6664*
- froude number, plumes, two dimensional flow, Phillips (W.F.), *6667*
- buoyant flow, surface jets, Murota (A.), Nakatsuji (K.), *6673*
- boundary layer, hydrodynamic stability, turbulence, Gad-ElHak (M.), Blackwelder (R.F.), (et al.), *6686*
- drops, liquid fuels, pulsatile flow, two phase flow, Low (S.C.), Baruah (P.C.), *6967*
- annular flow, drops, Andreussi (P.), *6981*
- heat transfer, mass transfer, mixing layers, oceanography, thermocline, turbulence (geophysical), Shapiro (G.I.), *7059*
- boundary layer (turbulent), buoyancy, stratified flow, Kitaigorodskii (S.A.), *7066*
- mixing layers, shear stress, stratification, wind, Kranenburg (C.), *7652*
- aeration, bubble dynamics, Volkart (P.), *8908*
- boundary layer, interface phenomena, sprays, Macha (J.M.), Norton (D.J.), *8910*
- bubble dynamics, two phase flow, water, Salih (A.M.A.), *9878*
- similarity methods, stratified flow, stresses, turbulent mixing, Kundu (P.K.), *10408*
- crossflow, jets, Rajaratnam (N.), Gangadharaiah (T.), *10452*
- axisymmetric flow, jets, mixing, two dimensional flow, Vatsa (V.N.), Werle (M.J.), (et al.), *11517*
- film flow, nonlinear waves, turbulent flow, two phase flow, Demekhin (E.A.), *11565*

entrance region, drag reduction, integral methods, pipe flow, turbulent flow, Embaby (M.H.), Verba (A.), *615*
- aerodynamic performance, conical flow, diffusers, Sharma (P.C.), *626*
- convection, variable fluid properties, variational methods, Pavlovic (M.I.), Milojevic (D.Z.), *731*
- heat transfer, integral methods, pipe flow, transforms, Vick (B.), Ozisik (M.N.), (et al.), *734*
- compressible flow, lasers (gasdynamic), perturbation methods, Kuznetsov (V.M.), *1523*
- convection, interferometry, nusselt number, secondary flow, Yousef (W.W.), Tarasuk (J.D.), *1668*

- annular flow, convection, heat transfer, hydrogen bubble technique, visualization, Ogunba (V.), Barrow (H.), *1690*
- approximations (higher order), mass transfer, pipe flow, turbulent flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *2645*
- ducts (constant area), laminar flow, noncircular pipes, three dimensional flow, Del Giudice (S.), Strada (M.), (et al.), *3659*
- laminar flow, pipe flow, porous walls, Masuzawa (J.), Tanahashi (T.), (et al.), *3672*
- channels, deposition, suspensions, Korjack (T.A.), Chen (R.Y.), *4010*
- noncircular pipes, numerical methods, turbulent flow, Gessner (F.B.), Emery (A.F.), *4623*
- coaxial jets, jets, subsonic flow, Ko (N.W.M.), Au (H.), *5455*
- centrifugal compressors, diffusers, laser doppler velocimeters, optical analysis, rotors, Krain (H.), *6735*
- deposition, suspensions, tubes, Chen (R.Y.), Gelber (M.W.), *6957*
- duct flow, fluid injection, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *7723*
- convection, dispersed flow, drops, heat transfer, tubes, two phase flow, Rane (A.G.), Yao (S.-C.), *7825*
- film flow, laminar flow, non newtonian flow, Yang (T.M.T.), Yarbrough (D.W.), *8579*
- developing flow, numerical analysis, overshoot, velocity profiles, Li (L.C.), Ludford (G.S.S.), *8585*
- condensation, film flow, two phase flow, Segev (A.), Collier (R.P.), *8698*
- axisymmetric flow, diffusers, separated flow, supersonic flow, Vishnevetskii (S.L.), Pakhomova (Z.S.), *9589*
- channel flow, turbulence model, turbulent flow, Zaryankin (A.E.), Likherzak (E.E.), (et al.), *10440*
- compressible flow, compressional waves, pipe flow, Zhestkov (G.B.), Mareev (V.A.), *11601*

entropy, thermodynamic processes, thermodynamics, thermodynamics (irreversible), Kestin (J.), *716, book*

- materials possessing memory, thermodynamic processes, thermodynamics (irreversible), thermodynamics (nonequilibrium), Bataille (J.), Kestin (J.), *720*
- compressible flow, drag, supersonic flow, wave drag, Wellmann (J.), *1522*
- thermodynamic functions, thermodynamic properties, viscous effects, Hsiao (L.), *2774*
- mixtures, thermodynamic properties, thermodynamics (nonequilibrium), Bree (J.), *2779*
- augmentation, energy transport, heat exchangers, heat transfer, pressure drop, viscous effects, Bejan (A.), Pfister (P.A.) Jr., *2828*
- continuum mechanics, thermodynamics (nonequilibrium), Woods (L.C.), *6040*
- thermodynamic functions, thermodynamics (statistical), Lo Schiavo (M.), Maschio (G.), *6745*
- microstructures, structured continua, thermodynamics (nonequilibrium), Michelet (G.), Darrozes (J.-S.), *7143*
- discrete systems, linear systems, linear theory, time invariant systems, Zames (G.), *7231*
- compressible flow, finite difference methods, stability (numerical), transonic flow, Engquist (B.), Osher (S.), *7686*
- heat engines, thermodynamics (irreversible), thermodynamics (nonequilibrium), Heidug (W.), Muschik (W.), *7817*
- adiabatic processes, caratheodory's axiom, thermodynamic functions, Kuiken (G.D.C.), *7818*
- strain energy, thermodynamics, wear, Klamecki (B.E.), *8054*

Entwistle (K.M.), composite pressure vessels, hose, hydraulics, pressurized pipes, tubes, *6205*

environmental control, energy conservation, mathematical models, Hirst (E.), *208*

- design, fluid mechanics, Hunt (J.C.R.), *565*
- noise, noise (traffic), Ahrlin (U.), Rylander (R.), *1816*
- noise, noise abatement, Hede (A.J.), *1817*
- mathematical models, pesticide, pollution, Hirata (H.), Kogo (H.), *2192*
- air conditioning, air raid shelters, environmental tests, Pnueli (D.), *5574*
- contamination, discharges, estuaries, rivers, water pollution, Smith (R.), *7657*
- convection (forced), currents, gravity, heat transfer, Sturm (T.W.), *10406*

environmental tests, endurance limit, fatigue, high cycle fatigue, life expectancy, nickel alloys, Mowbray (D.F.), Giaquinto (E.V.), (et al.), *443*

- crack growth, fatigue, pressure vessels, steel, Ritchie (R.O.), Suresh (S.), (et al.), *2414*
- crack growth, fatigue, material testing, steel, stress intensity factor, Stewart (A.T.), *3448*
- crack growth, damage (cumulative), fracture mechanics, metals, Davidson (D.L.), *3449*
- crack opening displacement, failure, life expectancy, plastics, stress rupture, Shanahan (M.E.R.), Schultz (J.), *4486*
- aluminum alloys, crack closure, crack opening displacement, fatigue, Ewalds (H.L.), *5287*
- air conditioning, air raid shelters, environmental control, Pnueli (D.), *5574*
- corrosion fatigue, crack growth, steel, welded joints, Davis (D.A.), Czyryca (E.J.), *6428*
- boundary layer (atmospheric), boundary layer (thermal), roughness, stratified flow, Ogawa (Y.), Diosey (P.G.), *6646*
- combustion, materials properties, thermal fatigue, Tretyachenko (G.N.), Kravchuk (L.V.), (et al.), *7474*
- corrosion fatigue, crack growth, fatigue, Wei (R.P.), Simmons (G.W.), *7477*
- alloys, high cycle fatigue, high temperature, low cycle fatigue, Soo (P.), Chow (J.G.Y.), *7478*
- crack propagation, fatigue, fractography, Grinberg (N.M.), Ostapenko (I.L.), (et al.), *7488*
- flow obstructions, near ground effects, separated flow, siting considerations, vortex flow, wind turbines, Frost (W.), Shieh (C.F.), *10516*

Enz (C.P.), navier stokes equation, rheology, statistical continuum mechanics, turbulence (structure), viscous flow, *4126*

Epikhin (V.E.), axisymmetric flow, jets, swirl flow, *4632*

Epperson (J.F.), error, mathematical methods, melting, stefan problem, *8108*

Epple (A.), see Von Roth (W.), *2248*

Epstein (H.I.), floating structures, plates (circular), roofs, tanks, *3317*

Epstein (M.), convection (forced), cooling, cylindrical bodies, film boiling, spherical bodies, stagnation point, Hauser (G.M.), *8687*

- buoyant flow, conductivity, convection (free), diffusion, heat addition, heat transfer (combined modes), radiant interchange, Cheung (F.B.), (et al.), *8751*

Epstein (Y.), brain, heat transfer (biological), high temperature, nervous system, Koren (G.), (et al.), *7124*

Epton (M.A.), see Ehlers (F.E.), *8552*

equations of motion, differential equations (ordinary), iterative methods, micropolar media, numerical methods, Anwar (M.), Guram (G.S.), *61*

- shells (cylindrical), shells (thin), Akeju (T.A.I.), *1233*
- plates (sandwich), Mindlin (R.D.), *1236*
- existence theorems, polar fluids, rheology, viscoelastic fluids, Solonnikov (V.A.), Kazhikhov (A.V.), *3076*
- diffusion, discrete systems, hydrodynamics, one dimensional flow, Visscher (P.B.), *3636*
- diffusion, two component flow, Reimschussel (W.), Abramczyk (H.), *3854*
- conservation laws, mixture theories, nonhomogeneous media, Kril (S.I.), *4135*
- dynamic analysis, shells (nonlinear), shells (orthotropic), Sokolovskaya (I.I.), *4377*
- dynamics, optimization, variable mass, Apykhtin (N.G.), Iakoviev (V.F.), *4757*
- hamiltonian equations, kepler orbits, mathematical methods, transformation, Leach (P.G.L.), *6064*
- algorithms, computing techniques, orbit mechanics, space vehicle structures, space vehicles, Kane (T.R.), Levinson (D.A.), *7916*
- elastic behavior, kinematics, lagrange multiplier, mechanisms, Blejwas (T.E.), *8100*
- artificial satellites, averaging, oblateness, transformation, Hoots (F.R.), *8842*
- dynamic analysis, mathematical methods, vibration (nonlinear), Benson (D.C.), *9296*
- beams (timoshenko), fluid-structure interaction, follower forces, pipe flow, Laithier (B.E.), Paidoussis (M.P.), *11642*
- airplanes, control surfaces, design, flight control, mathematical models, Paljaruci (G.), *11733*

equations of state, thermodynamic properties, vapor pressure, Harmens (A.), Knapp (H.), *717*

- empirical methods, gases, thermodynamic properties, Rogankov (V.B.), Chumachenko (A.V.), *1654*
- ethylene, thermal properties, Thomas (W.), Zander (M.), *1659*
- phase changes, steam, steam turbines, Hedback (A.J.W.), *2776*
- constitutive equations, thermodynamic properties, Kamaukhov (V.G.), Senchenkov (I.K.), *3771*
- constitutive equations, high pressure, water, Juza (J.), Sifner (O.), (et al.), *5521*
- constitutive equations, high pressure, solid mechanics, Filimonov (V.A.), *5525*
- mathematical models, nonlinear analysis, Ahrendts (J.), Baehr (H.D.), *6744*
- gases, high pressure, nitrogen, Antanovich (A.A.), *7820*
- molecular theory, surface tension, water, Guerrero (M.I.), Davis (H.T.), *10553*
- creep, molecular theory, polymers, thermophysical properties, Ainbinder (S.B.), Tyunina (E.L.), (et al.), *10556*

equilibrium, chemically reactive flow, internal combustion engines, numerical methods, Ramshaw (J.D.), Cloutman (L.D.), *1756*

- chemical reactions, injection, ionization, plasma, Poissant (G.), Prudhomme (R.), *1779*
- hamilton principle, inhomogeneities, linear theory, plasma, Lewis (H.R.), Symon (K.R.), *1780*
- coastal engineering, sediment transport, Migniot (C.), Viguier (J.), *2593*
- brownian motion, fluids, statistical mechanics, Tokuyama (M.), Oppenheim (I.), *2842*
- control stability, magnetic field, thermonuclear energy, tokamak, Rubin (I.K.), *2903*
- heat transfer, reactors, Giger (G.K.), Mutharasan (R.), (et al.), *3001*
- axisymmetric flow, gravity, rotating fluids, Friedman (A.), Turkington (B.), *3627*
- libration theory, restricted three body problem, Szebehely (V.), Mckenzie (R.), *3917*
- fredholm equations, magneto fluid dynamics, resistance, toroids, Lo Surdo (C.), *4748*
- fibers, stochastic systems, structure, textiles, thermodynamics, Lindenmeyer (P.H.), *5133*
- failure, soil mechanics, Protosenya (A.G.), Chernikov (A.K.), *6397*
- cylindrical bodies, magneto fluid dynamics, modes, pressure gradient, Lortz (D.), Nuhrenberg (J.), *6860*

- asymptotic methods, curve fitting, scour, sediment transport, Blaisdell (F.W.), Anderson (C.L.), (et al.), *7659*
- generators, hall effect, magneto fluid dynamics, nonuniform flow, Rosenbaum (M.), Shamma (S.E.), (et al.), *8830*
- boundary layer, boundary layer (turbulent), pressure gradient, Schofield (W.H.), *10426*
- alfven number, magneto fluid dynamics, rotating fluids, theory, Zeitunyan (R.Kh.), *10743*
- free boundary, interface phenomena, layered media, magneto fluid dynamics, Kiryushin (V.V.), Chung Za Bin, *10744*
- drops, magneto fluid dynamics, shape, stability theory, Barkov (Yu.D.), Berkovskii (B.M.), *11822*
- containment, plasma (toroidal), pressure, stability theory, Kovrizhnykh (L.M.), Shchepetov (S.V.), *11838*
- cavitation, dilute solutions, two component flow, two phase flow, Cha (Y.S.), *12039*

equivalence techniques, composite materials, computing techniques, constitutive relations, Lene (F.), Leguillon (D.), *10127*

Erasov (V.S.), boron, fibers, high temperature, tension, testing equipment, Pirogov (E.N.), (et al.), *2485*

Ercoli (L.), see Grossi (R.O.), *5480*

Erdei (C.K.), brittle materials, finite element techniques, materials properties, *10134*

Erden (A.), machine design, machining (electrochemical), mathematical methods, optimization, Kaftanoglu (B.), *3430*

Erdman (A.G.), kinematics, linkages, mechanisms (planes), synthesis, *3578*

Erdmann-Jesnitzer (F.), bonding, delamination, glass fibers, holography, plates (sandwich), Winkler (T.), *483*

Erdogan (E.), nonlinear analysis, pipe flow, rivlin-ericksen fluid, viscoelastic fluids, *7721*

Eremin (E.A.), chemically reactive flow, convection (forced), plane flow, thermal instability, Kolesnikov (A.K.), *6785*

Ergin (A.), currents, dispersion, surface waves, turbulence (geophysical), water pollution, *5903*

- dispersion, floating bodies, gravity waves (surface), oscillatory flow, visualization, *9533*

Ericksen (J.L.), bifurcation, continuum mechanics, stability theory, *1050*

Erickson (M.), holes, photoelasticity, plane strain, plates (holed), strain measurement, stress concentration, Durelli (A.J.), *6461*

Ericsson (L.E.), design, slender bodies, vehicles, vortex shedding, Reding (J.P.), *696*

- see Reding (J.P.), *5495*
- aerodynamic performance, missiles, stability derivatives, transonic flow, viscous effects, *6727*

Eriksen (C.C.), breakers, currents, gravity waves (internal), internal waves, oceanography, spectra, thermocline, *4871*

Eringen (A.C.), elasticity (nonlocal), elastoplasticity, yield criteria, *6179*

Erisman (A.M.), see Sincovec (R.F.), *2039*

Erlikh (A.I.), see Khachiyan (L.G.), *2034*

Erlmann (K.), computing techniques, finite element techniques, forming, plastic behavior, Dung (N.L.), *3427*

Ermak (A.A.), defects, glass fibers, stress concentration, Mikhailov (A.M.), *6192*

Ermakov (S.V.), axial loading, elastoplasticity, shells (cylindrical), shells (plastic), torque, *4375*

Ermentrout (G.B.), bifurcation, diffusion, periodic orbits, perturbation methods, reaction-diffusion systems, *2003*

- bifurcation, biomathematics, mathematical models, neural nets, Cowan (J.D.), *9197*

Ermi (A.M.), crack propagation, fatigue, fracture, nuclear reactors, Bauer (R.E.), (et al.), *2406*

Ermolaev (B.S.), combustion (oscillatory), flame propagation, Sulimov (A.A.), (et al.), *9759*

Ermolenko (A.F.), see Protasov (V.D.), *9251*

Ermolin (N.E.), duct flow, nonequilibrium flow, supersonic flow, Fomin (V.M.), *9565*

Ermolov (I.N.), see Basatskaya (L.V.), *1294*

- acoustic measurements, acoustic waves, defects, surface flaws, ultrasonics, Razygraev (N.P.), (et al.), *6490*
- see Vopilkin (A.Kh.), *6492*

Ernst (H.), see Paris (P.C.), *3463*

- see Joyce (J.A.), *5302*

Ernst (S.), acoustic measurements, liquids, materials properties, molecular properties, Glinski (J.), *3968*

Ernst (W.R.), see Harrison (B.K.), *1743*

Erofeev (A.I.), see Gorelov (S.L.), *11447*

Erofeev (V.I.), see Kochetov (V.T.), *1414*

- cyclic loading, elastoplasticity, nonlinear materials, statically indeterminate structures, structural analysis, Kondeikin (P.I.), *2242*

Eroshenko (V.M.), fluid injection, pipe flow, porous walls, transpiration, turbulent flow, Ershov (A.V.), (et al.), *4622*

- drag, ducts, laminar flow, porous walls, variable fluid properties, Zaichik (L.I.), (et al.), *6658*
- diffusion, impurities, pipe flow, porous walls, Zaichik (L.I.), *10669*

erosion, jets, penetration, water, Walters (W.P.), Scott (B.R.), *1011*

- abrasion, hardness, particle size, wear, Misra (A.), Finnie (I.), *1928*
- ductility, particles, wear, Humphrey (J.A.C.), *1930*
- bed load, jets, sediment transport, shear stress, Chatterjee (S.S.), Ghosh (S.N.), *2591*
- abrasion, cavitation, impact, wear, Preece (C.M.) ed., *3038, book*
- aluminum alloys, ductility, metals, Bellman (R.) Jr., Levy (A.), *3039*
- heat treatment, particles, steel, wear, Salik (J.), Buckley (D.H.), *3504*
- drainage, embankments, hydrology, Gonchar (A.I.), Sribnyi (I.K.), *4046*
- beaches, coasts, Mizumura (K.), Shiraishi (N.), *5916*
- abrasion, particles, wear, Rabinowicz (E.), *5977*
- cavitation, damage (cumulative), prediction, Hammitt (F.G.), De (M.K.), *5978*
- channel flow, crossflow, river beds, scour, wall jets, Rajaratnam (N.), *6596*
- bottom irregularities, drag, icebergs, ocean, Lopez (R.), Chari (T.R.), (et al.), *6611*
- aluminum alloys, impact, Preece (C.M.), Brunton (J.H.), (et al.), *7091*
- impact, repeated loading, Polezhaev (Yu.V.), *7498*
- composite materials, impact, Polezhaev (Yu.V.), Romanchenkov (V.P.), (et al.), *7499*
- cavitation, rotating disks, testing equipment, wear, Nikulin (V.A.), Konovalov (V.M.), (et al.), *7573*
- cavitation, corrosion, surface effect, vibration, Hoss (S.), Hirth (F.W.), (et al.), *7810*
- brittle materials, particle size, wear, Marshall (D.B.), Evans (A.G.), (et al.), *8052*
- cavitation, diesel engines, injectors, unsteady flow, visualization, Bastenhof (D.), *8661*
- axial turbines, blades, cascades, combustion products, particles, synthetic fuels, Wenglarz (R.A.), Menguturk (M.), *8807*
- fluidized beds, particles, Lin (L.), Sears (J.T.), (et al.), *8937*
- cavitation, coatings, corrosion fatigue, Okada (T.), Awazu (K.), (et al.), *9023*
- soils, Kelly (W.E.), Gularte (R.C.), *9353*
- channels, river beds, variable area flow, Gill (M.A.), *9507*
- cavitation, channel flow, variable area flow, venturi tubes, vibration, He (J.-G.), Hammitt (F.G.), *9516*
- condensation (dropwise), condensation (filmwise), steam, steam turbines, Hammitt (F.G.), Krzeczkowski (S.), (et al.), *9780*

Ershov (A.V.), see Eroshenko (V.M.), *4622*

Ershov (N.P.), composite materials, fibers, shells (anisotropic), shells (stiffened), structural stability, *2304*

Ershov (N.S.), cavitation, flow reversal, mathematical models, pumps, unsteady flow, Kuchkin (V.N.), *7791*

Ertanova (O.N.), see Bakrunov (A.O.), *6964*

Ertel (H.), see Rosenhouse (G.), *8857*

Ertepinar (A.), dynamic analysis, tubes, vibration (forced), Gurkok (A.), *1259*

- see Gurkok (A.), *11132*
- dynamic stresses, shells (cylindrical), shells (sandwich), vibration (nonlinear), Mengi (Y.), *11134*

Erzhanov (Zh.S.), cracks, elastic bodies, elliptical cracks, fracture mechanics, Garagash (I.A.), *4493*

Esaulov (V.P.), railroads, web design, wheels, *2282*

Escudier (M.P.), see Keller (J.J.), *11583*

Esin (A.), cyclic loading, plasticity, stress strain relationships, work hardening, *5119*

Esmail (M.N.), boundary layer, falling films, film flow, nonlinear analysis, surface waves, *3709*

Esposito (R.), clausius-duhem inequality, continuum mechanics, thermodynamic processes, thermodynamics (irreversible), Romano (A.), *11758*

Essen (H.), dynamic analysis, rotating bodies, *3091*

Esser (H.), see Koller (R.), *9484*

Essers (J.A.), digital simulation, elliptic equations, flow measurement, time dependence, *3121*

Esswein (R.), acoustic waves, diffraction, ocean, sound propagation, Flatte (S.M.), *1799*

estimation, convolution integrals, optimization, probability theory, reliability analysis, Grigoriu (M.), Lind (N.C.), *48*

- design, kalman filters, tracking, Weiss (H.), Moore (J.B.), *119*
- ballistics, least squares, trajectories, Chang (C.B.), *130*
- algorithms, identification, Wang (B.-C.), Luus (R.), *132*
- frequency response, mathematical models, plasma, Gvozdkov (Yu.V.), *138*
- algorithms, identification, state space techniques, Ginsberg (K.S.), *140*
- algorithms, queue theory, Ivanovskii (V.B.), *143*
- filters, mathematical models, Baram (Y.), *145*
- identification, noise (random), sampling, Semesenko (M.P.), *163*
- obsolete data, prediction, stochastic processes, Popovskii (V.I.), Chizhenkov (Yu.Ya.), *164*
- algorithms, pattern recognition, Yurachkovskiy (Yu.P.), Groshkov (A.N.), *169*
- kalman filters, navigation, space vehicles, Madrid (G.A.), Bierman (G.J.), *194*
- arrays, detection, filters, radar, Chen (C.-C.), Andrews (H.C.), *195*
- mathematical models, population estimation, simulation, Nakamura (A.), Nakamura (M.), *215*
- jump conditions, linear systems, observers, Caglayan (A.K.), *1144*
- stochastic control, trajectories, Rubinovich (E.Ya.), *1156*
- biomechanics, gait, three dimensional formulation, Woltring (H.J.), *1168*

- meteorology (physical), oceanography, optimization, Penenko (V.V.), *1910*
- interval estimation, reliability, statistical theory, Pavlov (I.V.), *2020*
- least squares, state space techniques, statistical control, stochastic processes, Kailath (T.), *2025*
- adaptive systems, filters, maximum principle, Skelton (R.E.), *2080*
- kalman filters, nonlinear systems, quasilinearization, stochastic processes, Wagdi (M.N.), *2098*
- algorithms, prediction, Ivakhnenko (A.G.), Stepashko (V.S.), (et al.), *2102*
- classification, detection, noise (random), signal detection, Zilbershteyn (A.M.), Natkovich (Yu.S.), *2103*
- algorithms, identification, Shubladze (A.M.), *2112*
- adaptive systems, algorithms, Tugnait (J.K.), *2136*
- algorithms, mathematical programming, optimization, stochastic processes, Katkovnik (V.Ya.), Kheisin (V.E.), *2138*
- algorithms, approximation methods, stability, Gilbo (E.P.), Chelpanov (I.B.), (et al.), *2139*
- algorithms, identification, model reduction, Semesenko (M.P.), Ramazanov (S.K.), *2148*
- algorithms, identification, Kuzmin (N.N.), Korotnikh (Yu.Ya.), (et al.), *2149*
- calibration, electrostatic gyro, gyroscopes, kalman filters, mathematical models, navigation, strapdown systems, Blanchard (R.L.), *2162*
- filters, optimization, Emelyanov (S.V.), Golembo (B.Z.), *2172*
- algorithms, forecasting, Mckenzie (E.), *2201*
- identification, simulation, Cheng (R.C.H.), *2202*
- biaxial loading, crack opening displacement, fatigue, Howard (I.C.), *2418*
- crack propagation, fatigue, Hills (D.A.), Ashelby (D.W.), *2419*
- identification, nonlinear systems, wiener-hammerstein model, Fakhouri (S.Y.), *3160*
- filters, nonlinear methods, nonlinear systems, Kalachev (M.G.), Nikonov (V.G.), *3161*
- degree of nonlinearity, hammerstein type, nonlinear systems, nonlinear theory, Variaki (P.), Raybman (N.S.), *3163*
- dynamic analysis, input-output relationships, inverse problems, Benyon (P.R.), *3164*
- adaptive systems, dynamic analysis, search-free systems, Nachinkina (G.N.), Shnaidman (M.A.), *3203*
- acoustics, sound propagation, source motion, Carter (G.C.), Abraham (P.B.), *3945*
- acoustics, harmonic waves, Eddy (T.W.), *3960*
- meteorology, optimization, Brimkulov (U.N.), Krug (G.K.), (et al.), *4081*
- filters, identification, kalman filters, Leondes (C.T.), Siu (T.K.), *4218*
- airplanes, algorithms, error, identification, Ramamoorthy (R.P.), *4223*
- analytical methods, harmonic balance, harmonic linearization, oscillations, Volovodov (S.K.), Rozenvasser (E.N.), *4240*
- identification, linear systems, matrix methods, Schwarz (R.G.), *4254*
- adaptive systems, algorithms, identification, model reference systems, Van De Ven (H.H.), Groenendaal (A.W.M.), *4255*
- stochastic processes, tracking, Bar-Shalom (Y.), Marcus (G.D.), *4264*
- identification, nonlinear systems, Variaki (P.), Raibman (N.S.), *4265*
- identification, stochastic processes, stochastic systems, Kazakov (I.E.), *4266*
- faults, reliability analysis, stochastic processes, Nikiforov (I.V.), *4269*
- adaptive systems, algorithms, stochastic processes, Rudenko (O.G.), Bodyanskii (E.V.), (et al.), *4270*
- algorithms, filters, Bakan (T.M.), *4274*
- algorithms, optimization, pareto set, Merkurev (V.V.), Moldavskii (M.A.), *4281*
- perturbation theory, singular perturbations, Sebald (A.V.), Haddad (A.H.), *4294*
- algorithms, nonlinear systems, observability, Krasovskii (A.A.), *4300*
- linear systems, nonlinear systems, stochastic systems, Siluyanova (I.D.), *4306*
- correlation, filters, iterative methods, Simkin (M.M.), *4313*
- adaptive systems, optimization, Tugnait (J.K.), Haddad (A.H.), *4320*
- error, finite element techniques, mesh generation, structural analysis, Kleiber (M.), *5028*
- doppler effect, electric propulsion, random error, space vehicles, Asher (R.B.), Eller (T.J.), (et al.), *5714*
- convergence, galerkin method, norms, parabolic equations, Thomee (V.), *7199*
- distributed parameters, flexible bodies, strings, Schaechter (D.B.), *7239*
- endurance limit, fatigue, weibull statistics, Sakai (T.), Iwaya (T.), (et al.), *7511*
- deposition, pollution, Rodhe (H.), *7968*
- control, diffusion, nonlinear systems, Banon (G.), Nguyen (H.T.), *8122*
- leak detection, leaks, pipelines, piping systems, Siebert (H.), Klaiber (T.), *9192*
- digital simulation, kalman filters, martingales, Moek (G.), *10034*
- approximation methods, error, ill posed problems, Vainikko (G.M.), *10048*
- nonlinear methods, stochastics, Ivanov (A.V.), Kozlov (O.M.), *10055*
- data analysis, fatigue, statistical theory, strength, Nishijima (S.), *10323*
- algorithms, identification, time delay systems, Banks (H.T.), Burns (J.A.), (et al.), *11060*
- discrete systems, kalman filters, nonlinear theory, Kalaba (R.), Tesfatsion (L.), *11067*
- algorithms, identification, modeling, nonlinear systems, nonlinear theory, stochastic systems, volterra series, Fakhouri (S.Y.), *11080*

estuaries, circulation, finite difference methods, oceanography, two dimensional flow, Wang (D.-P.), Kravitz (D.W.), *2594*

- finite difference methods, free boundary, hydraulics, lakes, water pollution, Fischer (H.B.) ed., *4577, book*
- channel flow, rotating fluids, Nof (D.), *4869*
- stratified flow, wedges, Grubert (J.P.), *5392*
- galerkin method, stratified flow, two dimensional flow, Rasmussen (H.), *6607*
- channel flow, currents, rotating fluids, Nof (D.), *7053*
- contamination, discharges, environmental control, rivers, water pollution, Smith (R.), *7657*
- energy conversion, pumps, reservoirs, tides, Robinson (I.S.), Perry (J.M.), *9521*
- nonlinear waves, shallow water, tidal waves, two dimensional flow, Debnath (L.), Chatterjee (A.K.), *11359*
- finite element techniques, liquid liquid interface, tides, Kawahara (M.), Morihira (M.), (et al.), *11609*
- boundary conditions, finite element techniques, gravity waves (shallow water), Walters (R.A.), Cheng (R.T.), *11611*

Etinberg (I.E.), design, dimensional analysis, hydraulic turbines, scale models, *2753*

Etkin (B.), airplanes, control, flight control, lateral stability, longitudinal stability, stability, *8646, book*

- damping capacity, design, masts, oscillations, viscous effects, wind loads, Hansen (J.S.), *11842*

Etok (E.U.), dynamic response, floating structures, offshore structures, random loading, wave loads, Kirk (C.L.), *3556*

- see Kirk (C.L.), *6291*

Etsion (I.), bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), stability, Green (I.), *1024*

- design, lubrication (elastohydrodynamic), seals, stirling cycles, *2570*
- flexibility, lubrication (hydrostatic), seals, squeeze films, vibration, Dan (Y.), *7628*

Etter (P.C.), modeling, sound propagation, underwater acoustics, *5723*

Ettles (C.M.Mc.), see Cameron (A.), *7078, book*

euler equations, compressible flow, finite difference methods, two dimensional flow, Hindman (R.G.), Kulter (P.), (et al.), *587*

- convergence, mathematical methods, reynolds number (high), vorticity, Hald (O.H.), *1121*
- beams, loads, Tahiani (C.), Srivastava (N.K.), *1219*
- flow obstructions, vortex flow, vortex sheets, vorticity, Saffman (P.G.), *2600*
- lagrange equations, oceanography, particle fluid flow, tracers, Regier (L.), Stommel (H.), *4880*
- compressible flow, finite difference methods, potential flow, transonic flow, Caughey (D.A.), *5420*
- characteristic methods, finite element techniques, vorticity, Bardos (C.), Bercovier (M.), (et al.), *7680*
- inviscid fluid, numerical methods, spherical bodies, vortex lines, Dhanak (M.R.), *11361*
- stratified flow, variational methods, vorticity, Saltanov (N.V.), *11372*

Evans (A.G.), ceramics, crack initiation, defects, nondestructive tests, stochastic systems, Meyer (M.E.), (et al.), *7470*

- see Marshall (D.B.), *8052*
- ceramics, fatigue, micromechanics, *8376*
- see Richardson (J.M.), *9437*

Evans (D.J.), see Benson (A.), *62*

- see Lipitakis (E.A.), *1122*
- biharmonic equation, boundary value problems, elasticity (linear), Murphy (C.P.), *5072*

Evans (D.V.), see Thomas (G.P.), *10489*

- floating bodies, oscillating bodies, wave absorbers, wave energy, *11645*

Evans (H.P.), contact problems, film thickness, lubrication (elastohydrodynamic), reynolds number, viscosity, Snidle (R.W.), *9027*

Evans (H.R.), cellular structures, elastic behavior, plates (anisotropic), shear lag, web openings, Shanmugam (N.E.), *3292*

- bridges (box girder), design criteria, shear lag, Taherian (A.R.), *5151*
- beams (box), bending, girders (plate), shear loading, Shanmugam (N.E.), *7320*
- see Shanmugam (N.E.), *8263*

Evans (J.W.), see Kasuba (R.), *8471*

Evans (R.D.), see Lippy (D.), *5832*

- crack propagation, gas wells, hydraulic transport, Carroll (H.B.) Jr., *8925*

evaporated films, absorption, air conditioning, dehumidifying system, drying, film flow, fins, low temperature, Peng (C.S.P.), Howell (J.R.), *10641*

evaporation, drying, phase changes, Szentogyorgyi (S.), *792*

- drying, mechanics, thermodynamics, Lampinen (M.), *800*
- drying, Szentgyorgyi (S.), Molnar (K.), *801*
- cooling, heat transfer, mass transfer, water, Arefyev (K.M.), Averkiyev (A.G.), *802*
- heat pipes, mechanics, Tolubinskii (V.I.), Antonenko (V.A.), (et al.), *804*
- boiling, convection (forced), heat transfer, refrigeration, Mishra (M.P.), Varma (H.K.), (et al.), *1669*
- desalination, heat transfer, Suematsu (H.), Inoue (S.), (et al.), *1716*
- condensation, heat transfer, thermosyphons, two phase flow, Imura (H.), Kusuda (H.), (et al.), *1719*
- heat transfer, porous surfaces, Rannenberg (M.), Beer (H.), *1873*
- condensation (dropwise), drops, surfactants, Borzilov (V.A.), Klepikova (N.V.), (et al.), *1905*

- convection (forced), cooling towers, waste heat, Hane (C.E.), *1906*
- condensation, drops, gases, Rakhmatulina (I.Kh.), *2840*
- condensation, drops, Sadhal (S.S.), *2841*
- two phase flow, void fraction, Beck (B.T.), Wedekind (G.L.), *2987*
- heat transfer (atmospheric), mass transfer, Szaniawski (A.), *3021*
- bgk model, half space, Siewert (C.E.), Thomas (J.R.) Jr., *3644*
- energy conversion, geothermal energy, heat exchangers, Kodres (C.A.), Jacobs (H.R.), (et al.), *3834*
- condensation, heat transfer, mass transfer, regenerators, rotary regenerators, Van Leersum (J.G.), Ambrose (C.W.), *3838*
- capillary flow, diffusion, drying, porous media, Molnar (K.), *3845*
- drops, flames (laminar), Harpole (G.M.), *3848*
- convection, heat transfer, interface phenomena, Palmer (H.J.), Makeshri (J.C.), *3849*
- boiling, channel flow, film flow, heat exchangers, heat transfer, Vasilev (L.L.), Abramenko (A.N.), (et al.), *4721*
- drops, kinetics, mass transfer, numerical analysis, Larina (I.N.), Rykov (V.A.), *4726*
- liquid metals, mass transfer, porous media, Prosvetov (V.V.), *5608*
- condensation, excitation, isotopes, lasers (gasdynamic), mixtures, Druzhinin (A.A.), Ptitsyn (G.A.), (et al.), *5612*
- convection, mass transfer, oceanography, Kutalo (A.A.), Chernyavskii (E.B.), *5952*
- film cooling, film flow, heat transfer, liquid vapor interface, Wassner (L.), *6779*
- heat transfer, thermal diffusion, wind tunnels (environmental), Reijnhart (R.), Rose (R.), *6826*
- bubble dynamics, photography, Lerner (Y.), Sonn (A.), (et al.), *6991*
- fins, heat exchangers (crossflow), otec evaporator, pressure drop, transient loading, Chapman (M.C.), Heydt (G.T.), *7867*
- boundary layer (atmospheric), diffusion, mass transfer, Reijnhart (R.), Piepers (J.), (et al.), *8030*
- bubbly flow, buoyant flow, condensation, immiscible fluids, two phase flow, Moalem-Maron (D.), Sokolov (M.), (et al.), *8696*
- absorption, drops, radiant interchange, Harpole (G.M.), *8741*
- boiling, channel flow, Mironov (Yu.V.), *8760*
- burners, drops, heat transfer, liquid liquid interface, Iida (Y.), Takashima (T.), *8772*
- combustion, diesel engines, injection systems, modeling, Baumer (K.), Hartje (J.), (et al.), *8804*
- combustion, diffusion, metals, oxidation, Fursov (V.P.), Shevtsov (V.I.), (et al.), *9767*
- contact problems, heat exchangers, liquid vapor interface, mathematical models, Bukharkin (E.N.), *10617*
- heat transfer, vacuum, Palmer (H.J.), Bose (A.), *10644*
- coagulation, drops, mathematical models, transport mechanisms, Novikov (V.S.), *10646*
- diffusion, kinetics, models, Petersen (I.F.), *10648*
- capillary surfaces, condensation, heat transfer, Shekrildza (I.G.), Rusishvili (D.G.), *10649*
- convection, drops, heat transfer, Rane (A.), Yao (S.-C.), *10651*
- cooling towers, Ward (G.H.) Jr., *10655*
- cooling towers, Gosi (P.), *10656*
- heat transfer, impingement, jets, mass transfer, navier stokes equation, Mujumdar (A.S.), Li (Y.-K.), (et al.), *10665*
- heat transfer, mass transfer, porous media, Iodko (E.A.), *10692*
- combustion, drops, sprays, Umemura (A.), Ogawa (S.), (et al.), *10709*
- combustion, liquid fuels, sprays, Tambour (Y.), *10716*
- condensation, excitation, molecular theory, Abramov (A.A.), Makashev (N.K.), *11442*
- cooling, crossflow, heat exchangers, regenerators, Maclaine-Cross (I.L.), Banks (P.J.), *11767*
- capillary flow, channel flow, heat pipes, Suslov (A.D.), Ustinov (V.Ya.), *11772*
- porous media, resistance, two phase flow, Maiorov (V.A.), *12067*

evasion, airplanes, algorithms, differential games, pursuit, Rajan (N.), Prasad (U.R.), (et al.), *1157*
- design, differential games, pursuit, Ostapenko (V.V.), *2127*
- differential games, pursuit, synthesis, Tomskii (G.V.), *2131*
- airplanes, missiles, pursuit, suboptimal control, Steinberg (A.M.), Forte (I.), *6146*
- optimal control, pursuit, variational methods, Large (E.), *7926*
- differential games, pursuit, Getz (W.M.), Pachter (M.), *8170*
- differential games, lyapunov's functions, pursuit, Getz (W.M.), Pachter (M.), *11086*
- differential games, pursuit, stochastic systems, Pachter (M.), Yavin (Y.), *11087*

Evdokimov (V.E.), see Kuznetsov (A.L.), *700*

Evers (A.H.), algorithms, numerical methods, optimal control, sensitivity, *5058*

Everstine (G.C.), analogies, differential equations (partial), elasticity (linear), *3075*
- see Neilson (H.C.), *11635*

Every (M.J.), cables, cylindrical bodies, submerged bodies, suppression, vibration (flow induced), vortex shedding, King (R.), (et al.), *10488*

Evin (O.A.), combustors, gas turbines, high temperature, Yankovskii (V.M.), (et al.), *5656*

Evlanov (L.G.), algorithms, dynamic programming, equipment replacement, optimal control, Trubitsin (O.N.), *4309*

evolution equations, banach space, cauchy problem, differential equations (partial), quasilinearization, Altman (M.), *33*
- differential equations (ordinary), time dependence, Shugrin (S.M.), *1091*
- capillary waves, gravity waves, nonlinear analysis, plasma, soliton solutions, Ma (Y.-C.), *1094*
- axial flow, drops, Hinch (E.J.), *1863*
- burgers equation, korteweg de vries equation, nonlinear analysis, Fokas (A.S.), *2002*
- backlund transformations, mathematical methods, transformation, Fokas (A.S.), Fuchssteiner (B.), *3103*
- transient effects, two dimensional waves, Engelbrecht (J.), *4444*
- existence theorems, nonlinear systems, Pavel (N.H.), *4949*
- computing techniques, differential equations (ordinary), integration, Sepehrnoori (K.), Carey (G.F.), *5000*
- backlund transformations, inverse problems, korteweg de vries equation, scattering, Prikarpatskii (A.K.), *6072*
- boltzmann equation, diffusion, kinetic theory, statistical mechanics, Brunnschweiler (A.), *7164*
- linear equations, navier stokes equation, nonlinear analysis, Teman (R.), *7170*
- beams, differential equations (partial), periodic orbits, vibration, Holmes (P.), Marsden (J.), *10024*

Evseev (V.N.), plates (reinforced), sound generation, vibration, Ivanov (V.S.), (et al.), *11949*

Evstratova (S.P.), see Stepnov (M.N.), *10330*

Evtushenko (Yu.G.), see Grachev (I.I.), *10091*

Ewalds (H.L.), aluminum alloys, crack closure, crack opening displacement, environmental tests, fatigue, *5287*

Ewart (T.E.), scattering, sound propagation, underwater acoustics, Ehrenberg (J.E.), (et al.), *4792*

Ewing (R.E.), galerkin method, mixed flow, porous media, Wheeler (M.F.), *9904*

excavation, mining, numerical methods, stress analysis, tunnels, Diering (J.A.C.), *1335*
- prediction, rocks, sliding, stability, walls, Priest (S.D.), *4467*
- soils, statistical design, Matsuo (M.), Kawamura (K.), *6394*
- clay, soil mechanics, structural stability, tunnels, Davis (E.H.), Gunn (M.J.), (et al.), *6526*
- elastoplasticity, materials properties, mining, underground, Chugh (A.K.), *7288*
- cavities, elastoviscoplasticity, tunnels, Nonaka (T.), *8199*
- rock breaking devices, rocks, Ryhming (I.), Cooper (G.A.), (et al.), *11180*

excitation, dynamic response, noise (random), random excitation, Gasparini (D.A.), Debchaudhury (A.), *518*
- burning velocity, flame propagation, radiation, Clements (R.M.), Smith (R.D.), (et al.), *2860*
- oscillations, sensitivity, Rozenvasser (E.N.), *4247*
- jets, oscillating bodies, Simmons (J.M.), Lai (J.C.S.), (et al.), *4633*
- containers (partially filled), dynamic loads, fluid-structure interaction, membranes, sloshing, Bauer (H.F.), *4661*
- inhomogeneities, perturbations, plasma, waves, Chang (M.), *4751*
- experimental results, hydrodynamic stability, jets, turbulence (structure), Hussain (A.K.M.F.), Zaman (K.B.M.Q.), *5461*
- condensation, evaporation, isotopes, lasers (gasdynamic), mixtures, Druzhinin (A.A.), Ptitsyn (G.A.), (et al.), *5612*
- electron beams, lasers, plasma, spectral analysis, Ono (K.), Kamimoto (G.), (et al.), *5691*
- experimental methods, love waves, transducers (ultrasonic), Gulyaev (Yu.V.), Kurach (T.N.), (et al.), *6332*
- condensation, evaporation, molecular theory, Abramov (A.A.), Makashev (N.K.), *11442*
- acoustics, burners, oscillations, Larionov (V.M.), *11800*

exhaust gases, internal combustion engines, thermodynamic processes, Raible (C.J.), Cox (F.W.), *1762*
- combustion products, diesel engines, particle fluid flow, Cuthbertson (R.D.), Stinton (H.C.), (et al.), *1763*
- combustion products, diesel engines, particle fluid flow, Carpenter (K.), Johnson (J.H.), *1764*
- acoustics, attenuation, automobiles, ducts, silencers, Prasad (M.G.), Crocker (M.J.), *1813*
- flames (turbulent), methane, Moreau (P.), Borghi (R.), *2868*
- chemical kinetics, combustion, diffusion, Malte (P.C.), Schmidt (S.C.), (et al.), *3877*
- automobiles, design, internal combustion engines, optimization, Kanarachos (A.), Seifert (H.), *4564*
- jets, numerical methods, plumes, shock waves, supersonic flow, Dash (S.M.), Thorpe (R.D.), *4590*
- chemical kinetics, flames (diffusion), methane, nitric oxide, Mitchell (R.E.), Sarofim (A.F.), (et al.), *5635*
- compressible flow, inlet flow, internal combustion engines, two-stroke cycle, Sher (E.), *5647*
- particles, plumes, rockets, solid propellants, Strand (L.D.), Bowyer (J.M.), (et al.), *5809*

- combustion products, contamination, interferometry, optical techniques, propellants, spectral analysis, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- heat transfer, one dimensional flow, spark ignition engines, thermal measurements, Aikidas (A.C.), *6848*
- compressors, energy conservation, gas turbines, heat engines, heat exchangers, pipelines, Ludtke (K.), *10547*
- attenuation, ducts, noise abatement, Panicker (V.B.), Munjal (M.L.), *11939*
- attenuation, ducts, flow reversal, noise abatement, Panicker (V.B.), Munjal (M.L.), *11940*
- acoustics, vortex shedding, Rienstra (S.W.), *11960*

existence theorems, plasma, wave interactions, wave packets, Shulman (E.I.), *5*
- boundary value problems, differential equations (ordinary), falkner-skan equation, Utz (W.R.), *31*
- backward heat problem, conduction (heat), mathematical methods, norms, Biollay (Y.), *39*
- incompressible flow, navier stokes equation, three dimensional flow, Saut (J.C.), Temam (R.), *41*
- approximation methods, banach space, Balazs (M.), Goldner (G.), *63*
- computing techniques, mathematical methods, shells, Visarion (V.), Migdalovici (M.), *69*
- constitutive equations, plasticity, yield criteria, Kamenyarzh (Ya.A.), *267*
- cauchy problem, hyperbolic equations, inhomogeneities, uniqueness, Ying (L.-A.), Wang (C.-H.), *1089*
- anisotropic media, elasticity (linear), uniqueness, Umanskii (S.E.), *1184*
- nonconservative systems, periodic orbits, vibration, Pivovarov (I.), *1996*
- hyperbolic equations, uniqueness, water hammer, Barbu (V.), Morosanu (G.), *2006*
- conformal mapping, flow obstructions, potential flow, wakes, Hilbig (H.), *2008*
- hyperbolic equations, nonlinear methods, Morosanu (G.), *2012*
- navier stokes equation, three dimensional flow, uniqueness, Naumann (J.), *2013*
- finite amplitude, gravity waves (solitary), wave height (greatest), Amick (C.J.), Toland (J.F.), *2702*
- bottom irregularities, gravity waves (surface), nonlinear waves, Potapkin (V.S.), *2703*
- equations of motion, polar fluids, rheology, viscoelastic fluids, Solonnikov (V.A.), Kazhikhov (A.V.), *3076*
- discrete systems, integer programming, optimization, scheduling problems, uniqueness, Smadici (C.), *3114*
- plates (holed), Leko (T.D.), *3236*
- bifurcation, elliptic equations, Brown (K.J.), Ibrahim (M.M.A.), (et al.), *4151*
- bifurcation, functional equations, hopf bifurcation, De Oliveira (J.C.F.), *4153*
- evolution equations, nonlinear systems, Pavel (N.H.), *4949*
- almost periodic functions, differential equations (ordinary), oscillations, Simirad (C.), *4950*
- bifurcation, diffusion, perturbation theory, reaction diffusion equations, Rothe (F.), *4961*
- functional analyis, integro differential equations, nonlinear analysis, D'Ambrosio (U.), Krivocheine (L.E.), (et al.), *4981*
- asymptotic behavior, boundary layer, cylindrical bodies, gortler series, uniqueness, yawing, Schwierz (K.-P.), *5426*
- mechanical systems, periodic orbits, Pasynkova (I.A.), *6067*
- boundary value problems, initial value problems, plates, uniqueness, vibration, Uroev (V.M.), *6073*
- elasticity, functional analyis, strips, uniqueness, Lebedev (L.P.), *6152*
- elasticity (nonlinear), uniqueness, Kholmatov (T.), *6156*
- n body problems, periodic orbits, Meyer (K.R.), *6880*
- boundary value problems, infinite medium, navier stokes equation, Ladyzhenskaya (O.A.), Solonnikov (V.A.), *7169*
- bending, contact problems, plates, uniqueness, variational methods, Fortune (D.), Bezine (G.), *7330*
- dynamic response, elasticity (nonlinear), nonlinear theory, uniqueness, Vilke (V.G.), *7424*
- dynamics, large scale systems, limit cycles, Skar (S.J.), Miller (R.K.), (et al.), *8103*
- diffusion, inverse problems, uniqueness, Chrzanowski (E.M.), *8115*
- hyperbolic equations, mathematical methods, Hoff (D.), *8117*
- boundary value problems, hyperbolic equations, integro differential equations, uniqueness, Krivosheln (L.E.), Leung (K.V.), (et al.), *8121*
- plasticity, uniqueness, work hardening, Suquet (P.-M.), *8205*
- channel flow, gravity waves (finite depth), unsteady flow, Forste (J.), *8623*
- stefan problem, uniqueness, Tabisz (K.), *9096*
- boussinesq equation, surface waves, uniqueness, Schonbek (M.E.), *9101*
- decision theory, optimization, vector methods, Alekseichik (M.I.), Naumov (G.E.), *9113*
- conservation laws, hyperbolic equations, shock waves, Chang (P.H.), *9639*
- boundary integral methods, boundary value problems, helmholtz equation, scattering, Angell (T.S.), Kleinman (R.E.), *10019*
- data analysis, finite element techniques, galerkin method, navier stokes equation, penalty function, Sani (R.L.), Gresho (P.M.), (et al.), *10072*
- postbuckling theory, shells (shallow), Kubrusly (R.S.), *10165*
- axisymmetric flow, differential equations (partial), stratified flow, Yih (C.-S.), *10407*
- isentropic processes, magneto plasma dynamics, one dimensional flow, theory, Sulem (C.), Sulem (P.L.), *10733*
- boundary value problems, gravity waves (finite depth), rotational flow, Yolkin (N.N.), *11615*
- plasma, rarefied gases, statistical theory, vlasov equation, Kharchenko (A.P.), *11835*

exothermic reactions, chemical reactors, theory, Butakov (A.A.), Maksimov (E.I.), (et al.), *828*
- convection (free), decomposition, porous surfaces, Saatdjian (E.), Caltagirone (J.P.), *8721*
- combustion, propagation, thermal waves, Leibenzon (A.S.), *8795*
- acid penetration, fracture, rocks, thermal effects, Lee (M.H.), Roberts (L.D.), *10679*

expansion, impingement, jets, stability, Shahaf (M.), Goldman (Y.), (et al.), *842*
- cylindrical bodies, elastoplasticity, finite strain, strain softening, Berest (P.), Nguyen (M.D.), *3262*
- gases, nozzles, rarefied flow, Nanbu (K.), Watanabe (Y.), *3646*
- piston driven flow, shock waves, Emanuel (G.), *3720*
- fluidized beds, granular media, Ngian (K.F.), Martin (W.R.B.), *5843*
- design, engines, expanders, Robinson (F.J.), *7624*
- approximations, magneto plasma dynamics, radiation, waves, Shyam (R.), Sharma (J.), (et al.), *8823*

experimental mechanics, biomechanics, kinematics, photography, Miller (N.R.), Shapiro (R.), (et al.), *1046*
- biomechanics, gait, transducers (load), Gola (M.M.), *1047*
- blood flow, doppler effect, flow measurement, Gill (R.W.), *1048*
- modal analysis, structural response, vibration (forced), Bonnecase (D.), *1290*
- location methods, three dimensional formulation, x ray techniques, Patwardhan (A.G.), Soni (A.H.), (et al.), *1978*
- concrete, modeling, shells (hyperbolic paraboloid), Sambanthan (T.G.), Aravindan (P.K.), (et al.), *3309*
- shells (cylindrical), vibration (free), Voloshanovskii (Yu.P.), *3371*
- damping, thin films, vibration (forced), Fox (M.J.H.), Whitton (P.N.), *3387*
- photoelasticity, strain, tires, Chow (C.L.), Woo (C.W.), *3560*
- beams, bolted joints, stress analysis, structural elements, Krishnamurthy (N.), *3581*
- buckets, shells, Angehrn (R.), Schweizer (F.), (et al.), *4383*
- dissipation, friction, vibration (forced), Karius (D.), *4408*
- beams (variable cross section), bending, eigenvalues, vibration, Vasinyuk (I.M.), Kruk (B.Z.), (et al.), *4415*
- dissipation, materials properties, vibration, Khilchevskii (V.V.), Vasilevich (D.I.), *4418*
- flexible bodies, rotating shafts, vibration (forced), Flack (R.D.), Leader (M.E.), (et al.), *4433*
- dynamic testing, holography, interferometry, vibration, Hazell (C.R.), *4437*
- cooling towers, shells, wind loads, Niemann (H.-J.), Ruhwedel (J.), *4542*
- brittle materials, composite materials, cyclic loading, shells (spherical), Ameiyanovich (K.K.), Podgornyi (L.N.), *4547*
- brittle materials, pipes, rupture, Baum (M.R.), Elston (M.J.H.), *4548*
- coatings, damping, tubes, vibration, Zeinetdinova (R.Z.), Naumkina (N.I.), (et al.), *5194*
- cyclic testing, plates, vibration, Clarkson (B.L.), Pope (R.J.), *5210*
- derailment, dynamic analysis, rails, wheels, Sweet (L.M.), Karmel (A.), *6066*
- dynamic properties, vibration, Jahn (K.-D.), *6284*
- beams (cantilever), damping, vibration (free), Kerlin (R.L.), *6288*
- dynamic stresses, ice mechanics, Maattanen (M.), *6309*
- bridges (railroad), railroads, vibration (forced), Okada (K.), *6311*
- fiber optics, measurements (dynamic), shock, Cook (R.O.), Hamm (C.W.), (et al.), *6320*
- cable stayed bridges, dynamic response, structural response, Augusti (G.), Chiarugi (A.), (et al.), *6524*
- space shuttle, structural analysis, windows, Dote (H.), Theodore (K.T.), *6547*
- dynamic response, railroads, trains (railroad), Fries (R.H.), Cooperrider (N.K.), (et al.), *7151*
- buildings (tall), dynamic response, vibration (nonlinear), Masri (S.F.), Bekey (G.A.), (et al.), *7367*
- cables, dynamic response, networks, Argyris (J.H.), Aicher (W.), (et al.), *7380*
- blades, frequencies, rotating bodies, turbines, vibration (free), Beckmann (J.), Wachter (J.), *7399*
- propellers, vibration (forced), Crandall (S.H.), Dugundji (J.), *7401*
- dynamic properties, gear trains, vibration (forced), Drago (R.J.), Brown (F.W.), *7414*
- crack growth, crack initiation, fracture mechanics, fracture toughness, J-integral, Morozov (E.M.), *7572*
- dams, earthquake engineering, vibration (forced), Severn (R.T.), Jeary (A.P.), (et al.), *7608*
- fatigue, flaws, fracture, pipes, Shibata (K.), Oba (T.), (et al.), *7620*
- buckling (experimental), pressure vessels, shells (toroidal), thin walled structures, Stanley (P.), Campbell (T.D.), *7622*
- impedance methods, vibration, Bessrour (J.), Senicourt (J.M.), (et al.), *8326*
- buckling (local), pipes, propagation, Kyriakides (S.), Babcock (C.D.), *8465*
- buckling, collapse, explosive loading, pipes, Kinelovskii (S.A.), *8466*
- concrete, impact, Schrader (E.K.), *9449*

- bearings (liquid lubricated), dynamic analysis, rotating bodies, stability theory, Iwatsubo (T.), Kawai (R.), (et al.), *11144*
- deformation, pipelines, thermal loading, Kogan (E.A.), Zlodeev (V.P.), *11333*

experimental methods, dynamic testing, vibration isolation, Walker (W.R.), *384*

- floors, friction (sliding), measurements, Malkin (F.), Harrison (R.), *487*
- cyclic testing, low cycle fatigue, random loading, Makhutov (N.A.), Zatsarinnyi (V.V.), (et al.), *491*
- diffusion coefficient, Besserdich (H.), Kahrib (E.), (et al.), *824*
- blood flow, flow measurement, noise (random), Cathignol (D.J.), Fourcade (C.), (et al.), *1043*
- crack propagation, measurements, Koval (V.I.), Lebedev (V.G.), *1360*
- aerodynamic interference, supersonic flow, wing-body, Vasenev (L.G.), Kharimonov (A.M.), *1624*
- conductivity, thermal measurements, thermophysical properties, Buravoi (S.E.), Kurepin (V.V.), (et al.), *1661*
- boiling, nucleate boiling, resistance thermometers, thin films, Oker (E.), Merte (H.) Jr., *1692*
- heat transfer, thermocouples, Breitkopf (G.), Wittig (S.), (et al.), *1694*
- blood, cell behavior, membranes, plastic behavior, Waugh (R.E.), La Celle (P.L.), *1949*
- bubble dynamics, fluidized beds, Tamarin (A.I.), Teplitskii (Yu.S.), (et al.), *2999*
- biodynamics, human body, kinematics, Alexander (M.J.L.), Colbourne (J.), *3057*
- biomechanics, bones, dynamic properties, Frasca (P.), Harper (R.A.), (et al.), *3073*
- imperfections, shells (cylindrical), shells (stiffened), Yaffe (R.), Singer (J.), (et al.), *3313*
- constitutive relations, sand, shear strength, Vardoulakis (I.), *3398*
- piles, settlements, Dente (G.), *3412*
- creep buckling, tube bundles, vibration (flow induced), Weaver (D.S.), El-Kashlan (M.), *3715*
- centrifugal pumps, geometrical properties, rotors, thrust, Okamura (T.), *3743*
- boundary layer (thermal), thermal measurements, thermometer, Torkelsson (S.A.), *3775*
- boundary layer (thermal), heat transfer, temperature, thermal measurements, Schreiber (V.), Christ (A.), *3776*
- manometers, pressure, Taborek (P.), Goodstein (D.), *3777*
- metals, plasma, rotating fluids, spectroscopy, Brand (G.F.), James (B.W.), (et al.), *3903*
- bearings (ball), design, hall effect, Kawakita (K.), Halling (J.), *4113*
- mathematical methods, rethermalization, singular integral equations, Haidar (N.H.S.), *4164*
- hybrid techniques, large displacement, plates (circular), Laermann (K.-H.), *4387*
- impact, testing equipment, Golderman (M.A.), Kochetov (D.A.), (et al.), *4459*
- force, impact, plates (circular), Shibuya (T.), Koizumi (T.), (et al.), *4460*
- anisotropic media, plasticity, soils, Murff (J.D.), *4461*
- hydraulic instruments, mercury, porous media, Van Brakel (J.) ed., *4843, book*
- bearings (ball), film thickness, high speed, lubrication (elastohydrodynamic), Coy (J.J.), Zaretsky (E.V.), *4899*
- circulatory systems, doppler effect, flow measurement, Gill (R.W.), *4920*
- hopkinson bar, relaxing media, stress strain relationships, viscoelasticity, Tormala (P.), Paakkonen (E.), (et al.), *5106*
- soils, tension, Thorne (C.R.), Tovey (N.K.), (et al.), *5261*
- friction (solid solid), interference fits, photoelasticity, stress analysis, Ghosh (S.P.), Dattaguru (B.), (et al.), *5316*
- cracking, flaw detection, instruments, magnetic field, testing equipment, Luz (H.), *5338*
- birefringence, extension, polymers, Van Aken (J.A.), Janeschitz-Kriegl (H.), *5384*
- soils, thermal measurements, transport properties, Abdel-Wahed (R.M.), Pfender (E.), (et al.), *5527*
- fluidized beds, laser doppler velocimeters, two phase flow, Levy (Y.), Lockwood (F.C.), *5841*
- acoustics (physiological), scattering, tissues, Braun (M.), Robinson (D.E.), *6012*
- blood flow, microcirculation, Shagal (D.I.), Tavik (A.I.), (et al.), *6019*
- blood flow, doppler effect, spine, White (D.N.), Ketelaars (C.E.J.), (et al.), *6024*
- excitation, love waves, transducers (ultrasonic), Gulyaev (Yu.V.), Kurach (T.N.), (et al.), *6332*
- shear stress, shock waves (normal), Batkov (Yu.V.), Novikov (S.A.), (et al.), *6366*
- finite element techniques, jet streams, Van Thiel (M.), Levatin (J.), *6367*
- disturbance, sampling, soils, Broms (B.B.), *6373*
- soils, Berends (B.E.), Ko (H.-Y.), *6391*
- capillary flow, ultrasonics, Dezhkunov (N.V.), Prokhorenko (P.P.), *6588*
- non newtonian flow, viscometry, Ozturk (Y.), Williams (R.W.), *6591*
- viscoelastic fluids, viscometry, Oosterbroek (M.), Waterman (H.A.), (et al.), *6592*
- metals, thermal fatigue, thermal stresses, Gopkalo (A.P.), Zasiotskaya (L.A.), (et al.), *6947*
- drops, particle size, steam, Georgiev (K.G.), Savostyanov (V.A.), (et al.), *7000*
- holes, permeability, porous media, Dees (P.J.), Tjan (T.G.), (et al.), *7007*
- fluidized beds, nozzles, Cebulla (D.), *7015*
- friction (sliding), steel, wear, Play (D.), *7090*
- nervous system, spine, stress strain relationships, tissues, Hung (T.-K.), Chang (G.-L.), (et al.), *7105*
- biological joints, impact, injuries, sports medicine, Mclaughlin (T.M.), Miller (N.R.), *7122*
- elastoplasticity, shock waves (normal), Astanin (V.V.), *7427*
- damping, friction (internal), metals, strain, Hooker (R.J.), Mead (D.J.), *7587*
- hot wire, turbulence, Kukes (V.I.), Ufimtsev (A.A.), (et al.), *7755*
- chemical reactions, mixing layers, turbulence (structure), wakes, Breidenthal (R.), *7756*
- drops, sprays, two phase flow, Ow (C.S.), Crane (R.I.), *7972*
- permeability, porous media, rocks, Batycky (J.P.), Mccaffery (F.G.), (et al.), *7990*
- absorption, tissues, ultrasonics, Christman (C.L.), *8062*
- highways, surface waves, vibration, Dhir (M.P.), Venkatesha (M.C.), (et al.), *8350*
- couette flow, unsteady flow, viscometry, Ravey (J.C.), Dognon (M.), (et al.), *8494*
- turbulence, waterways, Griffith (O.F.) III, Grimwood (C.), *8618*
- fracture criteria, pressure change, reservoirs, Lee (W.J.), Holditch (S.A.), *8944*
- stress strain relationships, tendons, tissues, viscoelastic materials, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *9046*
- bones, mechanical properties, Jaeger (J.H.), Merckx (D.), (et al.), *9047*
- biological joints, human body, kinematics, Chao (E.Y.S.), *9048*
- shadowgraphic methods, tension, tissues, Knauss (W.G.), Kenner (V.H.), *9057*
- diagnostics, gait, spine, Thurston (A.J.), Whittle (M.W.), (et al.), *9071*
- pore pressure, soil mechanics, Premchitt (J.), Brand (E.W.), *9352*
- boundary layer (turbulent), turbulence, turbulence (structure), Polyakov (A.F.), Tsypulev (Yu.V.), (et al.), *9606*
- approximation methods, conductivity, mathematical models, radiant interchange, Saito (A.), *9722*
- bearings (thrust), damping, stiffness, vibration (forced), Schwanecke (H.), *10219*
- impact, nonlinear characteristics, plates (circular), Dmitrieva (Zh.N.), Efimova (T.A.), (et al.), *10243*
- shape factors, size factors, soil consolidation, Subba Rao (K.S.), *10247*
- piles, reinforced concrete, strain gages, Gatti (G.), Collotta (T.), (et al.), *10260*
- abrasion, rocks, schmidt hammer, Janach (W.), Merminod (A.), *10264*
- acoustic emission, monitoring, rocks, Koerner (R.M.), Mccabe (W.M.), (et al.), *10265*
- fatigue, finite element methods, fracture mechanics, power plants, strain gages, stress analysis, Takhar (J.S.), Fryzel (R.A.), *10320*
- heat transfer, hot wire, turbulence, Smits (A.J.), Perry (A.E.), *10481*
- drops, drying, ultrasonics, Toei (R.), Furuta (T.), (et al.), *10640*
- ducts (variable area), liquid metals, magneto fluid dynamics, walls, Holroyd (R.J.), *10734*
- layered media, magneto fluid dynamics, rotating fluids, stabilization, Klyukin (A.A.), Kolesnikov (Yu.B.), (et al.), *10742*
- decomposition, interfaces, jets, magneto fluid dynamics, Arkhipenko (V.I.), Barkov (Yu.D.), *10745*
- containment, experimental methods, fusion, plasma (toroidal), stabilization, Schumacher (R.W.), Fukao (M.), (et al.), *10760*
- arcs, performance, plasma jets, porous walls, Gonopolskii (A.M.), Slobodkina (F.A.), *10761*
- fatigue, ultrasonics, Terao (K.), Kuno (T.), (et al.), *11162*
- eddies, jets, shear flow, turbulence (structure), turbulent flow, Mumford (J.C.), *11545*
- ocean waves, spectra, Kats (A.V.), Spevak (I.S.), *11582*
- capillary waves, experimental results, propagation, Byrne (D.), Earnshaw (J.C.), *11594*
- friction (sliding), roughness, sound generation, Yokoi (M.), Nakai (M.), *11945*
- friction (sliding), sound generation, Yokoi (M.), Nakai (M.), *11946*
- impulse, plates, sound generation, Nakayama (I.), Nakamura (A.), *11953*
- plates, sound fields, vibration, Vyalyshev (A.I.), Dubinin (A.I.), (et al.), *11954*

explosions, detonation, detonative ignition, explosives, Vasilev (A.A.), Nikolaev (Yu.A.), (et al.), *882*

- boundary layer, transition, transition flow, Volodin (A.G.), Zelman (M.B.), *1538*
- deflagration, detonation, liquid fuels, thermal explosions, Mitrofanov (V.V.), Pinaev (A.V.), (et al.), *1797*
- compressional waves, cylindrical waves, nuclear fusion, plasma, Kaliski (S.), *2902*
- isentropic processes, semi infinite media, shock waves, Singh (P.), *3723*
- detonative ignition, ignition, thermal explosions, Andersen (W.H.), *3925*
- chemical reactions, combustion, ignition, kinetics, Bowen (J.R.), Manson (N.), (et al.), *4734, book*
- chemical reactions, ignition, ignition sensitivity, Burkina (R.S.), Vilyunov (V.H.), *6832*
- dust, flame propagation, thermal diffusion, Nomura (S.-I.), Tanaka (T.), *6839*
- detonation (condensed phase), thermal explosions, Bdzil (J.B.), *6890*
- dynamic loads, walls, Zhdan (S.A.), *7434*
- continuum mechanics, fracture, modeling, oil shale, rock mechanics, Grady (D.E.), Kipp (M.E.), *7561*
- detonation (two phase), shock waves, thermal explosions, Ulyanitskii (V.Yu.), *7931*
- dynamic interaction, explosive loading, hydrodynamics, impulsive transfers, Shubin (G.R.), *7932*

- characteristic methods, implosion, shock waves, Yousaf (M.), *8637*
- combustion (turbulent), heat transfer, ignition, turbulence, Liu (V.C.), *8788*
- detonation (two phase), ignition, propagation, Smirnov (N.N.), *8853*
- detonation (two phase), detonative ignition, propagation, Terentev (E.D.), *8854*
- detonative ignition, ignition, impact, Sorel (J.), Lucas (G.), (et al.), *8856*
- cavities, elastic waves, geomechanics, Vasilyev (Yu.I.), Molotova (L.V.), (et al.), *8955*
- blast waves, chemical kinetics, detonation (two phase), explosive loading, Eidelman (S.), Sichel (M.), *9822*
- chemical kinetics, detonation, thermal explosions, Eidelman (S.), Sichel (M.), *9823*
- chemical kinetics, detonation, detonative ignition, thermal explosions, Kassoy (D.R.), Poland (J.), *9824*
- chemical kinetics, combustion, detonation, Dremin (A.N.), Nelin (V.M.), (et al.), *9825*
- chemical kinetics, detonation, detonative ignition, Ulyanitskii (V.Yu.), *9826*
- chemical kinetics, deflagration, detonation, Lesnyak (S.A.), Slutskii (V.G.), *9827*
- chemical kinetics, detonation (two phase), premixed fuel air, Vasilev (V.M.), Volpert (A.I.), (et al.), *9828*
- chemical kinetics, detonation (two phase), Putyatin (B.V.), *9829*
- chemical kinetics, detonation, Gendugov (V.M.), *9830*
- blast waves, chemical kinetics, detonation, propagation, Levin (V.A.), Svalov (A.M.), *9831*
- chemical kinetics, detonation, Shurshalov (L.V.), *9832*
- blast effects, impulsive loading, transient loading, underground, Egorov (V.A.), Kolobashkin (V.M.), (et al.), *9833*
- explosive loading, explosive solid interactions, impulsive propulsion, Wlodarczyk (E.), *9834*
- blast effects, impulsive transfers, rarefied gases, Aristov (V.V.), Shakhov (E.M.), *9835*
- detonative ignition, ignition, self ignition, thermal explosions, viscous effects, Aleksapolskii (N.B.), Naidenov (V.I.), *9836*
- deflagration, thermal explosions, Dik (I.G.), Zurer (A.B.), *9837*
- compaction, impulsive loading, porous media, transient loading, underground, Bovt (A.N.), Kobets (V.I.), (et al.), *9838*
- explosive loading, explosive solid interactions, impulsive propulsion, transient loading, Ivanov (A.G.), Karpenko (G.Ya.), *9839*
- explosive loading, explosive solid interactions, impulsive loading, impulsive transfers, Lyakhov (G.M.), Kovalenko (V.A.), (et al.), *9840*
- explosive loading, explosive solid interactions, impulsive loading, soil mechanics, Baranov (E.G.), Kovalenko (V.A.), (et al.), *9841*
- explosive loading, explosive solid interactions, impulsive loading, soil mechanics, Artyshev (S.G.), Dunin (S.Z.), (et al.), *9842*
- explosive loading, explosive solid interactions, hydrodynamics, shock waves, Ritter (Z.W.), *9843*
- combustion, reactors, shock waves (normal), Sukhov (G.S.), Yarin (L.P.), *9899*
- powders, propagation, Brinza (V.N.), Babaitsev (I.V.), (et al.), *10714*
- film boiling, fuel-coolant interactions, shock tubes, Sharon (A.), Bankoff (S.G.), *10719*
- detonation, shock waves, unsteady flow, Ulyanitskii (V.Yu.), *10781*
- blast waves, cylindrical waves, isothermal processes, similarity methods, Lerche (I.), *11827*
- detonation, detonative ignition, thermal explosions, Kassoy (D.R.), Poland (J.), *11893*
- detonation, shock waves (oblique), Sheng (Y.), Sislian (J.P.), *11894*

explosions (underwater), fluid-structure interaction, numerical methods, stability (numerical), submerged bodies, Neishlos (H.), Israeli (M.), (et al.), *1604*

- displacement, ocean bed, seismic waves, Tanimoto (T.), Sato (R.), *1879*
- sound propagation, underwater acoustics, Mitchell (S.K.), Bedford (N.R.), (et al.), *5730*
- sound propagation, sound speed, underwater acoustics, Mitchell (S.K.), Hampton (L.D.), *5763*
- blast waves, ocean, underwater acoustics, Fridman (V.Ye.), *9643*
- impulse, transfer functions, underwater acoustics, Dicus (R.L.), *11906*

explosive forming, materials processing, sheet metal, tubes, Berman (I.), Schroeder (J.W.), *4473*

- metals, powders, Roman (O.V.), Nesterenko (V.F.), (et al.), *4474*
- compression, materials processing, plasma, projectiles, Kirko (V I.), *7903*

explosive loading, plasticity, shells (spherical), Anantha Ramu (S.), Iyengar (K.J.), *408*

- dynamic fracture, implosion, Didyk (R.P.), Semenyuk (E.A.), (et al.), *885*
- energy, finite element techniques, penetration, Tuft (D.B.), Murphy (M.J.), *1312*
- microcracks, porous media, rocks, shock waves, Siegfried (R.W.), Mcqueen (R.G.), (et al.), *2388*
- dynamic interaction, explosions, hydrodynamics, impulsive transfers, Shubin (G.R.), *7932*
- detonation, tubes, Mogilev (V.A.), Ivanov (A.G.), (et al.), *8346*
- boreholes, oil wells, photoelasticity (dynamic), Fourney (W.L.), Barker (D.B.), (et al.), *8408*
- buckling, collapse, experimental mechanics, pipes, Kinelovskii (S.A.), *8468*
- blast waves, chemical kinetics, detonation (two phase), explosions, Eidelman (S.), Sichel (M.), *9822*
- explosions, explosive solid interactions, impulsive propulsion, Wlodarczyk (E.), *9834*
- explosions, explosive solid interactions, impulsive propulsion, transient loading, Ivanov (A.G.), Karpenko (G.Ya.), *9839*
- explosions, explosive solid interactions, impulsive loading, impulsive transfers, Lyakhov (G.M.), Kovalenko (V.A.), (et al.), *9840*
- explosions, explosive solid interactions, impulsive loading, soil mechanics, Baranov (E.G.), Kovalenko (V.A.), (et al.), *9841*
- explosions, explosive solid interactions, impulsive loading, soil mechanics, Artyshev (S.G.), Dunin (S.Z.), (et al.), *9842*
- explosions, explosive solid interactions, hydrodynamics, shock waves, Ritter (Z.W.), *9843*

explosive solid interactions, detonation (condensed phase), dynamic behavior, impulsive loading, Mardashev (A.M.), *6889*

- explosions, explosive loading, impulsive propulsion, Wlodarczyk (E.), *9834*
- explosions, explosive loading, impulsive propulsion, transient loading, Ivanov (A.G.), Karpenko (G.Ya.), *9839*
- explosions, explosive loading, impulsive loading, impulsive transfers, Lyakhov (G.M.), Kovalenko (V.A.), (et al.), *9840*
- explosions, explosive loading, impulsive loading, soil mechanics, Baranov (E.G.), Kovalenko (V.A.), (et al.), *9841*
- explosions, explosive loading, impulsive loading, soil mechanics, Artyshev (S.G.), Dunin (S.Z.), (et al.), *9842*
- explosions, explosive loading, hydrodynamics, shock waves, Ritter (Z.W.), *9843*

explosive welding, composite materials, welding, Khanov (A.M.), Yakovlev (I.V.), *6569*

- buckling, composite materials, fibers, metallic composites, Kornev (V.M.), Yakovlev (I.V.), *7363*

explosives, detonation, detonative ignition, explosions, Vasilev (A.A.), Nikolaev (Yu.A.), (et al.), *882*

- deflagration, detonation (two phase), detonative ignition, thermal explosions, Terao (K.), Sawada (R.), *883*
- deflagration, detonation (two phase), detonative ignition, thermal explosions, Calzia (J.), *884*
- compressional waves, detonation (two phase), layered media, liquid gas mixture, slurries, Trebinski (R.), Trzcinski (W.), (et al.), *1595*
- detonation (condensed phase), impact, piercing, Lucas (G.), Sorel (J.), (et al.), *6893*
- abrasion, friction (solid solid), ignition, Amosov (A.P.), *9772*
- elastoplasticity, stress relieving, welded joints, Petushkov (V.G.), Fadeenko (Yu.I.), *10382*

extended surfaces, collocation, condensation, curved surfaces, isothermal processes, Panchal (C.B.), Bell (K.J.), *807*

- conduction (heat), convection, fins, heat transfer, Sparrow (E.M.), Hsu (C.F.), *1715*
- fins, heat transfer, perturbation methods, variable thermal properties, Aziz (A.), Na (T.Y.), *3822*
- fins, heat transfer, laminar flow, pipe flow, Sparrow (E.M.), Charmchi (M.), *4699*
- ducts (variable area), heat exchangers, heat exchangers (cartridge), rotating fluids, Margittai (T.B.), *4717*
- fins, heat exchangers, pressure drop, tube bundles, Rabas (T.J.), Eckels (P.W.), (et al.), *4719*
- cooling, fins, heat addition, Toth (K.), *4720*
- convection (free), cylindrical bodies, heat transfer, plates, Sparrow (E.M.), Chrysler (G.M.), *6791*
- fins, heat transfer, melting, solidification, Bathelt (A.G.), Viskanta (R.), *7853*
- fins, heat transfer (combined modes), integral methods, Heggs (P.J.), Ingham (D.B.), (et al.), *7858*
- convection, fins, grashof number, laminar flow, Acharya (S.), Patankar (S.V.), *8684*
- biofilm fouling, fins, flow obstructions, fouling, heat exchangers, Chenoweth (J.M.) eds., Impagliazzo (M.), *8754*
- approximation methods, design criteria, fins, heat exchangers, Kern (J.), *8757*
- augmentation, fins, tube bundles, turbulent flow, Carnavos (T.C.), *8758*
- augmentation, channel flow, convection (free), heat transfer, plates (parallel), rayleigh number, Sparrow (E.M.), Prakash (C.), *9699*
- channel flow, cylindrical bodies, fins, heat transfer, Vanfossen (G.J.), *10621*
- augmentation, cylindrical pin fins, fins, heat transfer, optimization, Sonn (A.), Bar-Cohen (A.), *11771*

extension, bending, bimodulus materials, computing techniques, laminates, Jones (R.M.), Morgan (H.S.), *4358*

- birefringence, experimental methods, polymers, Van Aken (J.A.), Janeschitz-Kriegl (H.), *5384*
- constitutive equations, non newtonian flow, viscous flow, Powell (R.L.), Schwarz (W.H.), *8486*

extensometers, elastoplasticity, fracture toughness, Williams (J.A.), Carlson (K.W.), *10279*

external flow, cylindrical bodies, heat transfer, hot wire, reattachment, separated flow, shear flow, Ota (T.), Kon (N.), (et al.), *1685*

- drag, heat transfer, transport phenomena, viscoelastic fluids, Masheikar (R.A.), Marrucci (G.), *5383*

- cylindrical bodies, heat transfer (combined modes), laminar flow, separated flow, Yao (L.S.), Chen (F.F.), *6777*
- convection (free), cylindrical bodies, mass transfer, Terron (L.R.), Brunello (G.), *8728*
- condensation (dropwise), drops, film flow, laminar flow, mist flow, Trela (M.), *9692*
- convection (forced), internal flow, laminar flow, non newtonian flow, turbulent flow, viscoelastic fluids, Shenoy (A.V.), Mashelkar (R.A.), *9707*

extinguishment, combustion, inhibition, reaction rates, Nesterko (N.A.), Taran (E.N.), *5636*
- convection (free), flame propagation, Krivulin (V.N.), Kudryavtsev (E.A.), (et al.), *9750*

extrusion, capillary flow, viscoelastic fluids, Prokunin (A.N.), Sevruk (V.D.), *545*
- constitutive relations, finite element techniques, rate sensitivity, viscoplasticity, Tayal (A.K.), Natarajan (R.), *1339*
- cold working, metals, rods, Ghosh (T.P.), *1340*
- cutting, forming, materials properties, plastic flow, Shaw (M.C.), *3420*
- material testing, simulation, steel, Soos (E.), Teodosiu (C.), (et al.), *3423*
- heating, non newtonian flow, viscous effects, Dubovik (A.V.), *3588*
- plane strain, slip line methods, Murakami (T.), Takahashi (H.), *4470*
- deformation (finite), finite element techniques, forming, plasticity, Dung (N.L.), *5272*
- kinematics, torsion (plastic), Soos (E.), Teodosiu (C.), (et al.), *6406*
- jets, non newtonian flow, plastic flow, Kaithia (N.L.), *6576*
- galerkin method, high temperature, plastic flow, Shestopal (V.O.), Shestopal (O.Ya.), *8360*
- dies, viscoelastic fluids, Crochet (M.J.), Keunings (R.), *8488*
- dies, polymers, Weill (A.), *8495*

eyes, man machine systems, night vision, ocular system, Stone (L.W.), Sanders (M.G.), (et al.), *4329*
- biomathematics, diagnostics, electroretinogram, nonlinear analysis, Koblasz (A.J.), *4923*
- experimental results, heat transfer (biological), lasers, thermal effects, Polhamus (G.D.), *7115*
- diagnostics, optical techniques, Tamarova (R.M.), *7127*

Eyler (L.L.), mercury, pipe flow, prandtl number, prandtl number (low), turbulence (structure), Sesonske (A.), *1556*

Eyman (K.H.), concrete, mixing, mixtures, vibrators, *1436*

Eyre (B.L.), see Kumar (A.), *1355*

Ezhov (V.G.), see Shefer (L.A.), *3542*

F

Faber (B.), see Well (K.H.), *9660*

Fabian (O.), bending, buckling (plastic), elastoplasticity, pressurized pipes, tubes, *6255*

Fabre (J.), see Barrau (J.-J.), *4824*

Fabri (J.), axial compressors, transfer functions, transient effects, Paulon (J.), *6737*

Fabries (M.), damping, dynamic analysis, hysteresis, vibration (forced), *10192*

Fabrikant (A.L.), hydrodynamic stability, nonlinear analysis, wind-wave interaction, *5474*

Fabrikant (V.), approximations, computing techniques, linear equations, singular integral equations, Hoa (S.V.), (et al.), *7184*

Fabrizio (M.), see Banfi (C.), *7135*

Fadeenko (Yu.I.), see Petushkov (V.G.), *10382*

Fagerlund (A.C.), cylindrical bodies, ducts, sound propagation, Chou (D.C.), *11926*

Faghri (M.), moisture, porous media, transport phenomena, Eckert (E.R.G.), *951*
- see Sparrow (E.M.), *4697*
- see Eckert (E.R.G.), *5623*

Fahy (F.J.), see Schroter (V.), *10791*

fail safe design, dams, failure, optimization, reliability analysis, Bhattacharjee (M.C.), *10087*

failure, buckling (thermal), shells (stiffened), thermoelasticity, Reznikov (B.S.), *352*
- granular media, strength, Davis (R.O.), Mullenger (G.), *417*
- plastic behavior, sand, yield criteria, Desai (C.S.), *419*
- anisotropic media, compression, rocks, Nova (R.), *425*
- rocks, wedges, Lucas (J.M.), *428*
- crack propagation, physical properties, Vinokurov (V.A.), Makarov (G.I.), *469*
- propagation, radiation, seismic waves, Barker (T.G.), Minster (J.B.), *961*
- cracks, filamentary structures, reinforced bodies, textiles, Pipkin (A.C.), Rogers (T.G.), *1385*
- crystals, fatigue, overloads, Chu (S.N.G.), Li (J.C.M.), *1404*
- analysis, dynamic analysis, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *1464, book*
- detection, gyroscopes, reliability analysis, Kerr (T.H.), *2096*
- cyclic loading, fatigue, Hashin (Z.), *2240*
- composite materials, data analysis, reliability, triaxial loading, Wetherhold (R.C.), *2245*
- rocks, slopes, Wyllie (D.C.), *2386*
- bearings (roller), crack propagation, cracking, x ray techniques, Maeda (K.), Tsushima (N.), (et al.), *2410*
- notch tests, plastic behavior, steel, Margetson (J.), *2444*
- risk, systems, weakest link systems, Garson (R.C.), *2514*
- adhesives, aluminum alloys, bonded joints, Kinloch (A.J.), Smart (N.R.), *2572*
- friction (sliding), scuffing, sliding, thermoelasticity, wear, Durkee (D.B.), Cheng (H.S.), *3037*
- plastics, reinforced bodies, Turvey (G.J.), *3275*
- fibers, glass fibers, hybrid construction, micromechanisms, stochastics, Manders (P.W.), Bader (M.G.), *3277*
- fatigue, nylon, ropes, Bitting (K.R.), *3444*
- biaxial loading, crack branching, elliptical cracks, Chang (K.J.), *3456*
- beryllium, crystals, material testing, Papirov (I.I.), Stoev (P.I.), (et al.), *3472*
- airplane structures, algorithms, reliability analysis, Yanko (A.K.), *3529*
- crack opening displacement, environmental tests, life expectancy, plastics, stress rupture, Shanahan (M.E.R.), Schultz (J.), *4486*
- safety, structural optimization, Blockley (D.I.), *4529*
- composite materials, compression, creep, tension, Gorev (B.V.), Rubanov (V.V.), (et al.), *5103*
- corrosion fatigue, elliptical cracks, fatigue, glass, Doremus (R.H.), *5286*
- metals, prediction, Kovpak (V.I.), *5289*
- buckling (local), cold working, cold-formed steel, collapse, multistory frames, steel, Zamecnik (F.J.), *5349*
- bolted joints, composite materials, laminates, Tang (S.), *5380*
- capsizing, ocean waves, rolling motion, ship design, ship motion, stability, Dahle (E.A.), Kjaerland (O.), *5964*
- finite element techniques, nonlinear analysis, nonlinear materials, rotors, turbines, Nyssen (C.), *6118*
- plastic behavior, structural design, Marek (P.), Sejnoha (J.), *6185*
- cracks, pressurized pipes, shells (cylindrical), Kitching (R.), Zarrabi (K.), *6221*
- composite materials, floors, slabs, Davies (J.M.), Fisher (J.), *6229*
- collapse, columns, framed structures, structural analysis, welded structures, Kanbe (T.), Kanatani (H.), (et al.), *6244*
- axial loading, joints, shells (cylindrical), Bushnell (D.), Holmes (A.M.C.), (et al.), *6259*
- diesel engines, dynamic stresses, rotating shafts, vibration (torsional), Pasricha (M.S.), Carnegie (W.D.), *6303*
- anisotropic media, collapse, finite element methods, soils, Toh (C.T.), Sloan (S.W.), *6382*
- equilibrium, soil mechanics, Protosenya (A.G.), Chernikov (A.K.), *6397*
- brittle fracture, cold working, steel, Rybin (V.V.), Morozov (A.M.), (et al.), *6424*
- composite materials, plane stress, strength, Tennyson (R.C.), Nanyaro (A.P.), (et al.), *6435*
- beams, brittle fracture, probability, weibull statistics, Kittl (P.), Camilo (G.M.), *6443*
- filaments, high temperature, tungsten filaments, Horacsek (O.), *6951*
- deformation (finite), elastoplasticity, torsion, Billington (E.W.), *7286*
- crack growth, crack initiation, steel, Reuter (W.G.), Brown (H.L.), (et al.), *7471*
- fatigue, ice, mechanical properties, Mellor (M.), Cole (D.), *7479*
- brittle materials, fracture toughness, notch tests, stress intensity factor, Shih (T.T.), *7519*
- life expectancy, markov processes, reliability analysis, Teodorescu (D.), *7601*
- inertial guidance, isolation, statistical theory, Daly (K.C.), Gai (E.), (et al.), *7927*
- holes, mining, plastic behavior, tunnels, Kaczmarek (J.), *8155*
- cracking, griffith cracks, random loading, stochastic systems, Smolskii (V.M.), *8411*
- brittle materials, material testing, stochastic processes, Aoki (S.), Sakata (M.), *8422*
- matrix methods, probability theory, reliability analysis, trusses, Murotsu (Y.), Okada (H.), (et al.), *8448*
- hardness, rolling contact, thermal effects, wear, Rozeanu (L.), Pnueli (D.), *9022*
- friction (sliding), lubrication (elastohydrodynamic), oil films, thin films, viscosity, Begelinger (A.), De Gee (A.W.J.), *9037*
- fracture mechanics, structural analysis, toughness, Sih (G.C.), Hartranft (R.J.), *9391*
- design criteria, fretting, Hoeppner (D.W.), Gates (F.L.), *9390*
- damage (cumulative), markov processes, Bogdanoff (J.L.), Kozin (F.), *10031*
- dams, fail safe design, optimization, reliability analysis, Bhattacharjee (M.C.), *10087*
- composite materials, plates (sandwich), Turvey (G.J.), *10156*
- brittle materials, crack initiation, cracks, porous media, powders, Barinov (S.M.), Krasulin (Yu.L.), *10308*
- beams, energy dissipation, reinforced concrete, Okada (K.), Koyanagi (W.), (et al.), *10360*
- linear systems, model reduction, Skelton (R.E.), *11053*
- design, fatigue, fracture, materials properties, piping systems, pressure vessels, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- dam-failure, dams, gravity waves (shallow water), wave interactions, Marshall (G.), Menendez (A.N.), *11564*

Fainberg (E.A.), see Yushkevic (A.A.), *5053*

Fainzilberg (L.S.), metallography, pattern recognition, thermography, *156*

Fair (W.B.) Jr., phase changes, pressure change, wells, *7985*

Fairall (C.W.), boundary layer (atmospheric), dissipation, turbulence (geophysical), Markson (R.), (et al.), *5945*

Fairbairn (G.W.), see Lewis (R.I.), *2754*

Fairen (V.), see Brenig (L.), *7159*

Fairman (F.W.), see Das Gupta (R.), *11046*

Fakhouri (S.Y.), estimation, identification, nonlinear systems, wiener-hammerstein model, *3160*
- algorithms, estimation, identification, modeling, nonlinear systems, nonlinear theory, stochastic systems, volterra series, *11080*

Fakhretdinov (I.A.), binary flow, heat transfer, liquid vapor interface, mixtures, vaporization, Chalyi (A.V.), *5611*

Falade (G.K.), anisotropic media, porous media, unsteady flow, *10836*

Falk (S.), dynamic analysis, kinematics, rigid bodies, *4936*

falkner-skan equation, boundary value problems, differential equations (ordinary), existence theorems, Utz (W.R.), *31*
- boundary layer, collocation, splines, Mastro (R.A.), Voss (D.A.), *4615*
- perturbation theory, uniqueness, Aziz (A.), Na (T.Y.), *8556*

Falkovich (A.I.), atmospheric circulation, clouds, forecasting, weather forecasting, *1903*
- atmospheric circulation, clouds, convection (forced), convection (free), heat transfer (atmospheric), hydrodynamic stability, *4063*

Falnes (J.), damping, floating bodies, gravity waves (surface), virtual mass, *11675*

Faltinsen (O.M.), see Liapis (N.), *12086*

Familant (H.M.), crossover, mathematical models, textiles, twisting, *5134*

Fan (D.-N.), see Vira (N.R.), *8716*
- see Vira (N.R.), *11552*

Fan (L.T.), see Hiraoka (S.), *6651*
- see Too (J.R.), *10562*

Fan (T.-Y.), see Fan (Y.-X.), *8386*

Fan (Y.-X.), cylindrical bodies, edge cracks, interface cracks, penny shaped crack, stress intensity factor, Fan (T.-Y.), (et al.), *8386*

Fan (Z.Q.), see Wang (K.C.), *8560*

Fanning (A.E.), aerodynamic interference, afterbodies, airplanes, jet engines, wind tunnels, Lucas (E.J.), *8642*

fans, noise abatement, sound generation, Fukano (T.), Kodama (Y.), (et al.), *905*
- crossflow, modeling, propulsion, Harloff (G.J.), Wilson (D.R.), *1634*
- jet engines, noise, Sofrin (T.G.), Mathews (D.C.), *4773*
- flow obstructions, noise (aerodynamic), Woodward (R.P.), Glaser (F.W.), *5782*
- aerodynamic performance, attitude control, propulsion, Betzina (M.D.), Kita (R.), *7790*
- hot wire, incompressible flow, rotors, turbomachinery, wakes, Lakshminarayana (B.), Govindan (T.R.), (et al.), *8653*

- centrifugal fans, noise abatement, Neise (W.), *10801*
- centrifugal fans, noise abatement, Neise (W.), Barsikow (B.), *10802*

far field radiation, nonlinear waves, sound generation, sound propagation, Fenlon (F.H.), Mckendree (F.S.), *4785*
- acoustic waves, sound generation, sound propagation, Levine (H.), *5765*
- transducers (ultrasonic), transient, ultrasonics, Aulenbacher (U.), Langenberg (K.J.), *7585*

Faradzhev (R.G.), control, design, linear sequential machines, time optimal systems, *134*

Farah (A.), see Ibrahim (I.M.), *5160*

Farahmand (B.), bending, caustics, edge cracks, stress intensity factor, Raftopoulos (D.D.), *5297*

Farassat (F.), helicopters, propellers, rotors, sound generation, *11944*

Farat (K.), cracks, dielectrics, dispersion, electroelasticity, *5089*

Faravelli (L.), see Casciati (F.), *3527*
- see Casciati (F.), *6517*

Fardis (M.N.), concrete, shear, stiffness, Buyukozturk (O.), *1441*

Farghaly (S.A.), beams, reinforced concrete, repeated loading, shear reinforcement, strain, *8449*

Faris (R.), see Bennett (R.H.), *423*

Farkas (J.), computer aided manufacturing, numerical control, positioning accuracy, robotics, tools, El-Sonbaty (I.), *2166*
- beams (composite), bending, design (optimum), shear strength, ultimate strength, *4526*

Farney (G.R.), see Franke (M.E.), *8573*

Farooq (M.M.), liquids, thermal diffusion, thermal measurements, thermal properties, Giedt (W.H.), (et al.), *2781*

Farouk (B.), convection (free), cylindrical bodies, laminar flow, nusselt number, Guceri (S.I.), *5565*

Farquhar (R.W.), gravity, orbits, restricted three body problem, solar system, swing-by, Dunham (D.W.), *5706*

Farrenkopf (R.L.), optimal control, space vehicles, trajectories, *197*

Farris (R.), compression, elastomers, fibers, material testing, tubes, Filippov (A.), *10324*
-), *26547*

Farshad (M.), beams (curved), beams (prestressed), elastic waves, *396*

Farukhi (N.M.), see Saha (P.) eds., *6956, book*

fast fourier transform, algorithms, computer programming, fourier transform, Despain (A.M.), *70*
- computer programming, processing, real time solution, Kuno (A.Ya.), *71*
- algorithms, computing techniques, hankel transform, transforms, Oppenheim (A.V.), Frisk (G.V.), (et al.), *4173*
- dispersion, pressure change, tubes, waves, Moodie (T.B.), Haddow (J.B.), *6913*
- spectral analysis, vibration, vibration (random), Gossmann (E.), Waller (H.), *7377*
- computing techniques, vibration (forced), Gossmann (E.), Waller (H.), *9330*
- frequency response, vibration (free), Mitchell (L.D.), *10196*

fasteners, corners, finite element methods, holes, stress intensity factor, Grandt (A.F.) Jr., Kullgren (T.E.), *480*
- crack growth, fatigue, fractographic tests, Mcgee (W.M.), Hsu (T.M.), *9414*

Fathalah (K.A.), adsorption, buoyant flow, convection (free), heat transfer (combined modes), radiant interchange, solar radiation, Elsayed (M.M.), *9729*

fatigue, laminates, metallic composites, shakedown structures, Dvorak (G.J.), Johnson (W.S.), *283*
- crack growth, fractographic tests, steel, Kunio (T.), Shimizu (M.), (et al.), *442*
- endurance limit, environmental tests, high cycle fatigue, life expectancy, nickel alloys, Mowbray (D.F.), Giaquinto (E.V.), (et al.), *443*
- copper, crack growth, fracture, microstructures, stress intensity factor, Mullner (H.), Weiss (B.), *444*
- aluminum alloys, crack propagation, heat treatment, life expectancy, Chung (D.W.), Chaturvedi (M.C.), *445*
- high cycle fatigue, linear theory, probabilistic design, Wirsching (P.H.), Hsieh (S.), *446*
- crack propagation, crack tip geometry, strain energy, Bailon (J.-P.), Dickson (J.I.), (et al.), *448*
- biaxial loading, crack growth, crack initiation, life expectancy, Brown (M.W.), Miller (K.J.), *450*
- corrosion fatigue, fretting, metals, survey, Kovalevskii (V.V.), *453*
- crack growth, crack propagation, cyclic loading, J-integral, Leis (B.N.), Zahoor (A.), *468*
- beams, steel, textiles, welded structures, Bardell (G.R.), Kulak (G.L.), *495*
- pressurized pipes, steel, Hale (D.A.), Wilson (S.A.), (et al.), *535*
- buildings, earthquake effects, floors, multistory frames, Wilson (J.C.), *970*
- cyclic loading, plastics, Bucknall (C.B.), Stevens (W.W.), *1202*
- composite materials, glass fibers, high cycle fatigue, life expectancy, Kim (H.C.), Ebert (L.J.), *1209*
- airplane structures, crack growth, material testing, prediction, survey, Schijve (J.), *1350*
- cyclic loading, endurance limit, life expectancy, precipitation hardening, softening, Lee (J.K.), Bhat (S.P.), (et al.), *1353*
- crack growth, experimental results, steel, Glinka (G.), Molski (K.), *1354*
- corrosion fatigue, fretting, surveys, wear, Waterhouse (R.B.) ed., *1358, book*
- crack growth, mixed mode fracture, Sih (G.C.), Barthelemy (B.M.), *1371*
- crystals, failure, overloads, Chu (S.N.G.), Li (J.C.M.), *1404*
- aluminum alloys, crack growth, overloads, Wei (R.P.), Fenelli (N.E.), (et al.), *1405*
- aluminum alloys, crack propagation, materials processing, Schulte (K.), Nowack (H.), *1407*
- airplane structures, life expectancy, statistical design, Jost (G.S.), Costolloe (S.P.), *1408*
- concrete, strength, Tepfers (R.), *1443*
- composite materials, debonding, delamination, fibers, Gradin (P.A.), Backlunk (J.), *1478*
- cyclic loading, failure, Hashin (Z.), *2240*
- alloys, crystals, cyclic loading, stress strain relationships, Wilhelm (M.), *2241*
- crack propagation, fracture, nuclear reactors, Ermi (A.M.), Bauer (R.E.), (et al.), *2406*
- aluminum alloys, combined loading, life expectancy, multiaxial fatigue, Sines (G.), Ohgi (G.), *2407*
- crack initiation, fracture mechanics, notch sensitivity, stress intensity factor, Livesey (V.B.), Knott (J.F.), *2408*
- crack growth, fracture mechanics, metallic composites, Morley (J.G.), Mccoll (I.R.), *2409*
- crack closure, crack growth, material testing, three dimensional formulation, Mcgowan (J.J.), Liu (H.W.), *2412*
- materials properties, offshore structures, steel, toughness, Wilson (A.D.), *2413*
- crack growth, environmental tests, pressure vessels, steel, Ritchie (R.O.), Suresh (S.), (et al.), *2414*
- crack growth, probabilistic design, Tsurui (A.), Igarashi (A.), *2415*
- cracks, fracture mechanics, gas turbines, powder metallurgy, Sheldon (G.P.), Cook (T.S.), (et al.), *2416*
- crack growth, high temperature, low cycle fatigue, Saxena (A.), *2417*
- biaxial loading, crack opening displacement, estimation, Howard (I.C.), *2418*
- crack propagation, estimation, Hills (D.A.), Ashelby (D.W.), *2419*
- crack growth, materials properties, reinforced concrete, Lovegrove (J.M.), Salah El Din (A.S.), (et al.), *2420*
- cracking, cracks, stochastics, Ford (D.G.), *2422*
- aluminum alloys, crack growth, crack opening displacement, Vogelesang (L.B.), *2423*
- aluminum alloys, crack growth, cyclic loading, Bowen (A.W.), Forsyth (P.J.E.), *2426*
- crack growth, crack opening displacement, Schijve (J.), *2428*
- combined loading, material testing, notch sensitivity, stress concentration, Kurajian (G.M.), Na (T.Y.), *2433*
- displacement, dynamics, testing equipment, Balakovskii (O.B.), *2492*
- boron, composite materials, damage, laminates, stiffness, O'Brien (T.K.), Reifsnider (K.L.), *2493*
- alloys, crack initiation, crack propagation, cyclic testing, high temperature, turbines, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- flaw detection, fracture, microcracks, surface flaws, Verpoest (I.), Aernoudt (E.), (et al.), *2503*
- beams, fibers, reinforced concrete, Kormeling (H.A.), *2521*
- cyclic loading, life expectancy, random loading, strength, Kruk (B.Z.), Kuzmenko (V.A.), (et al.), *2527*
- offshore structures, vortex shedding, wave loads, Russo (E.P.), Loiacono (N.J.), (et al.), *2545*
- contact stresses, gear teeth, kinematics, surface profiles, wear, Huston (R.L.), Coy (J.J.), *2558*
- contact stresses, gears (spur), hardness, surfaces, Flamand (L.), Berthe (D.), (et al.), *2562*
- bending, gear teeth, strength, Oda (S.), Shimatomi (Y.), (et al.), *2565*
- beams (sandwich), composite materials, weibull statistics, wood, Kyanka (G.H.), *3280*
- crack propagation, fracture mechanics, material testing, Shimada (H.), Furuya (Y.), *3433*
- crack growth, design, high temperature, life expectancy, Mcgowan (J.J.), Liu (H.W.), *3436*
- crack growth, foam, material testing, polymers, Noble (F.W.), Lilley (J.), *3437*
- crack propagation, low temperature, magnesium alloys, Serdyuk (V.A.), *3438*
- alloys, crack growth, low cycle fatigue, rotors, Shih (T.T.), Donald (J.K.), *3439*
- crack propagation, plastics, Hyakutake (H.), Hagio (T.), *3442*
- failure, nylon, ropes, Bitting (K.R.), *3444*
- damage, dynamic analysis, random excitation, structural analysis, Kenny (R.A.), Chandra (S.), *3445*
- damage (cumulative), life expectancy, material testing, random loading, Berezovszkij (A.M.), Balter (I.I.), (et al.), *3447*
- crack growth, environmental tests, material testing, steel, stress intensity factor, Stewart (A.T.), *3448*
- crack closure, crack opening displacement, crack propagation, Lal (K.M.), Le May (I.), *3450*
- alloys, crack growth, mixed mode fracture, strain energy, Badaliance (R.), *3469*
- crack growth, creep, fracture mechanics, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), *3494*
- crack growth, creep, fracture mechanics, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), (et al.), *3495*

F

- damage (cumulative), random loading, Shefer (L.A.), Ezhov (V.G.), (et al.), *3542*
- dynamic response, foundations, loads, offshore structures, resonance, Smith (I.M.), Molenkamp (F.), *3558*
- alloys, crack growth, James (L.A.), *4476*
- creep, deformation maps, life expectancy, Priest (R.H.), Ellison (E.G.), *4477*
- endurance limit, plastics, Suvorova (Yu.V.), Viktorova (I.V.), (et al.), *4478*
- crack growth, probability, random loading, Kozin (F.), Bogdanoff (J.L.), *4481*
- bending, crack propagation, surface flaws, Mukai (Y.), Matsuno (H.), (et al.), *4482*
- shafts, stress concentration, turbines, Jackson (M.C.), Umans (S.D.), *4483*
- crack propagation, endurance limit, stress intensity factor, Davenport (R.T.), Brook (R.), *4484*
- fracture, material testing, stochastic processes, Bolotin (V.V.), *4504*
- cermets, composite materials, composite structures, fracture, materials properties, metallic composites, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
- crack initiation, cracks, structural design, Oleinik (N.V.), Medvedev (S.A.), (et al.), *5280*
- grain boundaries, microcracks, thresholds, Tanaka (K.), Nakai (Y.), (et al.), *5281*
- creep, cyclic testing, low cycle fatigue, turbines, Kloos (K.H.), Granacher (J.), (et al.), *5282*
- curve fitting, high temperature, life expectancy, weibull statistics, Hasegawa (N.), Hirose (M.), (et al.), *5283*
- crack growth, grain size, microstructures, steel, Kitsunai (Y.), *5284*
- coatings, iron, life expectancy, probability, Kalmutskii (V.S.), Frunze (I.P.), *5285*
- corrosion fatigue, elliptical cracks, failure, glass, Doremus (R.H.), *5286*
- aluminum alloys, crack closure, crack opening displacement, environmental tests, Ewalds (H.L.), *5287*
- aluminum alloys, crack initiation, fractographic tests, fretting, wear, Leadbeater (G.), Kovalevskii (V.V.), (et al.), *5290*
- aluminum alloys, crack retardation, hold time, metallurgy, Slagle (W.P.), Mahulikar (D.), (et al.), *5310*
- random loading, surveys, testing equipment, Bily (M.), Kliman (V.), (et al.), *5330*
- crack growth, crack initiation, creep, notch tests, prediction, Olkin (S.I.), *5331*
- composite materials, life expectancy, programmed loading, stochastics, Yang (J.N.), Jones (D.L.), *6197*
- composite materials, graphite, life expectancy, resins, weibull statistics, Shimokawa (T.), Hamaguchi (Y.), *6203*
- composite materials, loads, material testing, Oldyrev (P.P.), *6204*
- damage, fracture mechanics, material testing, time dependence, Biegler (K.K.), Sandor (B.I.), *6412*
- crack propagation, cracks, fractographic tests, Schijve (J.), *6413*
- bending, multiaxial fatigue, torsion, Mcdiarmid (D.L.), *6414*
- crack initiation, cyclic loading, fracture, stochastics, Arone (R.), *6416*
- acoustic waves, fracture mechanics, life expectancy, nondestructive tests, Tittmann (B.R.), Buck (O.), *6417*
- bending, combined loading, notch tests, torsion, Matake (T.), Imai (Y.), *6418*
- aluminum alloys, crack initiation, life expectancy, microcracks, nondestructive tests, Buck (O.), Morris (W.L.), (et al.), *6419*
- crack arrest, cyclic loading, cyclic testing, residual stresses, Romaniv (O.N.), Siminkovich (V.N.), (et al.), *6420*
- bending, damping, material testing, metals, Weissmann (G.F.), *6421*
- anisotropy, heat treatment, life expectancy, rolling, strength, Nisitani (H.), Kage (M.), *6422*
- creep, elastoplasticity, life expectancy, structural design, Nikitenko (A.F.), Zaev (V.A.), *6431*
- deformation, elastoplasticity, piezoelectric devices, ultrasonics, Bajons (P.), *6464*
- alloys, high cycle fatigue, high temperature, Ishchenko (I.I.), Golub (V.P.), (et al.), *6469*
- bending, cyclic loading, steel, Gavrilov (D.A.), *6470*
- beams, experimental results, stiffened structures, Korashy (M.), Varga (J.), *6471*
- cracks, flaw detection, pipes, reflection, threaded joints, Lyapkov (A.A.), Spektorov (I.Sh.), *6494*
- cracks, flaw detection, thermography, Rantsevich (V.B.), *6496*
- life expectancy, loads, Proshkovets (I.), Voitishek (Ya.), *6948*
- seismic loading, welded structures, Kaneta (K.), Kohzu (I.), *7045*
- mesh generation, surface profiles, thin films, wear, El-Sherbiny (M.G.), Salem (F.B.), *7088*
- film thickness, lubrication (elastohydrodynamic), rolling contact, surface profiles, Tallian (T.E.), *7100*
- residual stresses, surface effect, work hardening, Trofimov (V.V.), Radeeva (E.N.), *7293*
- composite structures, fracture, material testing, structural analysis, surveys, Marshall (I.H.) ed., *7296, book*
- aluminum alloys, cracks, high cycle fatigue, ultrasonics, Tschegg (E.), Stanzl (S.), *7473*
- endurance limit, gas turbines, high temperature, nickel alloys, Palienko (E.Ya.), *7475*
- crack propagation, edge cracks, material testing, microcracks, nickel alloys, Lankford (J.), Cook (T.S.), (et al.), *7476*
- corrosion fatigue, crack growth, environmental tests, Wei (R.P.), Simmons (G.W.), *7477*
- failure, ice, mechanical properties, Mellor (M.), Cole (D.), *7479*
- crack propagation, low temperature, rocks, steel, Mubeen (A.), *7480*
- crack growth, elastoplasticity, fractographic tests, Kobayashi (H.), Sibuya (E.), (et al.), *7481*
- damage, hardening, interaction, steel, Chaboche (J.-L.), Kaczmarek (H.), (et al.), *7482*
- fracture mechanics, life expectancy, sensitivity, Fukuda (S.), *7483*
- biaxial loading, fracture, stochastic systems, Troshchenko (V.T.), Sosnovskii (L.A.), *7485*
- damage (cumulative), fracture, life expectancy, Kuliev (V.D.), Kaplun (A.B.), *7486*
- cyclic loading, fracture, inhomogeneities, microcracks, Getman (A.F.), *7487*
- crack propagation, environmental tests, fractography, Grinberg (N.M.), Ostapenko (I.L.), (et al.), *7488*
- crack growth, reinforced concrete, Salah El Din (A.S.), Lovegrove (J.M.), *7489*
- high cycle fatigue, material testing, Kuzmenko (V.A.), *7510*
- endurance limit, estimation, weibull statistics, Sakai (T.), Iwaya (T.), (et al.), *7511*
- fractography, fracture, fracture toughness, micromechanisms, Stepanenko (V.A.), *7512*
- cracks, diffraction, nondestructive tests, ultrasonics, Golan (S.), Adler (L.), (et al.), *7513*
- crack initiation, crack propagation, micromechanics, stochastics, Ghonem (H.), *7533*
- acoustic emission, aluminum alloys, low cycle fatigue, nondestructive tests, tension, Baram (J.), Rosen (M.), *7559*
- blast effects, cyclic loading, panels, plaster panels, shear loading, vibration, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- experimental mechanics, flaws, fracture, pipes, Shibata (K.), Oba (T.), (et al.), *7620*
- damage (cumulative), design, machine elements, Proshkovets (I.), Voitishek (Ya.), *7634*
- bending, butt welding, welded joints, welding, Lawnicki (J.J.), Cutler (V.C.), *7638*
- composite materials, plastics, polymers, Furue (H.), Shimamura (S.), *7958*
- composite materials, cyclic loading, fibers, fracture criteria, Hashin (Z.), *8369*
- cracks, cyclic loading, finite element techniques, plastic behavior, Billardon (R.), Brunet (M.), (et al.), *8370*
- crack propagation, polymers, Sandt (A.), Hornbogen (E.), *8371*
- aluminum alloys, crack opening displacement, high strength, material testing, Davidson (D.L.), Lankford (J.), *8373*
- crack growth, polymers, Radon (J.C.), *8375*
- ceramics, micromechanics, Evans (A.G.), *8376*
- crack initiation, crack propagation, cyclic loading, micromechanics, polymers, Sauer (J.A.), Richardson (G.C.), *8377*
- composite materials, fracture criteria, materials properties, Reifsnider (K.), *8378*
- computing techniques, gradient techniques, Brand (A.), *8380*
- crack growth, ductile fracture, fracture mechanics, fracture toughness, Sih (G.C.) eds., Valluri (S.R.), *8405, book*
- acoustic loading, airplane structures, galerkin method, monte carlo analysis, panels, Maekawa (S.), *8434*
- contact stresses, friction drives, rolling contact, traction, Rohn (D.A.), Loewenthal (S.H.), (et al.), *8473*
- bearings (ball), lubrication (elastohydrodynamic), lubrication (hydrodynamic), rolling contact, Hamrock (B.J.), Dowson (D.), *9032, book*
- alloys, ausforming, forming, rolling, steel, Ohmori (M.), Yokokawa (S.), (et al.), *9378*
- cavities, cracks, creep, metals, micromechanics, surveys, Gittus (J.) ed., *9380, book*
- crack propagation, damage (cumulative), stochastic processes, Ihara (C.), Igarashi (A.), *9384*
- correlation, life expectancy, strength, Romashov (R.V.), Fedorov (V.V.), (et al.), *9385*
- crack initiation, dislocations, Tanaka (K.), Mura (T.), *9387*
- fractographic tests, fracture, Bondal (G.V.), Kolesnikova (T.V.), *9395*
- crack growth, fasteners, fractographic tests, Mcgee (W.M.), Hsu (T.M.), *9414*
- concrete, Hsu (T.T.C.), *9447*
- friction (rolling), friction (sliding), rolling contact, Dawson (P.H.), *9946*
- additives, antiwear films, chemical reactions, films, lubrication (elastohydrodynamic), rolling contact, wear, Sakurai (T.), *9961*
- composite materials, fibers, interlaminar stresses, Ratwani (M.M.), Kan (H.P.), *10130*
- crack initiation, elastoplasticity, Saanouni (K.), Bathias (C.), *10270*
- crack arrest, crack opening displacement, crack propagation, Furuya (Y.), Shimada (H.), *10271*
- aluminum alloys, crack growth, quenching, Petrak (G.J.), Ruschau (J.J.), *10272*
- crack closure, inclusions, Mayes (I.C.), Baker (T.J.), *10273*
- deformation (plastic), plastic behavior, strength, Glikman (L.A.), Gurevich (B.G.), *10274*

- crack detection, cracks, ultrasonics, Ibrahim (S.I.), Whittaker (V.N.), *10275*
- crack growth, diffraction, nondestructive tests, ultrasonics, Sigmond (R.S.), Lien (E.), *10282*
- experimental methods, finite element methods, fracture mechanics, power plants, strain gages, stress analysis, Takhar (J.S.), Fryzel (R.A.), *10320*
- data analysis, estimation, statistical theory, strength, Nishijima (S.), *10323*
- damage (cumulative), empirical methods, life expectancy, prediction, titanium, Adams (J.H.), *10327*
- aluminum alloys, correlation, endurance limit, flexure, steel, ultimate strength, Stepnov (M.N.), Evstratova (S.P.), (et al.), *10330*
- crack initiation, crack propagation, impact, polymers, Takemori (M.T.), *10331*
- adhesives, bonded joints, finite element methods, strength, Sawyer (J.W.), Cooper (P.A.), *10383*
- experimental methods, ultrasonics, Terao (K.), Kuno (T.), (et al.), *11162*
- design, failure, fracture, materials properties, piping systems, pressure vessels, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- offshore structures, stochastic processes, vibration (forced), wave loads, Sigbjornsson (R.), *11334*
- contact stresses, grinding, microstructures, rolling contact, Dudragne (G.), Fougeres (R.), (et al.), *12096*

Faulkner (M.G.), dynamic properties, mathematical methods, strings, vibration (nonlinear), Mioduchowski (A.), (et al.), *1271*
- large displacement, numerical analysis, rods, Mioduchowski (A.), (et al.), *9257*

Faulmann (D.), see Mignosi (A.), *3763*

faults, corrections, error, reliability analysis, Ostafin (V.A.), Romankevich (A.M.), *103*
- detection, kalman filters, reliability analysis, Clark (R.N.), Setzer (W.), *2099*
- buckling, plates, rocks, tectonics, Golecki (J.J.), *2311*
- earth, earth's crust, sliding, stress concentration, viscoelasticity, Mukherji (P.), Pal (B.P.), (et al.), *4031*
- estimation, reliability analysis, stochastic processes, Nikiforov (I.V.), *4269*
- earthquakes, generation, modeling, Bykovtsev (A.S.), Chernov (G.P.), *4851*
- deformation, earth, stress analysis, Dravinski (M.), Trifunac (M.D.), *5864*
- displacement, earth, Prescott (W.H.), *7998*
- seismic waves, spectral analysis, Landa (Ye.I.), Mitrofanov (G.M.), *8011*
- deformation, fluid injection, geothermal energy, rocks, Hayashi (K.), Abe (H.), *9373*
- creep, earthquakes, prediction, water levels, Wesson (R.L.), *9906*
- radiation, seismic waves, Shamina (O.G.), Pavlov (A.A.), (et al.), *9909*
- creep, deformation, earthquakes, stochastic processes, Andrews (D.J.), *9917*
- experimental results, micromechanics, rocks, Wong (T.-F.), *10262*
- dislocations, initiation, modeling, seismic waves, Cornea (I.), Misicu (M.), (et al.), *10845*
- deformation, earthquakes, simulation, Miyashita (K.), *10847*

Faupel (J.H.), elasticity (linear), fracture, solid mechanics, stress analysis, Fisher (F.E.), *4330, book*

Fauske (H.K.), see Henry (R.E.), *5547*

Favier (D.J.), see Maresca (C.A.), *10502*

Favorskii (A.P.), see Taran (M.D.), *3824*

Favre-Marinet (M.), fluid injection, generation, jets, oscillations, Binder (G.), (et al.), *10456*

Faw (R.E.), convection, heat transfer, holography, interferometry, visualization, Dullforce (T.A.), *3807*

Fazkullin (V.A.), see Kruglov (A.S.), *6498*

Fedock (J.J.), foundations, modeling, seismic loading, soil structure interaction, Schreyer (H.L.), *7033*

Fedorenko (R.P.), see Andreev (Yu.N.), *2142*

Fedorov (A.V.), see Nesterenko (B.N.), *5429*

Fedorov (V.V.), see Romashov (R.V.), *9385*

Fedorova (N.V.), interfaces, inverse problems, seismic waves, Tsirulskiy (A.V.), *5876*

Fedorovsky (V.G.), see Barvashov (V.A.), *7321*

Fedotov (A.G.), see Vilenkin (S.Ya.), *3197*

Fedotov (V.A.), see Shevchenko (A.V.), *9968*

Fedotovskii (V.S.), see Sinyavskii (V.F.), *5232*
- see Sinyavskii (V.F.), *5233*

feedback, frequency domain techniques, multivariable systems, synthesis, Doyle (J.C.), Stein (G.), *108*
- decoupling, linear systems, multivariable systems, time invariant systems, Sinha (P.K.), *113*
- airplanes, design, observers, Singh (S.N.), Schy (A.A.), *121*
- design, state feedback, state space techniques, Preuss (H.-P.), *125*
- sensitivity, stability theory, Francis (B.A.), *131*
- design, regulator problem, sensitivity, state space techniques, Howze (J.W.), Cavin (R.K.) III, *2083*
- impingement, jets, Ho (C.-M.), Nosseir (N.S.), *2677*
- decoupling, design, frequency domain techniques, Argoun (M.B.), Van De Vegte (J.), *3158*
- control, design, deterministic control, nonlinear methods, nonlinear systems, stability theory, Leitmann (G.), *3174*
- control, plasma, stability theory, Sen (A.K.), *3213*
- asymptotic methods, control, space vehicle structures, stability theory, Balas (M.J.), *3922*
- design, modal control, multivariable systems, synthesis, Lutskiv (N.M.), Strepko (I.T.), *4221*
- design, multivariable systems, sensitivity, stability theory, Safonov (M.G.), Laub (A.J.), (et al.), *4226*
- linear systems, multivariable systems, stability theory, time lag, Gosiewski (A.), Olbrot (A.W.), *4231*
- decoupling, state space techniques, Descusse (J.), *4232*
- control, control stability, linear systems, matrix methods, stability theory, Meilakhs (A.M.), *4246*
- algorithms, control stability, design, linear systems, stability theory, Tannenbaum (A.), *4249*
- control stability, design, interconnected systems, large scale systems, lyapunov's functions, stability theory, Mahalanabis (A.K.), Singh (R.), *4250*
- discrete systems, identification, linear systems, Sin (K.S.), Goodwin (G.C.), *4259*
- control, space vehicle structures, structural response, Balas (M.J.), *4298*
- control, design, linear systems, multivariable systems, pole placement, Balestrino (A.), Celentano (G.), *6125*
- control, design, linear systems, multivariable systems, pole placement, Seraji (H.), *6126*
- control, matrix methods, state space techniques, Potter (J.M.), Anderson (B.D.O.), (et al.), *6128*
- control, linear systems, pole placement, Shapiro (E.Y.), Fredricks (D.A.), (et al.), *6141*
- gait, prosthetic devices, simulation, Hirokawa (S.), Sugiyama (H.), (et al.), *6150*
- optimal control, pole placement, Heymann (M.), *7230*
- describing function, nonlinear systems, nonlinear theory, oscillations, Lambert (L.), Dittrich (F.), *7237*
- noise (aerodynamic), orifices, sound generation, Czarnecki (S.), Czechowicz (M.), (et al.), *7938*
- analog simulation, chaos, differential equations (ordinary), Sparrow (C.T.), *8104*
- limit cycles, on off systems, oscillations, relay systems, stability theory, Balasubramanian (R.), *8161*
- control, nonlinear systems, second order analysis, sensitivity, Herbert (R.J.), *8162*
- airplanes, design, feedforward control, interception, optimal control, pursuit, Lunderstadt (R.), *8169*
- control, dynamic analysis, dynamic properties, rotating bodies, rotors, vibration, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- control, multivariable systems, state space techniques, Preuss (H.-P.), *9159*
- bilinear systems, control, design, Derese (I.), Noldus (E.), *9160*
- design, frequency domain techniques, multivariable systems, process control, state space techniques, Bar (W.), *9163*
- control, linear systems, spectral analysis, stability theory, transfer functions, Schober (J.), *9166*
- guidance, navigation, stability theory, time varying systems, Dorrscheidt (F.), Leuer (A.), *9169*
- actuators, control, design, pneumatic components, position control, Bender (E.), Kotschenreuther (P.), *9194*
- asymptotic behavior, biomathematics, differential equations (ordinary), Selgrade (J.F.), *10015*
- automatic control, pole placement, stability, Willems (J.C.), Commault (C.), *11037*
- design, state space techniques, Willems (J.C.), *11040*
- automatic control, discrete systems, multipass processes, stability theory, Boland (F.M.), Owens (D.H.), *11045*
- control, decoupling, design, digital control, nonlinear systems, Singh (S.N.), *11050*
- linear systems, multivariable systems, nyquist theory, Nwokah (O.D.I.), *11054*
- control, design, large scale systems, stability theory, Anderson (B.D.O.), Moore (J.B.), *11089*
- adaptive systems, design, dynamic analysis, Corless (M.J.), Leitmann (G.), *11090*
- adaptive systems, design, networks, pierce loop, queue theory, Yu (W.), Majithia (J.C.), *11093*

feedforward control, model reference systems, modeling, Broussard (J.R.), O'Brien (M.J.), *2081*
- airplanes, design, feedback, interception, optimal control, pursuit, Lunderstadt (R.), *8169*

feeding mechanisms, frequencies, vibration, Okabe (S.), Yokoyama (Y.), *1473*

Fehrenbach (J.P.), see Yoo (C.H.), *3295*

Feifarek (M.J.), see Horton (T.E.), *8629*

Feifer (L.I.), see Nazmeev (Yu.G.), *9684*

Feijoo (R.A.), dynamic loads, finite element techniques, shells (of revolution), Jospin (R.J.), (et al.), *6235*

Feijter (J.A.), contact angle, experimental results, liquids, thin films, Vrij (A.), *6584*

Feinstein (C.D.), asymptotic behavior, mathematical programming, optimal control, trajectory optimization, Luenberger (D.G.), *11069*

Feistel (T.W.), airplanes, separated flow, separation, spin recovery, wings, Anderson (S.B.), (et al.), *690*

Felder (E.), forging, friction, steel, wear, Montagut (J.L.), *7086*

Feldman (M.S.), see Dobrynin (S.A.), *8285*
Feldmane (E.G.), see Bogdanovich (A.E.), *377*
Felippe (C.A.), geometric nonlinearities, offshore structures, pipes, underwater structures, wave loads, Chung (J.S.), *6534*
- acoustics, boundary elements, finite element techniques, infinite medium, *9130*

Felsch (K.-O.), heat transfer, integral methods, laminar flow, mass transfer, rotating disks, rotating fluids, Piesche (M.), *10580*
Felsen (L.B.), acoustics, ducts, modes, nonhomogeneous media, waveguides, *1804*
Felske (J.D.), see Ruckenstein (E.), *3796*
- absorption, cylindrical bodies, particles, radiant interchange, radiation properties, Lee (K.M.), *7860*

Felton (L.P.), design (optimum), optimization, trusses, tubes, Fuchs (M.B.), *5343*
- see Davidson (J.W.), *7034*

Felzenbaum (A.I.), see Muzylev (S.V.), *3024*
Fendell (F.), see Carrier (G.), *7873*
Fenelli (N.E.), see Wei (R.P.), *1405*
Feng (C.C.), flames (diffusion), numerical analysis, pyrolysis, solid fuels, Tien (J.S.), *835*
Fenlon (F.H.), far field radiation, nonlinear waves, sound generation, sound propagation, Mckendree (F.S.), *4785*
- acoustic waves, gaussian beams, interference, nonlinear waves, radiation, *5736*

Fenner (W.J.), finite strain, membranes, Wu (C.H.), *3304*
Fenster (S.K.), see Ugural (A.C.), *2208, book*
Fenton (J.), attitude control, flexible bodies, riccati equation, space vehicle structures, Gill (K.F.), *3921*
Fenton (J.D.), see Schwartz (L.W.), *7759*
- gravity waves (finite depth), gravity waves (solitary), nonlinear waves, unsteady flow, wave interactions, Rienecker (M.M.), *11560*

Fenton (R.G.), see Cleghorn (W.L.), *5377*
Feonychev (A.I.), acceleration, body force convection, crystals, cylindrical bodies, heat transfer, mass transfer, *10595*
Ferch (R.L.), see Hancox (W.T.), *1848*
- see Rousseau (J.C.), *12033*

Ferguson (I.J.), see Davison (E.J.), *8168*
Ferguson (R.J.), see Reinhart (W.R.), *1132*
- gear trains, kinematics, transmissions, Kerr (J.H.), *6557*

Fernandes (J.L.M.), see Pina (H.L.G.), *4179*
Fernandez-Pello (A.C.), see Trevino (C.), *11781*
Fernandez-Sintes (J.), see Hoff (N.J.), *344*
Fernando (K.V.M.), analogies, eigenvalue problems, fredholm equations, Nicholson (H.), *9118*
- karhunen-loeve expansion, mathematical models, matrix methods, pattern recognition, Nicholson (H.), *10077*

Fernholz (H.H.), boundary layer (three dimensional), cylindrical bodies, measurements, pressure gradient, turbulence, Vagt (J.-D.), *9563*
Ferreira (P.), see Wolovich (W.A.), *112*
Ferreira (P.M.G.), complex variables, distributed parameters, extended complex plane, linear systems, poles, transfer functions, zeros, *4211*
ferrography, wear, Pocock (G.), Courtney (S.J.), *4893*
- lubricants (liquid), lubrication, particles, wear, Kjer (T.), *9949*

ferrous metals, liquids, magnetoelasticity, oscillations, suspensions, Shishkin (L.A.), *862*
- liquids, magneto fluid dynamics, separation, suspensions, Boguslavskii (V.A.), Dvorchik (S.E.), (et al.), *863*
- fracture toughness, mechanical properties, micromechanisms, stainless steels, toughness, Lula (R.A.) ed., *3501, book*
- magneto fluid dynamics, rotating bodies, seals, suspensions, Morris (W.D.), *3858*
- continuum theory, magnetoelasticity, waves, Maugin (G.A.), *4140*
- convection (forced), magneto fluid dynamics, suspensions, thermophysical properties, Shulman (Z.P.), Kordonskiy (V.I.), (et al.), *5548*
- gravity waves, liquid metals, magneto fluid dynamics, theory, Shishkin (L.A.), Slatinskii (N.D.), *10748*
- liquid metals, magneto fluid dynamics, seals, testing equipment, Mikhalev (Yu.O.), Orlov (D.V.), (et al.), *10755*
- interaction, liquid metals, magneto fluid dynamics, torque, Kashevskii (B.E.), *11816*
- films, liquid liquid interface, liquid metals, magneto fluid dynamics, Taktarov (N.G.), Bin (C.Z.), *11817*
- eigenvalues, liquid metals, magneto fluid dynamics, tensor methods, Radojevic (D.), *11828*

Fert (A.R.), see Rabinovich (M.D.), *6820*
Fertman (V.E.), see Orlov (L.P.), *5999*
Ferziger (J.H.), computing techniques, differential equations (ordinary), differential equations (partial), mathematical methods, numerical analysis, *1110, book*
Fessas (P.), controllability, frequency domain techniques, graph theory, interconnected systems, multivariable systems, observability, *4234*
Fessler (H.), joints, offshore structures, photoelasticity, tubes, Little (W.J.G.), *1390*
- couplings, deformation, drives, Stewart (R.W.), *2555*
- bars, photoelasticity, stress concentration, Woods (P.J.), *7284*
- see Hyde (T.H.), *10333*

Fetecau (C.), conduction (heat), helical flow, materials possessing memory, uniqueness, *6577*
- conduction (heat), cylindrical bodies, linear theory, materials possessing memory, tubes, *6797*

Fhts (P.B.) Jr., conduction (heat), heat addition, slabs, transient loading, De Witt (K.J.), *773*
fiber optics, analysis, displacement, holography, Gilbert (J.A.), Herrick (J.W.), *1395*
- control, gyroscopes, polarization, Kintner (E.C.), *3223*
- boundary layer (thermal), convection (free), cooling, optical techniques, Kuiken (H.K.), *4695*
- experimental mechanics, measurements (dynamic), shock, Cook (R.O.), Hamm (C.W.), (et al.), *6320*
- automatic control, electrical components, helicopters, hydraulics, rotors, Kretz (M.), Larche (M.), *8649*

fibers, continuum theory, networks, Pipkin (A.C.), *255*
- composite materials, dynamic stresses, rupture, Moskvitin (V.V.), Ovchinskii (A.S.), *285*
- biomaterials, composite materials, mechanical properties, teeth, Fox (P.G.), *1034*
- composite materials, materials properties, plastics, Worndle (R.), Daschner (W.), *1203*
- composite materials, constitutive relations, stiffness, vibration, Aboudi (J.), *1207*
- composite materials, conductivity, Gogol (W.), Furmanski (P.), *1208*
- composite materials, dynamic stresses, fracture, Sakharova (E.N.), Ovchinskii (A.S.), *1210*
- flexible bodies, surveys, textiles, tires, yarn, Hearle (J.W.S.) eds., Thwaites (J.J.), (et al.), *1214, book*
- elastic constants, graphite, tubes, Bauchau (O.A.), *1402*
- beams (prestressed), concrete, impulsive loading, reinforced concrete, Hughes (B.P.), *1438*
- reinforced concrete, tensile strength, Stroeven (P.), *1444*
- composite materials, debonding, delamination, fatigue, Gradin (P.A.), Backlunk (J.), *1478*
- bonding, composite materials, Liiri (O.), Kivisto (A.), (et al.), *1480*
- geometric nonlinearities, laminates, reinforced bodies, Hyer (M.W.), *2247*
- filamentary structures, paper, strength, yarn, Dent (R.W.), *2253*
- biaxial loading, multiaxial fatigue, rotating bodies, Calli (S.F.), Goswami (B.C.), (et al.), *2255*
- composite materials, shells (anisotropic), shells (stiffened), structural stability, Ershov (N.P.), *2304*
- boron, high temperature, tension, testing equipment, Erasov (V.S.), Pirogov (E.N.), (et al.), *2485*
- elastic constants, glass, thermal effects, Kobayashi (M.), Fujisawa (T.), (et al.), *2491*
- adhesion, high speed, hopkinson bar, matrices, strain rate, testing equipment, Rybin (A.A.), *2496*
- reinforced concrete, strength, Stages (A.H.), Minor (J.), *2516*
- beams, fatigue, reinforced concrete, Kormeling (H.A.), *2521*
- failure, glass fibers, hybrid construction, micromechanisms, stochastics, Manders (P.W.), Bader (M.G.), *3277*
- beams (cantilever), damping, laminates, reinforced bodies, Plunkett (R.), *4357*
- absorption, acoustic waves, reflection, Mathew (J.), Alfredson (R.J.), *4798*
- composite materials, fracture criteria, shear lag, Goree (J.G.), Gross (R.S.), *5130*
- stress rupture, stress strain relationships, textiles, Horikawa (A.), Yaida (O.), *5132*
- equilibrium, stochastic systems, structure, textiles, thermodynamics, Lindenmeyer (P.H.), *5133*
- creep, rheology, textiles, Koczy (L.), Fulop (I.), *5137*
- computing techniques, convergence, probability, Harlow (D.G.), Phoenix (S.L.), *5138*
- adhesion, composite materials, compression, strength, Martinez (G.M.), Piggott (M.R.), (et al.), *6190*
- composite materials, compression, mechanical analysis, strength, Piggott (M.R.), *6191*
- composite materials, discontinuities, metallic composites, shear lag, Fukuda (H.), Chou (T.-W.), *6194*
- anisotropic media, probability, void fraction, Komori (T.), Makishima (K.), *6201*
- adhesives, bonding, textiles, Hearle (J.W.S.), Ozsanlav (V.), *6202*
- boron, propagation, torsion, ultrasonics, vibration, Kaplan (M.D.), Veremeenko (S.V.), *6482*
- cast steel, composite materials, high temperature, materials properties, Skrovanek (S.D.), Herron (R.H.), *6954*
- elastic constants, high strength, organic fibers, polymers, Black (W.B.), *7280*
- composite materials, dynamic analysis, structural analysis, Moskvitin (V.V.), *7299*
- fizeau fringes, optical techniques, textiles, El-Nicklawy (M.M.), Fouda (I.M.), *7308*

- fizeau fringes, optical techniques, textiles, El-Nicklawy (M.M.), Fouda (I.M.), *7309*
- asymptotic behavior, composite materials, rings, Bogan (Yu.A.), *7326*
- buckling, composite materials, explosive welding, metallic composites, Kornev (V.M.), Yakoviev (I.V.), *7363*
- anisotropy, composite materials, dynamic behavior, harmonic waves, orthotropic materials, Nemat-Nasser (S.), Yamada (M.), *7408*
- composite materials, disclinations, fracture mechanics, peeling, Vladimirov (V.I.), Priemskii (N.D.), (et al.), *8217*
- composite structures, material testing, resins, Strife (J.R.), Prewo (K.M.), *8218*
- bending, composite structures, deformation, layered media, stress concentration, Isupov (L.P.), *8223*
- composite structures, crack propagation, fracture mechanics, Mileiko (S.T.), Rabotnov (Yu.N.), *8224*
- composite materials, fracture, materials properties, strength, Chou (T.-W.), Kelly (A.), *8227*
- composite materials, cyclic loading, fatigue, fracture criteria, Hashin (Z.), *8369*
- composite materials, conduction (heat), mixtures, variable thermal properties, Murakami (H.), Hegemier (G.A.), *8738*
- composite materials, fracture, polymers, tension, Protasov (V.D.), Ermolenko (A.F.), (et al.), *9251*
- composite materials, elastic waves, harmonic waves, Hlavacek (M.), *9344*
- bending, fiber reinforced concrete, reinforced concrete, torsion, Narayanan (R.), Toorani-Goloosalar (Z.), *9450*
- composite materials, pipes, reinforced bodies, Ainsworth (L.), *9466*
- composite materials, fatigue, interlaminar stresses, Ratwani (M.M.), Kan (H.P.), *10130*
- laminates, material testing, plastics, stretching, Polyakov (V.A.), Tanevskii (V.V.), *10133*
- composite materials, fracture, Kousiounelos (P.N.), Williams (J.H.) Jr., *10303*
- compression, elastomers, material testing, tubes, Farris (R.), Filippov (A.), *10324*
- bolted joints, composite materials, mechanical joints, plastics, Godwin (E.W.), Matthews (F.L.), *10381*
- aerosols, deposition, diffusion, filters, Ingham (D.B.), *12051*

Ficcadenti (G.M.), see Gelos (R.), *2331*
- see Laura (P.A.A.), *3366*

Fichter (E.F.), see Hunt (K.H.), *6562*

Ficker (M.), beams, prestressed concrete, stress concentration, *4535*

Fidler (J.E.), aerodynamic loads, slender bodies, vortex shedding, wakes, *689*

Fiedler (H.), see Mensing (P.), *9679*

Field (A.D.), linear systems, linear theory, matrix methods, multivariable systems, state space techniques, Owens (D.H.), *10079*

field tests, compaction, granular media, soils, Leonards (G.A.), Cutter (W.A.), (et al.), *418*
- pressure change, soils, Clough (G.W.), Denby (G.M.), *421*
- pore pressure, river beds, sedimentation, soils, Bennett (R.H.), Faris (R.), *423*
- clay, elastic constants, shear waves, Abbiss (C.P.), *1318*
- penetration, soils, Singh (A.), Verma (M.S.), *2380*
- finite element methods, mining, Pariseau (W.G.), Eitani (I.M.), *2392*
- clay, pressuremeter, shear strength, Denby (G.M.), Clough (G.W.), *3404*
- piles, saturation, soils, stress strain relationships, Bartolomei (A.A.), Yushkov (B.S.), (et al.), *3408*
- piles, sand, uplift, Prakash (C.), *3411*
- concrete, highways, sand, subgrade design, Barber (S.D.), Knapton (J.), *3417*
- experimental results, penetration, soils, tools, Spektor (M.), *5253*
- piles, Ottaviani (M.), Marchetti (S.), *5258*
- inverse problems, processing, seismic waves, Alekseyev (A.S.), Dobrinskiy (V.I.), (et al.), *5875*
- fluid injection, fracture, geothermal energy, hydraulics, rocks, Solberg (P.), Lockner (D.), (et al.), *5884*
- nonhomogeneous soils, swell, Kate (J.M.), Katti (R.K.), *6376*
- penetration, soils, Kezdi (A.), Mlynarek (Z.), *7442*
- electro-osmosis, mechanical properties, soils, Banerjee (S.), Mitchell (J.K.), *7445*
- electro-osmosis, mechanical properties, soils, Mitchell (J.K.), Banerjee (S.), *7448*
- penetration, soils, Baligh (M.M.), Vivatrat (V.), (et al.), *7447*
- buildings, multistory frames, pressure distribution, wind loads, wind tunnels, Lam (R.P.), Lam (L.C.H.), *7908*
- nondestructive tests, rocks, ultrasonics, Mckenzie (C.K.), Stacey (G.P.), (et al.), *11181*

Fielding (L.), axial turbines, blades, boundary layer, cascades, *4675*

Fife (P.C.), asymptotic behavior, diffusion, nonlinear analysis, phase plane, travelling waves, Mcleod (J.B.), *7167*

Figliola (R.S.), aortic valve, blood, damage, prosthetic devices, shear stress, Mueller (T.J.), *1960*

Fijalkowski (S.), bearings (gas lubricated), bearings (journal), laminar flow, reynolds number, thermal effects, *9965*

Fijimori (Y.), blades, helicopters, lift, rotors, turbulence (geophysical), turbulent flow, *9664*

Fikioris (J.G.), see Roumeliotis (J.A.), *11980*

Fiklistov (N.I.), see Akselrud (G.A.), *12019*

filament winding, reinforced openings, shells (nonlinear), stress analysis, Lykyanenko (P.D.), Makarenkov (A.G.), *251*
- nonmetals, solid propellants, wirewound vessels, Lamalle (J.), Cabanel (D.), *9465*

filamentary structures, cracks, failure, reinforced bodies, textiles, Pipkin (A.C.), Rogers (T.G.), *1385*
- fibers, paper, strength, yarn, Dent (R.W.), *2253*
- compression, materials properties, textiles, yarn, Leaf (G.A.V.), Oxenham (W.), *5131*
- energy conversion, inhomogeneities, magneto plasma dynamics, nonequilibrium effects, Petit (J.-P.), Billiotte (M.), *7899*
- composite materials, conduction (heat), layered media, Zimmerman (R.H.), *10594*

filaments, fluid injection, power law fluids, viscoelastic fluids, Kase (S.), Nakajima (T.), *548*
- failure, high temperature, tungsten filaments, Horacsek (O.), *6951*
- dynamic response, vibration (free), Kurkin (V.I.), Medvedev (S.A.), *7382*
- motion, nonlinear analysis, vortex flow, vortex lines, Kida (S.), *9522*
- fluid-structure interaction, impact, submerged bodies, Belov (V.I.), Lenskii (E.V.), *11665*

Filimonov (S.S.), conductivity, heat transfer (combined modes), radiant interchange, Khrustalev (B.A.), (et al.), *5569*

Filimonov (V.A.), constitutive equations, equations of state, high pressure, solid mechanics, *5525*

Filipkowski (S.), aerodynamic loads, airfoils, harmonic waves, incompressible flow, oscillating bodies, Nowak (M.), *3904*

Filippi (P.), see Hebault (D.), *1808*
- see Saadat (H.), *11969*

Filippi (P.J.T.), see Habault (D.), *8965*

Filippov (A.), see Farris (R.), *10324*

Filippov (K.N.), see Kuptsov (V.M.), *10417*

Filippov (L.P.), conductivity, density, gases, heat transfer, thermal measurements, transient effects, Eldarov (F.G.), (et al.), *2780*
- see Nefedov (S.N.), *5519*
- hot wire, liquids, thermal measurements, thermophysical properties, Nefedov (S.N.), (et al.), *10555*

Filippov (S.B.), dynamic analysis, shells (ellipsoidal), shells (of revolution), vibration (free), *9321*

Filippova (L.M.), see Aleksandrov (V.M.), *1183*

Filippovskii (N.F.), fluidized beds, heat transfer, oscillations, Zharkov (A.A.), (et al.), *5849*

Filliben (J.J.), see Simiu (E.), *4171*
- see Simiu (E.), *7795*

film boiling, critical phenomena, film flow, hydrodynamic stability, Ganchev (V.G.), Bokov (A.Ye.), *748*
- biomechanics, critical heat flux, cryogenics, heat transfer, nucleate boiling, Belyakov (V.P.), Budrik (V.V.), *750*
- heat transfer (combined modes), mass transfer, radiation, Arai (N.), Takahashi (S.), (et al.), *799*
- catalysts, chemically reactive flow, Kirillov (V.A.), Ogarkov (B.L.), *5545*
- nucleate boiling, pool boiling, thermal instability, transition boiling, Zhukov (S.A.), Barelko (V.V.), (et al.), *6772*
- galilei number, hydrodynamic stability, nusselt number, reynolds analogy, Klimenko (V.V.), *7829*
- boiling, porous surfaces, thermal effects, Strikovich (M.A.), Malyshenko (S.P.), (et al.), *7835*
- convection (forced), cooling, cylindrical bodies, spherical bodies, stagnation point, Epstein (M.), Hauser (G.M.), *8687*
- boiling, bubble dynamics, heat transfer, nucleate boiling, Shekriladza (I.G.), *8691*
- convection (free), hydrodynamic stability, liquid vapor interface, pipe flow, thermal instability, two phase flow, Sherman (D.C.), Sabersky (R.H.), *8693*
- porous walls, spherical bodies, thermal contact resistance, Kuzma-Kichta (Yu.A.), Lenkov (V.A.), (et al.), *9686*
- annular flow, critical heat flux, drying, Sedler (B.), *9688*
- explosions, fuel-coolant interactions, shock tubes, Sharon (A.), Bankoff (S.G.), *10719*
- melting, shock waves, thermal explosions, thermal shock, Inoue (A.), Bankoff (S.G.), *11760*
- melting, shock waves, thermal explosions, thermal shock, Inoue (A.), Ganguli (A.), (et al.), *11761*

film cooling, cooling, injection, transpiration cooling, Crawford (M.E.), Kays (W.M.), (et al.), *726*
- blades, cylindrical bodies, gas turbines, heat transfer, leading edge, thermal measurements, Mirhosseini (A.), Barrow (H.), *733*
- absorption, heat transfer, mass transfer, Nakoryakov (V.Ye.), Grigoryeva (N.I.), *798*
- boiling, cooling, impingement cooling, sprays, Ishigai (S.), Nakanishi (S.), (et al.), *1664*
- eddy viscosity, fluid injection, injection, mixing length theory, Kikkawa (S.), Fujii (M.), *1666*
- hypersonic flow, laminar flow, slots, thermal protection, Richards (B.E.), Stollery (J.L.), *5561*
- convection, film flow, heat transfer, plastics, polypropylene film, Shapovalov (V.M.), Tyabin (N.V.), (et al.), *5570*

- combustors, film flow, gas turbines, Sturgess (G.J.), *5622*
- evaporation, film flow, heat transfer, liquid vapor interface, Wassner (L.), *6779*
- blades, gas turbines, jets, Ito (S.), Goldstein (R.J.), (et al.), *6850*
- boiling, critical heat flux, film flow, tubes, Ueda (T.), Isayama (Y.), *7832*
- critical heat flux, film flow, heat transfer, pipe flow, surface tension, Ganic (E.N.), Roppo (M.N.), *8686*
- channel flow, crossflow, injection, Alekseyev (N.M.), Zelengur (A.A.), *8689*
- heat transfer, injection, similarity methods, El-Hadik (A.A.B.), Barrow (H.), *9694*
- rotors, turbines, Dring (R.P.), Blair (M.F.), (et al.), *10687*
- aerodynamic performance, blades, gas turbines, pressure drop, Ito (S.), Eckert (E.R.G.), (et al.), *11743*
- fluid injection, mass transfer, porous media, turbulence (freestream), Mironov (B.P.), Lugovskiy (P.P.), (et al.), *11778*

film flow, critical phenomena, film boiling, hydrodynamic stability, Ganchev (V.G.), Bokov (A.Ye.), *748*

- reynolds number (small), sloping bottom, wavy walls, Wang (C.-Y.), *1511*
- froude number, reynolds number, rotating cylinders, surface tension, weber number, Kovac (J.), Balmer (R.T.), *3628*
- boundary layer, falling films, nonlinear analysis, surface waves, Esmail (M.N.), *3709*
- boiling, critical heat flux, drops, entrainment, Ueda (T.), Inoue (M.), (et al.), *4702*
- boiling, channel flow, evaporation, heat exchangers, heat transfer, Vasilev (L.L.), Abramenko (A.N.), (et al.), *4721*
- heat transfer, nusselt number, velocity profiles, Sobin (V.M.), *5536*
- convection, film cooling, heat transfer, plastics, polypropylene film, Shapovalov (V.M.), Tyabin (N.V.), (et al.), *5570*
- combustors, film cooling, gas turbines, Sturgess (G.J.), *5622*
- coatings, finite element techniques, navier stokes equation, viscous flow, Saito (H.), Scriven (L.E.), *6616*
- evaporation, film cooling, heat transfer, liquid vapor interface, Wassner (L.), *6779*
- spherical bodies, stokes flow, surface tension, Johnson (R.E.), *7668*
- reynolds number (small), surface waves, viscous flow, Demekhin (E.A.), Shkadov (V.Ya.), *7758*
- nonlinear analysis, solitary waves, surface waves, Tsvelodub (O.Yu.), *7762*
- boiling, critical heat flux, film cooling, tubes, Ueda (T.), Isayama (Y.), *7832*
- surface flow, surface tension, Tanner (L.H.), *8490*
- lubrication (hydrodynamic), perturbation methods, rotating disks, stokes flow, Phan-Thien (N.), Antonia (R.A.), (et al.), *8533*
- entrance region, laminar flow, non newtonian flow, Yang (T.M.T.), Yarbrough (D.W.), *8579*
- critical heat flux, film cooling, heat transfer, pipe flow, surface tension, Ganic (E.N.), Roppo (M.N.), *8686*
- boiling, critical flow, critical heat flux, dispersed flow, two phase flow, Andreyev (P.A.), Borishanskiy (V.M.), (et al.), *8695*
- condensation, entrance region, two phase flow, Segev (A.), Collier (R.P.), *8698*
- asymptotic methods, cylindrical bodies, liquid vapor interface, plates, Salem (A.), Trad (A.), *9542*
- blunt bodies, rainfall, reynolds number (high), reynolds number (small), Brehm (E.), *9544*
- condensation (dropwise), drops, external flow, laminar flow, mist flow, Trela (M.), *9692*
- casting, channel flow, non newtonian flow, plates (parallel), polymers, squeeze films, Kazankov (Yu.V.), Pervushin (V.E.), *9709*
- liquid metals, magneto fluid dynamics, stabilization, transport phenomena, Bashtovoi (V.G.), Denisenko (T.D.), (et al.), *9785*
- bubble dynamics, coalescence, drainage, drops, plates, Lin (C.-Y.), Slattery (J.C.), *10405*
- pressure distribution, velocity profiles, vortex flow, Kislykh (V.I.), Smulski (I.I.), *10543*
- heat transfer, integral methods, laminar flow, nuclear reactors, tubes, Rogers (J.T.), *10565*
- counterflow, duct flow, heat transfer, mass transfer, roughness, Fujita (H.), Takahama (H.), (et al.), *10581*
- absorption, air conditioning, dehumidifying system, drying, evaporated films, fins, low temperature, Peng (C.S.P.), Howell (J.R.), *10641*
- absorption, mass transfer, Pedersen (H.), Prenosil (J.E.), *10678*
- hydrodynamic stability, pressure gradient, thin films, Mikielewicz (J.), Ihnatowicz (E.), (et al.), *11533*
- entrainment, nonlinear waves, turbulent flow, two phase flow, Demekhin (E.A.), *11565*
- drops, hydrodynamic stability, jets, viscous flow, Abramov (Yu.I.), *11592*
- film thickness, hydrodynamic stability, surface waves, vertical surfaces, Alekseenko (S.V.), Nakoryakov (V.E.), (et al.), *11612*

film thickness, boundary roughness, dynamic analysis, mathematical models, Vorontsov (Ye.G.), Yakhno (O.M.), *605*

- bearings (hydrostatic), lubrication (hydrostatic), non newtonian flow, oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1013*
- bearings (hydrostatic), lubrication (hydrostatic), non newtonian flow, thermal effects, El-Kayar (A.), Salem (E.A.), (et al.), *1014*
- bearings (hydrostatic), lubrication (hydrostatic), non newtonian flow, oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1015*
- gears (spur), lubricants (liquid), oil films, wear, Hirano (F.), Ichimaru (K.), (et al.), *1016*
- interferometry, optical instruments, Smolinska (B.), Wasowski (J.J.), *1396*
- lubrication (elastohydrodynamic), rolling contact, viscosity, Gecim (B.), Winer (W.O.), *1941*
- dynamic loads, gears (spur), lubrication (elastohydrodynamic), surfaces, temperature, Wang (K.L.), Cheng (H.S.), *2561*
- gears, oil films, roughness, surfaces, Tudor (A.), *3050*
- bearings (ball), experimental methods, high speed, lubrication (elastohydrodynamic), Coy (J.J.), Zaretsky (E.V.), *4899*
- ablation, aerodynamic heating, heat transfer, Znamenskii (V.V.), Lunev (V.V.), *5807*
- bearings (gas lubricated), bearings (slider), finite element methods, reynolds equation, Mitsuya (Y.), *5983*
- friction (rolling), friction (sliding), lubrication (elastohydrodynamic), rolling contact, Conry (T.F.), *5984*
- lubrication (elastohydrodynamic), rolling contact, rotating cylinders, squeeze films, Wada (S.), *5987*
- lubrication (elastohydrodynamic), rolling contact, Koye (K.A.), Winer (W.O.), *5988*
- electro fluid dynamics, magneto fluid dynamics, squeeze films, Gupta (J.L.), Vora (K.H.), *7094*
- bearings (porous metal), electro fluid dynamics, magneto fluid dynamics, squeeze films, Gupta (J.L.), Patel (K.C.), (et al.), *7095*
- fatigue, lubrication (elastohydrodynamic), rolling contact, surface profiles, Tallian (T.E.), *7100*
- contact problems, lubrication (elastohydrodynamic), reynolds number, viscosity, Evans (H.P.), Snidle (R.W.), *9027*
- lubrication (hydrodynamic), reynolds equation, squeeze films, Vora (K.H.), *9031*
- lubrication (elastohydrodynamic), rolling contact, roughness, surfaces, Terauchi (Y.), Nonishi (T.), *9035*
- bearings (thrust), friction, lubrication (hydrodynamic), pressure distribution, Safar (Z.S.), *9043*
- bearings (thrust), damping, inertia, lubrication (hydrostatic), stiffness, Prabhu (T.J.), Ganesan (N.), *9956*
- friction (solid fluid), lubrication (elastohydrodynamic), seals, Kalsi (M.S.), *9962*
- film flow, hydrodynamic stability, surface waves, vertical surfaces, Alekseenko (S.V.), Nakoryakov (V.E.), (et al.), *11612*

films, bond number, contact angle, dimensional analysis, friction (skin), Eichhorn (R.), *1536*

- atomization, centrifugation, Nafikov (I.M.), Zinnatullin (N.Kh.), *4826*
- fluid-structure interaction, rotating disks, vibration (forced), viscous effects, Anikeev (G.I.), Blokhin (I.L.), (et al.), *6306*
- dies, materials processing, melting, polymers, Cheng (C.Y.), *6407*
- crack growth, dugdale model, micromechanics, optical techniques, polymers, Donald (A.M.), Kramer (E.J.), *7500*
- ignition, kinetics, metals, particles, Arutyunyan (A.B.), Kharatyan (S.L.), (et al.), *9747*
- ignition, kinetics, metals, particles, Grigorev (Yu.M.), Safaneev (D.Z.), *9748*
- damping, liquid metals, magneto fluid dynamics, surfactants, Gogosov (V.V.), Naletova (V.A.), (et al.), *9790*
- interface phenomena, liquid vapor interface, rotating fluids, two phase flow, Siekmann (J.), Johann (W.), *9877*
- additives, antiwear films, chemical reactions, fatigue, lubrication (elastohydrodynamic), rolling contact, wear, Sakurai (T.), *9961*
- critical flow, shear flow, viscous buckling, viscous flow, Suleiman (S.M.), Munson (B.R.), *11378*
- ferrous metals, liquid liquid interface, liquid metals, magneto fluid dynamics, Taktarov (N.G.), Bin (C.Z.), *11817*

Filshtinskii (L.A.), rotating disks, singular integral equations, Lyubchak (V.A.), *325*

- see Lyubchak (V.A.), *3249*

filters, discrete systems, mathematical models, Blyumin (S.L.), *136*

- discrete systems, nonlinear systems, Shapiro (E.I.), *144*
- estimation, mathematical models, Baram (Y.), *145*
- algorithms, holography, Krasnov (A.E.), *162*
- arrays, detection, estimation, radar, Chen (C.-C.), Andrews (H.C.), *195*
- optimal control, optimization, tracking, Kosut (R.L.), *196*
- discrete systems, inertial guidance, minimax techniques, Vathsal (S.), *200*
- acoustic measurements, acoustics, spectral analysis, Williams (J.R.), Ricker (G.G.), *1824*
- capillary flow, stokes flow, Gusinskii (G.M.), Kremer (E.B.), (et al.), *1868*
- adaptive systems, estimation, maximum principle, Skelton (R.E.), *2080*
- algorithms, control, guidance theory, terminal control, Zavadskii (V.K.), *2111*
- identification, minimax techniques, Kats (I.Ya.), Kurzhanskii (A.B.), *2141*
- estimation, optimization, Emelyanov (S.V.), Golembo (B.Z.), *2172*
- nonlinear analysis, probability, stochastic systems, Hempel (P.R.), *3106*
- adaptive systems, identification, stochastic systems, Kushner (H.J.), *3147*
- estimation, nonlinear methods, nonlinear systems, Kalachev (M.G.), Nikonov (V.G.), *3161*

- algorithms, binary signals, digital simulation, interpolation, Konkin (A.V.), Kulman (N.K.), *3191*
- estimation, identification, kalman filters, Leondes (C.T.), Siu (T.K.), *4218*
- algorithms, estimation, Bakan (T.M.), *4274*
- algorithms, stability theory, Salychev (O.S.), *4278*
- kalman filters, stability theory, tikhonov-correct problem, Podchukayev (V.A.), *4293*
- linear systems, optimal control, stochastic control, Uryupin (M.A.), *4295*
- correlation, estimation, iterative methods, Simkin (M.M.), *4313*
- interpolation, observers, stochastic processes, Grigorev (F.N.), Kurdoya (E.A.), *5057*
- acoustics, discrete systems, fourier transform, spectral analysis, Williams (J.R.), *5790*
- processing, seismic waves, Prasad (S.), Mahalanabis (A.K.), *5865*
- geomechanics, Kats (A.), Shubik (B.M.), *5888*
- pressure drop, pulsejets, Leith (D.), Ellenbecker (M.J.), *6995*
- design, kalman filters, optimization, wiener-hopf technique, Melnikov (B.G.), *9180*
- adaptive systems, nonlinear systems, nonlinear theory, Linzenkirchner (E.), *9193*
- algorithms, dynamic programming, image processing, nonlinear systems, signal processing, Scharf (L.L.), Elliott (H.), *11064*
- adaptive systems, distributed parameters, stochastic systems, Watanabe (K.), Yoshimura (T.), (et al.), *11084*
- aerosols, deposition, diffusion, fibers, Ingham (D.B.), *12051*

filtration, deposition, diffusion, particles, turbulent flow, Gaidukov (N.I.), *1842*
- differential equations (ordinary), heat transfer, injection, porous walls, Sergeev (G.T.), *4732*
- mixing, powders, Cardew (P.T.), *4836*
- darcy flow, hydrodynamics, oil removal, underground, Rasulov (M.A.), *4968*
- laminar flow, porous media, resistance, tube bundles, Kolodziej (J.A.), *5437*
- steam, Ganzha (V.L.), Zhuravskii (G.I.), *5817*
- porous media, Danilov (V.L.), *5900*
- granular media, hoppers, powders, Murfitt (P.G.), Bransby (P.L.), *6959*
- particle size, testing equipment, Bridgwater (J.), Cooke (M.H.), (et al.), *6998*
- chemical reactors, porous media, Ngoc (D.M.), *7006*
- mass flow, porous media, Vasilev (L.L.), Maiorov (V.A.), *8924*
- combustion, porous media, Aldushin (A.P.), Seplyarskii (B.S.), (et al.), *9757*
- combustion instability, oxidizers, porous media, Sukhov (G.S.), Yarin (L.P.), *9763*
- combustion, reactors, Stolyarova (N.N.), Sukhov (G.S.), (et al.), *9773*
- mathematical models, porous media, Golden (J.M.), *9888*
- darcy flow, immiscible fluids, porous media, Mircea (O.T.), *10837*
- granular media, heat transfer, mass transfer, Ganzha (V.L.), Zhuravskii (G.I.), *12050*

Filyand (L.V.), capillary flow, hydrodynamic stability, jets, liquids, *11531*

Finckh (H.H.), see Becker (B.), *10632*

Findeisen (W.), control, large scale systems, multivariable systems, optimization, Brdys (M.), (et al.), *4289*

Findley (W.N.), aluminum alloys, combined loading, creep, Lai (J.S.), *1411*
- see Cho (U.W.), *6174*

Fine (M.E.), see Izumi (Y.), *3441*

finishing, gear teeth, rolling, surface profiles, Ozaki (T.), Imamura (A.), *3574*
- abrasion, grinding, materials processing, tribology, Kunz (P.), *6411*

finite amplitude, acoustic waves, anisotropic media, rayleigh waves, Planat (M.), *398*
- bandwidth, experimental results, gravity waves, ocean waves, Larsen (L.H.), *661*
- solitary waves, surveys, wave interactions, Phillips (O.M.), *662*
- korteweg de vries equation, separated flow, transient effects, two phase flow, Banerjee (S.), Chan (A.M.C.), *940*
- existence theorems, gravity waves (solitary), wave height (greatest), Amick (C.J.), Toland (J.F.), *2702*
- gravity waves (surface), wave interactions, Demchenko (R.I.), Yakovlev (V.V.), *4655*
- boundary value problems, perturbation methods, plates, series expansion, Kayuk (Ya.F.), Alekseeva (M.K.), *4991*
- particulate flow, shock waves, unsteady state, Yamamoto (Y.), Kobayashi (S.), (et al.), *5486*
- dynamic analysis, elastoplasticity, imperfections, shells, Ishizaki (T.), Bathe (K.-J.), *7216*
- aerosols, heat transfer, plane waves, Borisov (A.A.), Vakhgelt (A.F.), (et al.), *7760*
- currents, floating bodies, gravity waves (surface), Flierl (G.R.), *8620*
- crack opening displacement, elasticity (nonlinear), nonlinear analysis, Knowles (J.K.), *9405*
- approximations (higher order), gravity waves (surface), highest wave, velocity profiles, Srokosz (M.A.), *9618*
- bifurcation, gravity waves, three dimensional formulation, Ma (Y.-C.), *11561*
- gravity waves (internal), gravity waves (solitary), liquid liquid interface, Koop (C.G.), Butler (G.), *11575*
- gravity waves (breaking), nonlinear analysis, Longuet-Higgins (M.S.), *11581*
- boussinesq equation, channels, gravity waves (solitary), Toland (J.F.), *11587*
- capillary waves, gravity waves (surface), surface tension, Hogan (S.J.), *11593*
- bifurcation, capillary waves, gravity waves (surface), Chen (B.), Saffman (P.G.), *11595*
- fluid-structure interaction, plates, waves, Hasegawa (E.), *11646*

finite difference methods, finite element techniques, mesh generation, plane strain, Kunar (R.R.), *55*
- boundary value problems, differential equations (ordinary), discrete systems, Chawla (M.M.), Katti (C.P.), *57*
- composite materials, conduction (steady), iterative methods, Charrier (J.M.), Gupta (R.), (et al.), *282*
- casting, cavities, finite element techniques, fluid injection, injection molding, Hieber (C.A.), Shen (S.F.), *549*
- cavities, internal flow, navier stokes equation, Glotz (G.), Schonauer (W.), (et al.), *570*
- stream function, viscous flow, vorticity, Cooke (C.H.), *583*
- compressible flow, euler equations, two dimensional flow, Hindman (R.G.), Kulter (P.), (et al.), *587*
- compressible flow, navier stokes equation, supersonic flow, Berezin (Yu.A.), Kovena (V.M.), (et al.), *589*
- cascades, compressible flow, thermodynamic processes, two dimensional flow, Thyagaraja (A.), *590*
- aerodynamics, counterflow, jets, Peck (R.E.), *630*
- diffusion, gases, navier stokes equation, stratified flow, Ukeguchi (N.), Okamoto (H.), (et al.), *825*
- convection (forced), oscillations, pressure drop, two phase flow, Akyuzlu (K.), Veziroglu (T.N.), (et al.), *947*
- forecasting, weather forecasting, Kalenkovich (E.E.), *989*
- meteorology (physical), Sadokov (V.P.), Kucherenko (I.K.), *990*
- coding, free boundary, hydrodynamics, Hirt (C.W.), Nichols (B.D.), *1115*
- approximations, inequalities, Singare (S.M.), Pachpatte (B.G.), *1117*
- mesh generation, survey, Liszka (T.), Orkisz (J.), *1124*
- beams, structural analysis, Jay (B.), *1445*
- channel flow, free boundary, one dimensional flow, open channels, unsteady flow, Maczuga (T.), *1501*
- airfoil characteristics, reynolds equation, stratification, trailing vortices, turbulent flow, vortices, wakes, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- navier stokes equation, rotating bodies, spherical bodies, viscous flow, Dennis (S.C.R.), Ingham (D.B.), (et al.), *1507*
- friction (skin), internal flow, rotating disks, viscous flow, Kullen (A.), *1510*
- compressible flow, computing techniques, navier stokes equation, Abarbanel (S.), Gottlieb (D.), *1526*
- hydrodynamic stability, taylor-gortler instability, wall jets, Kobayashi (R.), Fujisawa (N.), *1577*
- jets, turbulence, turbulence model, Leschziner (M.A.), Rodi (W.), *1581*
- flame holders, models, recirculation, Majumdar (S.), Bhaduri (D.), *1748*
- aquifers, finite element methods (hybrid), unsteady flow, Guvanasen (V.), Volker (R.E.), *1874*
- algorithms, elliptic equations, Hornby (R.P.), Barrow (H.), *2047*
- cracks, elastic behavior, j-integral, stress intensity factor, Vaikovskii (S.N.), Kurguzov (V.D.), *2432*
- crack propagation, j-integral, Early (P.W.), Burns (S.J.), *2439*
- buildings (tall), tokamak, walls, Liauw (T.-C.), Luk (W.-K.), *2539*
- circulation, estuaries, oceanography, two dimensional flow, Wang (D.-P.), Kravitz (D.W.), *2594*
- axisymmetric bodies, compressible flow, three dimensional flow, transonic flow, Chen (L.-T.), Caughey (D.A.), *2614*
- compressible flow, inviscid fluid, unsteady flow, Steger (J.L.), Warming (R.F.), *2621*
- compressible flow, one dimensional flow, viscous effects, Gadzhiev (A.D.), Pisarev (V.N.), *2624*
- boundary layer (thermal), computer programming, Bradeanu (D.), *2641*
- closed conduit flow, convection (free), heat transfer, laminar flow, transient effects, Vasseur (P.), Robillard (L.), *2799*
- heat transfer, mass transfer, slug flow, Antonini (G.), Guiffant (G.), *2855*
- axisymmetric flow, computing techniques, magneto fluid dynamics, turbulent flow, Mikelson (Yu.Ya.), Pavlov (S.I.), (et al.), *2876*
- atmospheric circulation, baroclinic instability, hydrodynamic stability, Dymnikov (V.P.), *3018*
- computing techniques, singular perturbations, Berger (A.E.), Solomon (J.M.), (et al.), *3117*
- conduction (steady), elliptic equations, heat transfer, implicit procedure, Schneider (G.E.), Zedan (M.), *3118*
- computing techniques, finite element techniques, mesh generation, modeling, Thacker (W.C.), *3122*
- cables, vibration (free), Luongo (A.), Rega (G.), *3350*
- channel flow, discharges, sediment transport, Pezzoli (G.), *3608*
- one dimensional flow, shallow water, tides, Stelling (G.S.), *3612*
- cylindrical bodies, internal flow, navier stokes equation, rotating disks, Schultz (D.H.), Shah (V.L.), *3621*
- cavities, discretizations, navier stokes equation, networks, Amit (R.), Hall (C.A.), (et al.), *3636*
- cascades, transonic flow, Kozel (K.), Petrovsky (I.), *3678*
- atmospheric circulation, weather forecasting, Penenko (V.V.), Obraztsov (N.N.), *4055*

- differential equations (ordinary), inequalities, integro differential equations, mathematical methods, Pachpatte (B.G.), *4170*
- estuaries, free boundary, hydraulics, lakes, water pollution, Fischer (H.B.) ed., *4577, book*
- internal flow, navier stokes equation, two dimensional flow, vorticity, Shay (W.A.), *4586*
- navier stokes equation, reynolds number (small), stream function, vorticity, Rubin (S.G.), Khosla (P.K.), *4588*
- discharges, elliptic equations, flow measurement, manifolds, Majumdar (A.K.), *4589*
- blunt bodies, shock waves, supersonic flow, Gustafsson (B.), Wahlund (P.), *4593*
- blunt bodies, shock waves, supersonic flow, Weilmuenster (K.J.), Graves (R.A.) Jr., *4594*
- boundary layer, laminar flow, navier stokes equation, separated flow, Horton (H.P.), *4614*
- circulation, ocean waves, oceanography, surface waves, Niemeyer (G.), *4862*
- eigenvalue problems, membranes, Kuttler (J.R.), *5006*
- membrane theory, shells, theory, Csonka (P.), *5156, book*
- beam columns, beams (variable cross section), buckling (variable section), Iremonger (M.J.), *5175*
- bending, numerical methods, plates, Atkatsh (R.S.), Baron (M.L.), (et al.), *5226*
- impingement, inviscid fluid, jets, plates, stagnation point, Rubel (A.), *5394*
- algorithms, free boundary, navier stokes equation, Bulgarelli (U.), Casulli (V.), (et al.), *5408*
- convergence, fluid mechanics, viscous flow, vortex flow, Krause (E.), *5409*
- navier stokes equation, numerical methods, spectral analysis, Roy (P.), *5410*
- compressible flow, shock waves, Anderson (J.D.) Jr., *5411, book*
- airfoils, compressible flow, transonic flow, unsteady flow, Kerlick (G.D.), Nixon (D.), *5417*
- compressible flow, euler equations, potential flow, transonic flow, Caughey (D.A.), *5420*
- buoys, dynamic analysis, force, sudden stop, Grossi (R.O.), Ercoli (L.), *5480*
- infiltration, porous media, Orasanu (M.), *5861*
- transonic flow, variational methods, Khosla (P.K.), Rubin (S.G.), *6084*
- conservation laws, dynamic analysis, hyperbolic equations, Harten (A.), Tal-Ezer (H.), *6086*
- beams, membranes, mesh generation, plates (folded), Mohr (G.A.), *6105*
- finite element techniques, galerkin method, peclet number, Smith (R.M.), *6120*
- bending (elastic), plates (simply supported), Kant (T.), *6233*
- cables, dynamic response, vibration (free), Rega (G.), Luongo (A.), *6287*
- channel flow, flood routing, reservoirs, Desikan (V.), Nath (S.C.), *6597*
- discharges, drainage, hydrographs, mathematical models, storage, Khan (S.I.), Takagi (F.), (et al.), *6599*
- conduits, ice mechanics, lakes, unsteady flow, Spring (U.), Hutter (K.), *6608*
- elliptic equations, interpolation, reynolds number (high), Han (T.), Humphrey (J.A.C.), (et al.), *6625*
- compressible flow, potential flow, transonic flow, Luo (S.J.), Zheng (Y.W.), (et al.), *6627*
- conduction, coordinate systems, Goldman (A.), Kao (Y.C.), *6794*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), reynolds equation, Pande (S.S.), Somasundaram (S.), *7098*
- boundary integral methods, computing techniques, differential equations (partial), galerkin method, iterative methods, surveys, Noye (J.) ed., *7180, book*
- marching procedures, mesh generation, navier stokes equation, parabolic equations, stability theory, Rubin (S.G.), *7191*
- approximation theory, error, finite element techniques, heat transfer, Stubley (G.D.), Raithby (G.D.), (et al.), *7196*
- energy methods, plates, Reipert (Z.), *7350*
- finite element techniques, heat transfer, two dimensional flow, Chung (K.C.), *7673*
- diffusion, separated flow, two dimensional flow, unsteady flow, vorticity, Porthouse (D.T.C.), Lewis (R.I.), *7678*
- boundary layer, navier stokes equation, parabolic equations, shear flow, Spradley (L.W.), Stalnaker (J.F.), (et al.), *7684*
- compressible flow, entropy, stability (numerical), transonic flow, Engquist (B.), Osher (S.), *7686*
- flow reversal, manifolds, Datta (A.B.), Majumdar (A.K.), *7725*
- blades, cascades, unsteady flow, Mitchell (N.A.), *7729*
- cascades, transonic flow, Daiguji (H.), Nozaki (A.), *7730*
- reactors, thermal effects, Stewart (H.B.), *7967*
- boundary value problems, differential equations (partial), finite element techniques, generalized coordinates, Schulz (B.), Wachter (J.), *8135*
- laplace equation, relaxation methods, Ponnuswamy (V.), *8138*
- composite structures, crack arrest, crack propagation, dynamic fracture, Williams (J.H.) Jr., Lee (S.S.), (et al.), *8409*
- embankments, nonlinear waves, reflection, wave interactions, Nasser (M.S.), *8511*
- boundary layer, plates, submerged bodies, turbulence model, Markatos (N.-C.G.), Wills (C.B.), *8537*
- simulation, vortex sheets, vortices, Bromilow (I.G.), Clements (R.R.), *8542*
- cavities, navier stokes equation, reynolds number (small), two dimensional flow, Gupta (M.M.), *8543*
- axisymmetric flow, compressible flow, internal combustion engines, reciprocating engines, turbulent flow, Ramos (J.I.), Humphrey (J.A.C.), (et al.), *8591*
- cascades, incompressible flow, separated flow, viscous flow, Luu (T.S.), Ta Phuoc Loc, *8593*
- conduction, convection, heat transfer (combined modes), Griffiths (D.F.), Christie (I.), (et al.), *8750*
- ablation, heat transfer, nucleate boiling, space vehicles, Sutton (G.W.), *8771*
- geothermal reservoirs, two phase flow, Moench (A.F.), *8930*
- geothermal reservoirs, two phase flow, Zyvoloski (G.A.), O'Sullivan (M.J.), *8932*
- convergence, mathematical methods, parabolic equations, Heron (B.), *9114*
- convection, diffusion, parabolic equations, stability (numerical), Morton (K.W.), *9126*
- approximation theory, continuum mechanics, lattices, Jaberolanssar (H.), Peddieson (J.) Jr., *9252*
- mathematical models, river beds, unsteady flow, Henriques (A.G.), *9508*
- mass transfer, oxygen, stratified flow, thermocline, Naito (K.), Nakamura (Y.), (et al.), *9509*
- cylindrical bodies, eddies, reynolds number (small), Smith (F.T.), *9540*
- boundary layer, convergence, finite element techniques, galerkin method, Soliman (M.O.), Baker (A.J.), *9573*
- shock waves, supersonic flow, three dimensional flow, Yamamoto (Y.), Karashima (K.), *9635*
- magneto plasma dynamics, mathematical models, nonlinear analysis, two dimensional flow, Schnack (D.), Killeen (J.), *9791*
- bearings (journal), computer aided design, lubrication (hydrodynamic), reynolds equation, thermal effects, Cowking (E.W.), *9964*
- acoustic waves, parabolic equations, underwater acoustics, wave equations, Lee (D.), Botseas (G.), (et al.), *10043*
- approximations, derivatives, Lau (P.C.M.), *10045*
- mathematical models, reservoirs, three dimensional formulation, wells, Trimble (R.H.), Mcdonald (A.E.), *10059*
- crack initiation, dynamic fracture, griffith cracks, plates (rectangular), Perl (M.), Shmuely (M.), (et al.), *10304*
- asymptotic methods, boundary layer, grids, supersonic flow, Rai (M.M.), Anderson (D.A.), *10414*
- airfoils, transonic flow, two dimensional flow, Chen (L.-T.), *10497*
- boundary value problems, computing techniques, Snell (C.), Vesey (D.G.), (et al.), *10938*
- navier stokes equation, oscillating bodies, spherical bodies, streams, Urakawa (T.), Takahashi (K.), *11365*
- blunt bodies, flow obstructions, navier stokes equation, unsteady flow, Daiguji (H.), Kobayashi (S.), *11385*
- compressible flow, numerical methods, Kuzmin (A.V.), Makarov (V.L.), (et al.), *11427*
- blunt bodies, compressible flow, inviscid fluid, shock layer, Srivastava (B.N.), Werle (M.J.), (et al.), *11428*
- compressible flow, dissociation, numerical methods, shock waves, Charakhchyan (A.A.), *11431*
- compressible flow, Popov (S.B.), Popov (Yu.P.), *11435*
- gravity waves (shallow water), tides, Henry (R.F.), *11579*
- channels, ships, three dimensional formulation, wave generation, Ohring (S.), *11580*
- perturbation theory, slender wings, transonic flow, wings, Van Der Vooren (J.), Huizing (G.H.), (et al.), *11729*

finite element methods (hybrid), boundary conditions, cracks, finite element techniques, Rhee (H.C.), Atluri (S.N.), *88*

- large displacement, shells (nonlinear), Boogershausen (H.), *324*
- mesh generation, seepage, surface flow, Bathe (K.-J.), Khoshgoftaar (M.R.), *1870*
- aquifers, finite difference methods, unsteady flow, Guvanasen (V.), Volker (R.E.), *1874*
- elasticity, interpolation, materials properties, Spilker (R.L.), *2061*
- crack tip geometry, fracture, notch sensitivity, singularities, Lin (K.Y.), Tong (P.), *2071*
- interpolation, plates (thick), stress analysis, Spilker (R.L.), Munir (N.I.), *2072*
- navier stokes equation, stability (numerical), variational methods, Letallec (P.), *2078*
- crack growth, crack tip geometry, elastoplasticity, fracture mechanics, Rice (J.R.), Drugan (W.J.), (et al.), *2441*
- cavities, heat transfer, two dimensional flow, Chen (C.-J.), Naseri-Neshat (H.), (et al.), *2605*
- boundary integral methods, soil structure interaction, Underwood (P.), Geers (T.L.), *3009*
- convection, least squares, viscous flow, Kanarachos (A.), *3144*
- finite strain, large displacement, shells (anisotropic), shells (sandwich), Chang (T.Y.), Sawamiphakai (K.), *3311*
- frames, nonlinear analysis, structural stability, Karamanlidis (D.), *3334*
- global approach, nonlinear analysis, rayleigh ritz method, Noor (A.K.), Peters (J.M.), *4196*
- higher order theories, hybrid element methods, plates, Spilker (R.L.), Munir (N.I.), *4379*
- bending, mesh generation, plates (thick), Cheung (Y.K.), Wong (P.M.), (et al.), *5029*

- finite element techniques, lagrange multiplier, variational methods, Wissmann (J.W.), Specht (B.), *5032*
- convergence, structural analysis, Spilker (R.L.), Daugirda (D.M.), *5035*
- acoustic waves, sound propagation, Fix (G.J.), Nicolaides (R.A.), *5787*
- heat transfer, nonlinear systems, time dependence, Chung (K.S.), *6121*
- energy methods, structural stability, Murakawa (H.), Reed (K.W.), (et al.), *6236*
- cracks, elastoplasticity, stress intensity factor, Kuna (M.), Bilek (Z.), (et al.), *6447*
- finite element methods, finite element techniques, mesh generation, structural analysis, Cheung (Y.K.), Yeo (M.F.), *7202*
- computer programming, computing techniques, conduction (unsteady), matrix methods, Chiatti (G.), Sestieri (A.), *7222*
- edge effects, laminates, Spilker (R.L.), *7304*
- boundary integral methods, stress analysis, Brady (B.H.G.), Wassyng (A.), *8150*
- computing techniques, laminates, plates (thick), Spilker (R.L.), *8226*
- fracture mechanics, nonlinear materials, three dimensional formulation, Atluri (S.N.), Nakagaki (M.), (et al.), *8420*
- elasticity, stress analysis, transformation, Nath (B.), *9139*
- finite element techniques, fluid mechanics, free boundary, sloshing, solitary waves, Wellford (L.C.) Jr., Ganaba (T.H.), *9146*
- approximations (polynomial), computing techniques, integration, isoparametric elements, Spilker (R.L.), Singh (S.P.), *10062*

finite element techniques, finite difference methods, mesh generation, plane strain, Kunar (R.R.), *55*

- coding, computer programming, finite element methods, modal analysis, nastran, programming, Schaeffer (H.G.), *75, book*
- eigenvalue problems, elasticity, lagrange multiplier, stability (numerical), Malkus (D.S.), *76*
- infinite medium, mesh generation, Bettess (P.), *77*
- mesh generation, plates, Stefanou (G.D.), Syrmakezis (K.), *78*
- elastoplasticity, mesh generation, substructuring, Anand (S.C.), Shaw (R.H.), *80*
- beams, error, mathematical methods, variational methods, Thomas (G.), *81*
- boundary value problems, collocation, parabolic equations, Hayes (L.J.), *82*
- plates, shells, structural analysis, survey, variational methods, Pian (T.H.H.), Tong (P.), *83*
- dynamic behavior, matrix methods, Okrouhlik (M.), *84*
- combined loading, cracks, fracture, stress intensity factor, Ishikawa (H.), *85*
- earthquakes, oscillations, Artikov (T.U.), Khuzhaev (A.), *86*
- free boundary, stress analysis, Allison (I.M.), Soh (A.K.), *87*
- boundary conditions, cracks, finite element methods (hybrid), Rhee (H.C.), Atluri (S.N.), *88*
- beams, mathematical models, Barrett (D.), Soler (A.), *89*
- crack opening displacement, stress intensity factor, three dimensional formulation, Tseng (A.A.), *90*
- coding, computer programming, computing techniques, interaction, Lewis (B.A.), Cross (M.), *91*
- composite structures, residual stresses, shells (of revolution), Blagonadezhin (V.L.), Dmitriev (A.V.), *92*
- geometric nonlinearities, ocean, pipelines, submerged bodies, three dimensional formulation, Odorizzi (S.), Schrefler (B.A.), *93*
- stability (numerical), strain softening, Pietruszczak (S.), Mroz (Z.), *94*
- convection, diffusion, heat transfer, Baliga (B.R.), Patankar (S.V.), *96*
- fluid mechanics, free boundary, incompressible flow, surface tension, Ruschak (K.J.), *97*
- conduction (unsteady), moving surfaces, nonlinear theory, Padovan (J.), *98*
- plane stress, stress concentration, structural optimization, Schnack (E.), *239*
- elastoplasticity, numerical methods, yield criteria, Tracey (D.M.), Freese (C.E.), *278*
- discontinuities, rayleigh waves, scattering, Fuyuki (M.), Matsumoto (Y.), *401*
- cracks, stress intensity factor, Blackburn (W.S.), Hellen (T.K.), *463*
- crack opening displacement, crack tip geometry, patching, Jones (R.), Callinan (R.J.), *473*
- crack opening displacement, stress intensity factor, testing equipment, Papaspyropoulos (V.), Ahmad (J.), *477*
- asymptotic behavior, crack propagation, stress intensity factor, Bazant (Z.P.), Cedolin (L.), *479*
- casting, cavities, finite difference methods, fluid injection, injection molding, Hieber (C.A.), Shen (S.F.), *549*
- conduction (heat), nonhomogeneous media, thermoelasticity, Lisitsyn (B.M.), Bulyga (K.G.), *921*
- helmholtz equation, two dimensional waves, Helps (J.D.), Daly (P.), *1084*
- boundary integral methods, mechanics, numerical analysis, *1113, book*
- geometric nonlinearities, material nonlinearities, stiffness matrix, structural analysis, Cook (R.D.), *1127, book*
- fluid mechanics, incompressible flow, newton method, viscous flow, Engelman (M.S.), Strang (G.), (et al.), *1128*
- elasticity, least squares, Zamani (N.G.), *1129*
- nonlinear mechanics, shock waves, time dependence, wave equations, Cella (A.), Lucchesi (M.), (et al.), *1130*
- mathematical models, scale effects, Dow (J.O.), Byrd (D.E.), *1131*
- bending, gear teeth, Reinhart (W.R.), Ferguson (R.J.), (et al.), *1132*
- membrane theory, mesh generation, stiffness matrix, Robinson (J.), *1133*
- elasticity, isoparametric formulation, stress analysis, three dimensional formulation, Surana (K.S.), *1134*
- axisymmetric loading, elasticity, shells (axisymmetric), Surana (K.S.), *1135*
- bridges (highway), linear theory, plates (stiffened), Maeda (Y.), Sera (M.), *1136*
- convection, diffusion, Keramidas (G.A.), *1139*
- large displacement, shells (nonlinear), Kanok-Nukulchai (W.), Taylor (R.L.), (et al.), *1240*
- energy, explosive loading, penetration, Tuft (D.B.), Murphy (M.J.), *1312*
- constitutive relations, extrusion, rate sensitivity, viscoplasticity, Tayal (A.K.), Natarajan (R.), *1339*
- crack opening displacement, creep, relaxation, Bassani (J.L.), Mcclintock (F.A.), *1387*
- fluid-structure interaction, nuclear reactors, numerical methods, Mcmaster (W.H.), Gong (E.Y.), (et al.), *1605*
- fluid-structure interaction, lumped systems, numerical methods, Bathe (K.J.), Sonnad (V.), *1608*
- circuits, sound fields, Kagawa (Y.), Yamabuchi (T.), *1798*
- porous media, upset forging, Petrosian (G.L.), Nersisian (G.G.), (et al.), *1875*
- foundations, soil structure interaction, substructuring, Dasgupta (G.), *1881*
- finite element techniques, mathematical programming, parabolic equations, stiffness matrix, Franke (R.), Salinas (D.), *2045*
- finite element techniques, mathematical programming, parabolic equations, stiffness matrix, Franke (R.), Salinas (D.), *2045*
- boundary value problems, elliptic equations, galerkin method, rayleigh ritz method, Schreiber (R.), Eisenstat (S.C.), *2058*
- computing techniques, integration, modes, Flanagan (D.P.), Belytschko (T.), *2059*
- differential equations (partial), mesh generation, Bernadou (M.), Hassan (K.), *2060*
- algorithms, matrices (sparse), mesh generation, George (A.), *2063*
- computing techniques, newton method, nonlinear analysis, Mansfield (L.), *2064*
- mesh generation, singularities, Hughes (T.J.R.), Akin (J.E.), *2065*
- computer programming, interpolation, Ball (A.A.), *2066*
- interpolation, mesh generation, Robinson (J.), Ward (P.), *2067*
- bending, interpolation, locking, matrix methods, mindlin plates, plates, shells, Tsach (U.), *2070*
- cylindrical bodies, singularities, stress analysis, Solecki (J.S.), Swedlow (J.L.), *2073*
- corners, crack opening displacement, cracks, singularities, Wait (R.), *2074*
- fluid-structure interaction, three dimensional formulation, Kulak (R.F.), *2075*
- computing techniques, thermal loading, Pittr (J.), Hartl (H.), *2076*
- deformation (plastic), elastoplasticity, forging, materials properties, Hartley (P.), Sturgess (C.E.N.), (et al.), *2394*
- crack propagation, dynamic fracture, elastic waves, Bilek (Z.), *2449*
- composite materials, fracture criteria, notch sensitivity, Backlund (J.), *2454*
- composite materials, notch sensitivity, shear loading, stress analysis, Herakovich (C.T.), Bergner (H.W.) Jr., *2455*
- composite materials, crack growth, micromechanisms, thermal effects, Braun (H.), Herrmann (K.), *2456*
- cracking, elastoplasticity, stress concentration, welding, Karppi (R.A.J.), Toyoda (M.), (et al.), *2461*
- fracture, fracture mechanics, prediction, structures, Belie (R.G.), Reddy (J.N.), *2463*
- fluid-structure interaction, plates, vibration, Aggarwal (K.R.), Sinhasan (R.), (et al.), *2714*
- eigenvalue problems, fluid-structure interaction, modal analysis, Daniel (W.J.T.), *2716*
- conduction (heat), transient effects, variable thermal properties, Keramidas (G.A.), *2821*
- bottom irregularities, ocean air interaction, shallow water, surge, Kawahara (M.), Nakazawa (S.), (et al.), *3023*
- computing techniques, finite difference methods, mesh generation, modeling, Thacker (W.C.), *3122*
- approximations, computing techniques, interpolation, isoparametric elements, Webster (W.D.) Jr., *3133*
- constraints, inelasticity, newton method, penalty function, Malkus (D.S.), *3134*
- isoparametric elements, matrix methods, three dimensional formulation, Gnuchii (Yu.B.), Kvitka (A.L.), (et al.), *3136*
- diffusion, inequalities, Neta (B.), *3137*
- inhomogeneities, micromechanics, polycrystalline materials, Kuksa (L.V.), Elmanovich (V.I.), *3140*
- bending, elasticity, Tananaiko (O.D.), *3141*
- convergence, flexible bodies, geometric nonlinearities, large displacement, Mohr (G.A.), Milner (H.R.), *3142*
- iterative methods, navier stokes equation, stream function, Dhatt (G.), Fomo (B.K.), (et al.), *3143*
- axisymmetric flow, navier stokes equation, two dimensional flow, Wille (S.O.), *3145*
- laminates, penalty function, plates (anisotropic), plates (sandwich), Reddy (J.N.), *3308*
- rotating disks, vibration (forced), Nigh (G.L.), Olson (M.D.), *3369*
- computing techniques, forming, plastic behavior, Erlmann (K.), Dung (N.L.), *3427*

- machining (electrochemical), tools, Jain (V.K.), Pandey (P.C.), *3429*
- computing techniques, dynamic fracture, stress intensity factor, viscoelastic materials, Aoki (S.), Kishimoto (K.), (et al.), *3476*
- fracture mechanics, stress intensity factor, three dimensional formulation, torsion, wedges, Tseng (A.A.), Berry (J.T.), *3477*
- bending elements, design (optimum), optimization, plates, Haftka (R.T.), Prasad (B.), *3516*
- airfoils, transonic flow, Marsh (J.E.), Eastep (F.E.), *3727*
- axisymmetric loading, boussinesq equation, infinite medium, Medina (F.), *4189*
- elasticity, mooney-rivlin materials, rubber elasticity, Ruas (V.), *4190*
- computer programming, gaussian integration, matrices, mesh generation, Jackson (C.P.), *4191*
- approximations, computer programming, higher order theories, shape functions, Wachspress (E.L.), *4192*
- simulation, singularities, Nayfeh (A.H.), Nassar (E.A.A.M.), *4193*
- laminates, shells (anisotropic), shells (of revolution), Venkatesh (A.), Rao (K.P.), *4194*
- elastic bodies, nonconservative systems, nonlinear analysis, Argyris (J.H.), Symeonidis (S.), *4197*
- bending elements, curved elements, plates, shape functions, triangular elements, Caramanlian (C.), *4198*
- boundary integral methods, internal combustion engines, stress strain relationships, Kvitka (A.L.), Voroshko (P.P.), (et al.), *4199*
- elasticity, finite strain, nonlinear characteristics, Malkus (D.S.), Fuller (E.R.) Jr., *4200*
- contact problems, dynamics, mesh generation, Asano (N.), *4202*
- computer programming, elastoplasticity, prandtl-reuss relations, Deb (S.R.), Barman (S.), (et al.), *4203*
- creep, elastoplasticity, shells, Levy (A.), *4353*
- plastic waves, rods, Yokoyama (T.), Tsuzuki (M.), *4446*
- crack growth, stress intensity factor, Nikishkov (G.P.), Vainshtok (V.A.), *4494*
- computing techniques, elastoplasticity, fracture, hardening, Hammel (J.W.), Bodisco (U.V.), (et al.), *4502*
- crack growth, crack initiation, crack opening displacement, Harrop (L.P.), *4503*
- oil wells, pressure distribution, Bennett (C.O.), Reynolds (A.C.) Jr., (et al.), *4841*
- barotropic models, oceanography, rotating fluids, Platzman (G.W.), *4872*
- first passage, galerkin method, particle dynamics, random excitation, stochastic systems, Bergman (L.A.), Heinrich (J.C.), *4985*
- computing techniques, integration, nonlinear systems, optimization, Schmid (H.J.), *5008*
- control-volume methods, galerkin method, poisson equation, Ramadhyani (S.), Patankar (S.V.), *5013*
- algorithms, computer programming, linear equations, matrix methods, Stabrowski (M.M.), *5017*
- computer programming, mesh generation, stiffness matrix, vibration, Hoa (S.V.), Sankar (S.), *5019*
- elliptic equations, iterative methods, linear equations, Bank (R.E.), *5023*
- crack opening displacement, fracture mechanics, singularities, Okabe (M.), *5024*
- helmholtz equation, membranes, variational methods, vibration, Laura (P.A.A.), Sarmiento (G.S.), (et al.), *5025*
- error, estimation, mesh generation, structural analysis, Kleiber (M.), *5028*
- reliability, stochastic systems, structural analysis, Contreras (H.), *5030*
- computer graphics, computing techniques, mesh generation, optimization, Shephard (M.S.), Gallagher (R.H.), (et al.), *5031*
- finite element methods (hybrid), lagrange multiplier, variational methods, Wissmann (J.W.), Specht (B.), *5032*
- elastica, mathematical methods, nonlinear characteristics, stability theory, stiffness matrix, Fried (I.), *5034*
- burgers equation, computing techniques, differential equations (ordinary), differential equations (partial), Caldwell (J.), Wanless (P.), (et al.), *5037*
- acoustics, computing techniques, survey, Fix (G.J.), Gunzburger (M.D.), *5038*
- contact problems, elastic bodies, variational methods, Nguyen Dang Hung, De Saxce (G.), *5093*
- bimodulus materials, composite materials, laminates, Reddy (J.N.), Chao (W.C.), *5128*
- beams (intersecting), elastic waves, Dockerty (G.J.), Leech (C.M.), *5235*
- deformation (finite), extrusion, forming, plasticity, Dung (N.L.), *5272*
- friction, mechanical properties, upset forging, Hartley (P.), Sturgess (C.E.N.), (et al.), *5275*
- fracture mechanics, multiple cracks, singularities, stress intensity factor, Staab (G.H.), Sun (C.T.), *5313*
- free boundary, seepage, Isaacs (L.T.), *5862*
- rivers, tides, Meissner (U.), *5901*
- propellers (marine), ships, vibration (flow induced), Skaar (K.T.), Carlsen (C.A.), *5970*
- dispersion, galerkin method, korteweg de vries equation, waves, Sanz-Serna (J.M.), Christie (I.), *6088*
- computing techniques, continuation methods, mesh generation, nonlinear mechanics, structural analysis, Rheinboldt (W.C.), *6089*
- helmholtz equation, membranes, variational methods, vibration, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *6097*
- heat transfer, hydroelasticity, structural analysis, *6102*
- diffraction, elliptic equations, hydrodynamics, infinite medium, Jami (A.), Polyzakis (M.), *6103*
- mesh generation, plane stress, semi infinite media, singularities, Shephard (M.S.), Gallagher (R.H.), (et al.), *6104*
- computer programming, graphical methods, mathematical methods, mesh generation, Haber (R.), Shephard (M.S.), (et al.), *6106*
- fracture mechanics, singularities, Okabe (M.), *6107*
- bending, dynamic analysis, plates, Garnet (H.), Crouzet-Pascal (J.), (et al.), *6109*
- approximations (polynomial), interpolation, mathematical methods, Hoppe (V.), *6110*
- convection, diffusion, one dimensional flow, Varoglu (E.), Finn (W.D.L.), *6112*
- computing techniques, integration, triangular elements, Reddy (C.T.), Shippy (D.J.), *6113*
- contact problems, elastic behavior, Sachdeva (T.D.), Ramakrishnan (C.V.), (et al.), *6114*
- elastoplasticity, residual stresses, Arkhipov (A.N.), Temis (Yu.M.), *6116*
- failure, nonlinear analysis, nonlinear materials, rotors, turbines, Nyssen (C.), *6118*
- burgers equation, diffusion, initial value problems, Varoglu (E.), Finn (W.D.L.), *6119*
- finite difference methods, galerkin method, peclet number, Smith (R.M.), *6120*
- elasticity (linear), splines, Boyer (J.C.), Trompette (P.), *6171*
- shells (thin), thin walled structures, Idelsohn (S.), *6232*
- elastoplasticity, nonlinear theory, plates (nonlinear), Gobetti (A.), *6234*
- dynamic loads, shells (of revolution), Feijoo (R.A.), Jospin (R.J.), (et al.), *6235*
- nonlinear structures, postbuckling behavior, Wellford (L.C.) Jr., Dib (G.M.), *6240*
- large displacement, viscoelastic materials, Guelin (P.), Nowacki (W.K.), (et al.), *6337*
- experimental methods, jet streams, Van Thiel (M.), Levatin (J.), *6367*
- contact problems, elastodynamics, Doi (O.), Asano (N.), *6369*
- interfaces, rocks, Pande (G.N.), Sharma (K.G.), *6404*
- elliptical cracks, plates (holed), stress intensity factor, Grandt (A.F.) Jr., *6445*
- harbors, nonlinear waves, shallow water, tsunami, Lepelletier (T.G.), *6609*
- coatings, film flow, navier stokes equation, viscous flow, Saito (H.), Scriven (L.E.), *6616*
- compressible flow, stability (numerical), transonic flow, Wellford (L.C.) Jr., Hafez (M.M.), *6629*
- closure, valves, water hammer, Watt (C.S.), Hobbs (J.M.), (et al.), *6700*
- fluidstructure interaction, frequency domain techniques, Combescure (A.), Gibert (R.J.), (et al.), *6705*
- convection, diffusion, Heinrich (J.C.), *6808*
- dynamics, eigenvalue problems, structural analysis, Papadrakakis (M.), *7194*
- approximation theory, error, finite difference methods, heat transfer, Stubley (G.D.), Raithby (G.D.), (et al.), *7196*
- computer programming, linear equations, Dessi (M.), Priolo (P.), *7197*
- finite element methods, finite element methods (hybrid), mesh generation, structural analysis, Cheung (Y.K.), Yeo (M.F.), *7202*
- finite element methods, integration, mathematical methods, Okabe (M.), *7203*
- interpolation, plates, splines, Qu (S.-N.), *7204*
- differential equations (ordinary), numerical analysis, sturm-liouville problem, Babuska (I.), Rheinboldt (W.C.), *7205*
- boundary elements, holes, infinite medium, mesh generation, mining, Beer (G.), Meek (J.L.), *7206*
- curved elements, shells, shells (shallow), slabs, Mohr (G.), *7207*
- automobiles, computer programming, stiffness matrix, structural analysis, Tang (S.C.), Yeung (K.S.), (et al.), *7208*
- contact problems, friction (rolling), rolling contact, Zeid (I.), Padovan (J.), *7210*
- blades, impact, jet engines, solid solid interface, Brown (K.W.), Krahula (J.L.), *7211*
- beams (curved), isoparametric elements, plates (stiffened), shells (thick), stiffened structures, Jirousek (J.), *7212*
- stress concentration, thermoelasticity, Gibert (P.), Gorge (Y.), *7213*
- composite structures, plates (holed), wood structures, Wilkinson (T.L.), Rowlands (R.E.), (et al.), *7214*
- analogies, deformable bodies, rigid bodies, structural analysis, Grabski (J.), *7215*
- creep, nonlinear analysis, shear, stiffness matrix, Nguyen Dang Hung, *7218*
- biomechanics, fluid mechanics, peristaltic flow, Stavitsky (D.), Macagno (E.O.), (et al.), *7219*
- computer programming, fluid mechanics, mesh generation, triangular elements, Kleinstreuer (C.), Holdeman (J.T.), *7220*
- hydrodynamics, matrix methods, simulation, Walters (R.A.), *7221*
- composite materials, heat transfer, mass transfer, porous media, Strada (M.), Lewis (R.W.), *7224*
- heat transfer, newton method, nonlinear analysis, Hogge (M.A.), *7225*
- geometric nonlinearities, shells (nonlinear), Hughes (T.J.R.), Liu (W.K.), *7337*
- pipes, shells (nonlinear), Lazzeri (L.), *7346*
- penalty function, shells, Mohr (G.A.), *7348*
- shells (thin), stiffness matrix, Mohr (G.A.), *7349*
- cracks, j-integral, Ranaweera (M.P.), Leckie (F.A.), *7514*
- elliptical cracks, flaws, stress intensity factor, Newman (J.C.) Jr., Raju (I.S.), *7518*

- crack growth, crack opening displacement, fracture, j-integral, microcracks, reinforced concrete, Petersson (P.-E.), *7539*
- critical flow, spillways, variational methods, O'Carroll (M.J.), *7654*
- contamination, dispersion, lakes, water pollution, Salmon (J.R.), Liggett (J.A.), (et al.), *7661*
- finite difference methods, heat transfer, two dimensional flow, Chung (K.C.), *7673*
- galerkin method, navier stokes equation, reynolds number (small), viscous flow, Heinrich (J.C.), Marshall (R.S.), *7679*
- characteristic methods, euler equations, vorticity, Bardos (C.), Bercovier (M.), (et al.), *7680*
- boundary layer, galerkin method, mesh generation, steps, viscous flow, Leone (J.M.) Jr., Gresho (P.M.), *7713*
- containers (partially filled), fluid-structure interaction, seismic loading, storage, Liu (W.K.), *7768*
- three dimensional flow, turbomachinery, Haas (W.), Keck (H.), *7801*
- conduction (heat), nonlinear analysis, numerical methods, Schreyer (H.L.), *7857*
- fluid mechanics, porous media, streamlines, Christian (J.T.), *7981*
- diffusion, elastic bodies, porous media, Kanok-Nukulchai (W.), Suaris (V.W.), *7997*
- seismic loading, soil structure interaction, Ushijima (R.), Kausel (E.), *8017*
- boundary value problems, differential equations (partial), finite difference methods, generalized coordinates, Schulz (B.), Wachter (J.), *8135*
- mindlin plates, nonlinear analysis, Hughes (T.J.R.), Tezduyar (T.E.), *8144*
- computing techniques, fourier series, matrix methods, structural analysis, Wang (L.), *8145*
- matrix methods, substructuring, Mucino (V.H.), Pavelic (V.), *8146*
- computing techniques, digital simulation, dirichlet problem, iterative methods, Korneev (V.G.), Kuzmenko (V.G.), *8147*
- composite materials, harmonic waves, layered media, variational methods, Minagawa (S.), Nemat-Nasser (S.), (et al.), *8148*
- mesh generation, moving loads, Padovan (J.), Zeid (I.), *8149*
- disks, dynamic analysis, fourier series, Srinivasan (V.), Ramamurti (V.), *8152*
- beams (open section), beams (thin section), geometric nonlinearities, space frames, three dimensional formulation, Minozzi (D.), Odorizzi (S.), (et al.), *8153*
- computing techniques, plates (parallel), stress analysis, Zollinger (M.), *8154*
- mesh generation, shells (thick), structural design, thermal diffusion, Baldur (R.), *8156*
- beams, distributed systems, lumped systems, Surana (K.S.), *8230*
- beams (timoshenko), numerical methods, Tessler (A.), Dong (S.B.), *8236*
- beams (composite), composite materials, Hirst (M.J.S.), Yeo (M.F.), *8237*
- shells (nonlinear), shells (shallow), Mansfield (L.), *8256*
- beams (continuous), buckling, elastic foundations, framed structures, shafts, Bagci (C.), *8261*
- conical bodies, deformation (plastic), impact, plasticity, time dependence, Chiesa (M.L.), Callabresi (M.L.), *8342*
- cracks, cyclic loading, fatigue, plastic behavior, Billardon (R.), Brunet (M.), (et al.), *8370*
- crack propagation, cracks, dynamic analysis, Mall (S.), *8421*
- cascades, transonic flow, Akay (H.U.), Ecer (A.), *8589*
- blades, cascades, transonic flow, Deconinck (H.), Hirsch (C.), *8590*
- convection (free), enclosure flow, mathematical models, stream function, vorticity, Reddy (J.N.), Satake (A.), *8726*
- boundary elements, thermoelasticity (transient), Tanaka (M.), Tanaka (K.), *8889*
- convection (free), porous media, Diersch (H.-J.), *8945*
- convection, flood flow, Jaffre (J.), *8947*
- aquifers, coasts, infiltration, porous media, Das Gupta (A.), Arbhabhirama (A.), *8971*
- shallow water, tides, Platzman (G.W.), *8972*
- collapse, icebreakers, nonlinear analysis, ship structures, Hakala (M.K.), *9005*
- convergence, interpolation, mesh generation, Babuska (I.), Szabo (B.), *9128*
- computing techniques, integration, optimization, Pesno (A.), *9129*
- acoustics, boundary elements, infinite medium, Felippa (C.A.), *9130*
- matrices (sparse), solid mechanics, stiffness matrix, Sloan (S.W.), *9131*
- coding, computer graphics, Gordon (J.J.), Goodzeit (C.L.), *9135*
- plates, stiffness matrix, vibration, Pedersen (P.), Cederkvist (J.), *9136*
- plane stress, plates (stiffened), ship structures, Mukhopadhyay (M.), *9140*
- nonlinear structures, shells (nonlinear), Hughes (T.J.R.), Liu (W.K.), *9141*
- conduction (heat), differential equations (partial), elasticity, Gibert (P.), Gorge (Y.), *9142*
- beams, three dimensional formulation, Resende (L.), Doyle (W.S.), *9143*
- cable supported structures, curved surfaces, nonlinear structures, Jayaraman (H.B.), Knudson (W.C.), *9144*
- nonlinear materials, stiffness matrix, Traven (F.), *9145*
- finite element methods (hybrid), fluid mechanics, free boundary, sloshing, solitary waves, Wellford (L.C.) Jr., Ganaba (T.H.), *9146*
- boussinesq equation, conservation laws, fluid mechanics, Cliffe (K.A.), *9147*
- hydrodynamic stability, poiseuille flow, Li (Y.S.), Kot (S.C.), *9148*
- dynamic behavior, guyan reduction, thermal sciences, Bushard (L.B.), *9150*
- computing techniques, nonlinear theory, Banaszek (J.), Staniszewski (B.), *9151*
- elastoplasticity, fracture criteria, Beremin (F.M.), *9409*
- composite materials, computing techniques, crack growth, microcracks, Ito (Y.M.), Rosenblatt (M.), (et al.), *9418*
- dams, earthquake effects, pressure, reservoirs, Saini (S.S.), *9514*
- boundary layer, convergence, finite difference methods, galerkin method, Soliman (M.O.), Baker (A.J.), *9573*
- aeroelasticity, blades, helicopters, rotors, Straub (F.K.), Friedmann (P.P.), *9806*
- galerkin method, probability theory, weighted residual methods, Bergman (L.A.), Heinrich (J.C.), *10033*
- convergence, korteweg de vries equation, Arnold (D.N.), Winther (R.), *10064*
- approximations (polynomial), interpolation, mesh generation, Okabe (M.), *10065*
- algorithms, computer programming, optimization, Hua (B.-H.), *10066*
- interpolation, potential flow, Wu (E.-R.), *10067*
- elastoplasticity, elbows, pipes, Lazzeri (L.), *10068*
- computer programming, computing techniques, propagation, wave equations, Okrouhlik (M.), *10069*
- computing techniques, incompressible flow, numerical analysis, Griffiths (D.F.), *10070*
- data analysis, existence theorems, galerkin method, navier stokes equation, penalty function, Sani (R.L.), Gresho (P.M.), (et al.), *10072*
- conduction (unsteady), random loading, stability theory, Tasaka (S.), *10073*
- brittle materials, materials properties, Erdei (C.K.), *10134*
- collapse, numerical methods, plasticity, Marti (J.), Cundall (P.), *10183*
- computer programming, cracks, pipes, stress intensity factor, three dimensional formulation, Miyazaki (N.), Watanabe (T.), (et al.), *10284*
- biaxial loading, holes, multiple cracks, stress intensity factor, Oladimeji (M.K.), *10295*
- crack opening displacement, dynamic response, stress intensity factor, yield criteria, Betser (A.A.), Kobayashi (A.S.), (et al.), *10302*
- channel flow, holes, plates (holed), viscoelastic fluids, Richards (G.D.), Townsend (P.), *10445*
- cascades, compressible flow, rotating disks, Shirahata (H.), Daiguji (H.), *10451*
- axisymmetric flow, hydraulic machinery, incompressible flow, swirl flow, viscous flow, Bar-Yoseph (P.), Blech (J.J.), (et al.), *10533*
- convection, numerical methods, Donea (J.), Giuliani (S.), *10588*
- bending, membrane theory, shear loading, tanks, Royles (R.), Sofoluwe (A.B.), *11114*
- shells (cylindrical), shells (stiffened), Thomas (I.T.), Webber (J.P.H.), *11117*
- elastodynamics, harmonic waves, Murakami (H.), Shioya (S.), (et al.), *11173*
- cascades, compressible flow, transonic flow, Ecer (A.), Akay (H.U.), *11393*
- cascades, compressible flow, transonic flow, Akay (H.U.), Ecer (A.), *11404*
- compressible flow, navier stokes equation, shear layer, supersonic flow, unsteady flow, Cooke (C.H.), Blanchard (D.K.), *11429*
- estuaries, liquid liquid interface, tides, Kawahara (M.), Morihira (M.), (et al.), *11609*
- boundary conditions, estuaries, gravity waves (shallow water), Walters (R.A.), Cheng (R.T.), *11611*
- boundary elements, containers (partially filled), sloshing, Nakayama (T.), Washizu (K.), *11640*
- bodies (liquid filled), dams, fluid-structure interaction, Altinisik (D.), Karadeniz (H.), (et al.), *11649*
- fluid-structure interaction, nuclear reactors, reactor core, thermal effects, Bennett (J.G.), Ju (F.D.), *11658*
- containers (partially filled), seismic loading, sloshing, Aslam (M.), *11662*
- gravity waves (surface), integral methods, Mattioli (F.), *11692*
- gravity waves (shallow water), integration (semi-implicit), Malone (F.D.), Kuo (J.T.), *11693*
- boundary value problems, hyperbolic equations, initial value problems, stability (numerical), Winther (R.), *11694*
- ducts, ducts (variable area), sound propagation, Baumeister (K.J.), *11933*
- machinery, noise, radiation, Thompson (B.S.), *11943*
- acoustics, energy methods, noise abatement, perforated bodies, Ross (D.F.), *11987*

finite strain, imperfections, plane strain, shear bands, shear stress, Abeyaratne (R.), Triantafyllidis (N.), *231*
- deformation (finite), elasticity (nonlinear), stability, Sawyers (K.N.), Rivlin (R.S.), *232*
- constitutive equations, deformation (finite), deformation (plastic), Neale (K.W.), *1197*
- computing techniques, elastoplasticity, Nagtegaal (J.C.), De Jong (J.E.), *2232*
- cylindrical bodies, elastoplasticity, expansion, strain softening, Berest (P.), Nguyen (M.D.), *3262*
- membranes, Fenner (W.J.), Wu (C.H.), *3304*
- finite element methods (hybrid), large displacement, shells (anisotropic), shells (sandwich), Chang (T.Y.), Sawamiphakai (K.), *3311*
- elasticity, finite element techniques, nonlinear characteristics, Malkus (D.S.), Fuller (E.R.) Jr., *4200*
- deformation (finite), elasticity (nonlinear), Aleksandrov (A.Ya.), Shushunov (V.V.), *4332*
- beams (anisotropic), beams (flexural), beams (torsional), plates (anisotropic), Reissner (E.), *4365*
- membranes, plane stress, wrinkling, Wu (C.H.), Canfield (T.R.), *4369*
- crystals, elastic constants, Milstein (F.), *5085*

- membranes, theory, Yin (W.-L.), *5157*
- bending, shells (nonlinear), theory, Pietraszkiewicz (W.), *5161*
- constitutive equations, elastoplasticity, plasticity, Sidoroff (F.), *7281*
- beams (open section), beams (thin section), stability, Roberts (T.M.), *8231*
- creep, elastoplasticity, pressure vessels, Betten (J.), *8254*

Finkel (V.M.), acoustic emission, crack propagation, fracture, pressure vessels, shear, Muravin (G.B.), (et al.), *3506*
- see Golovin (Yu.I.), *5087*

Finkelstein (L.), obscuration, radiant interchange, shape factors, visualization, Weissman (Y.), *6806*

Finlayson (B.A.), see Jensen (O.K.), *10694*

Finn (R.), capillary flow, laplace equation, meniscus, *8520*

Finn (W.D.L.), see Varoglu (E.), *6112*
- see Varoglu (E.), *6119*

Finnie (I.), see Misra (A.), *1928*

fins, heat exchangers, heat transfer, transient effects, Senshu (T.), Hatada (T.), (et al.), *763*
- augmentation, heat exchangers, Webb (R.L.), *785*
- convection, heat transfer, transforms, unsteady flow, Aziz (A.), Na (T.Y.), *1703*
- conduction (heat), convection, convection (free), Sparrow (E.M.), Acharya (S.), *1709*
- conduction (heat), convection, extended surfaces, heat transfer, Sparrow (E.M.), Hsu (C.F.), *1715*
- augmentation, condensation, convection (forced), heat exchangers, Webb (R.L.), *2827*
- condensation, heat exchangers, tubes, Rifert (V.G.), *2843*
- augmentation, convection, heat transfer, laminar flow, tubes, Soliman (H.M.), Chau (T.S.), (et al.), *3786*
- perturbation methods, transient effects, Aziz (A.), Na (T.Y.), *3817*
- extended surfaces, heat transfer, perturbation methods, variable thermal properties, Aziz (A.), Na (T.Y.), *3822*
- extended surfaces, heat transfer, laminar flow, pipe flow, Sparrow (E.M.), Charmchi (M.), *4699*
- extended surfaces, heat exchangers, pressure drop, tube bundles, Rabas (T.J.), Eckels (P.W.), (et al.), *4719*
- cooling, extended surfaces, heat addition, Toth (K.), *4720*
- duct flow, fredholm equations, magneto fluid dynamics, velocity profiles, Ariel (P.D.), Aggarwala (B.D.), *5672*
- extended surfaces, heat transfer, melting, solidification, Batheit (A.G.), Viskanta (R.), *7853*
- extended surfaces, heat transfer (combined modes), integral methods, Heggs (P.J.), Ingham (D.B.), (et al.), *7858*
- concrete, convection (forced), energy storage, solar energy, Ortega (J.K.E.), Bingham (C.E.), (et al.), *7863*
- evaporation, heat exchangers (crossflow), otec evaporator, pressure drop, transient loading, Chapman (M.C.), Heydt (G.T.), *7867*
- duct flow, friction factor, heat transfer, turbulent flow, Scott (M.J.), Webb (R.L.), *8613*
- convection, extended surfaces, grashof number, laminar flow, Acharya (S.), Patankar (S.V.), *9684*
- biofilm fouling, extended surfaces, flow obstructions, fouling, heat exchangers, Chenoweth (J.M.) eds., Impagliazzo (M.), *8754*
- approximation methods, design criteria, extended surfaces, heat exchangers, Kern (J.), *8757*
- augmentation, extended surfaces, tube bundles, turbulent flow, Carnavos (T.C.), *8758*
- missiles, numerical methods, shock layer, supersonic flow, Wardlaw (A.B.) Jr., Solomon (J.M.), *9551*
- heat addition, heat pipes, radiant interchange, radiators, space vehicles, Furukawa (M.), *9735*
- aerodynamic interference, hypersonic flow, pressure distribution, projectiles, sabot discard, wind tunnels, Schmidt (E.M.), *10517*
- aerodynamic interference, launching, projectiles, trajectories, Schmidt (E.M.), *10519*
- channel flow, cylindrical bodies, extended surfaces, heat transfer, Vanfossen (G.J.), *10621*
- absorption, air conditioning, dehumidifying system, drying, evaporated films, film flow, low temperature, Peng (C.S.P.), Howell (J.R.), *10641*
- dynamic analysis, shells (cylindrical), shells (stiffened), vibration (free), Palamarchuk (V.G.), *11136*
- augmentation, cylindrical pin fins, extended surfaces, heat transfer, optimization, Sonn (A.), Bar-Cohen (A.), *11771*

Finston (R.), control, design, propulsion, space vehicles, Spicer (L.M.), *6853*

Fiorina (M.A.), see Balmer (R.T.), *11497*

Fiorito (R.), acoustic waves, elastic bodies, resonance, wave interactions, Madigosky (W.), (et al.), *4779*
- see Madigosky (W.), *4787*
- acoustics, resonance, viscoelastic fluids, Madigosky (W.), (et al.), *5738*

fire, crossflow, mathematical models, two dimensional flow, Luti (F.M.), *843*
- models, pyrolysis, slabs, wood, Holve (D.J.), Kanury (A.M.), *10717*

fire control, jets, trajectories, Hatton (A.P.), Osborne (M.J.), *2670*
- boundary value problems, fire spread, forest fires, Cekirge (H.M.), *5642*
- fire spread, mathematical models, methane, Quintiere (J.G.), Rinkinen (W.J.), (et al.), *9778*

fire spread, boundary value problems, fire control, forest fires, Cekirge (H.M.), *5642*
- combustion, flame propagation, ignition, solid propellants, Andoh (E.), Mizomoto (M.), (et al.), *6845*
- combustion, flame propagation, pyrolysis, sublimation, Frenandez-Pello (A.C.), Mao (C.-P.), *6846*
- flame propagation, forest fires, mathematical models, stefan problem, Fujii (N.), Hasegawa (J.), (et al.), *6847*
- forest fires, mathematical models, Anderson (D.H.), Catchpole (E.A.), (et al.), *9777*
- fire control, mathematical models, methane, Quintiere (J.G.), Rinkinen (W.J.), (et al.), *9778*

Fireteanu (V.), cylindrical bodies, liquid metals, magneto fluid dynamics, nonlinear systems, pumps, *6865*

Firoozbakhsn (K.), constitutive equations, continuum theory, granular media, micromechanics, Ahmadi (G.), *5097*

Firsukov (A.A.), see Melkanovich (A.A.), *7582*

Firt (V.), holes, hovercraft, membranes, *310*

Fischer (E.E.), see Jain (S.C.), *6601*

Fischer (H.B.) ed., estuaries, finite difference methods, free boundary, hydraulics, lakes, water pollution, *4577, book*

Fischer (J.), computer programming, digital simulation, dynamic analysis, Gerhardt (H.-D.), (et al.), *10058*

Fischer (K.-F.), crack initiation, crack propagation, fracture criteria, *7467*

Fischer (S.), see Wagner (H.D.), *10128*

Fiscko (K.A.), see Wentz (W.H.) Jr., *3730*

Fish (P.R.), damping, design, drag, dynamic response, fluid-structure interaction, offshore structures, Dean (R.B.), (et al.), *3559*

Fishbein (B.D.), afterburners, injection, oxygen, turbofan engines, *5662*

Fishbein (V.D.), see Gorelov (G.M.), *11748*

Fisher (D.G.), see Seborg (D.E.), *205*
- see Inoue (A.), *4314*

Fisher (E.H.), aerodynamic interference, cascades, centrifugal compressors, diffusers, rotors, Inoue (M.), *9670*

Fisher (F.E.), see Faupel (J.H.), *4330, book*

Fisher (G.), see Stepanishen (P.R.), *12010*

Fisher (J.), see Davies (J.M.), *6229*

Fisher (L.), see Judge (G.W.), *1957*

Fisher (S.S.) ed., compressible flow, kinetic theory, rarefied gases, *8554, book*

Fisher (U.), see Mang (Kh.), *9138*

Fishman (G.M.), see Reznikov (L.M.), *9179*

Fishman (L.), composite materials, continuum mechanics, smoothing of data, Mccoy (J.J.), *3276*

Fitzgerald (S.D.), jets, liquid liquid interface, mixing, pipe flow, Holley (E.R.), *11492*

Fitzpatrick (J.A.), dynamic properties, random loading, vibration (random), *5192*

Fitzsimmons (R.D.), flight tests, jet engines, noise abatement, Mckinnon (R.A.), (et al.), *11993*

Fix (G.J.), acoustics, computing techniques, finite element techniques, survey, Gunzburger (M.D.), *5038*
- acoustic waves, finite element methods (hybrid), sound propagation, Nicolaides (R.A.), *5787*

Flack (R.D.), closed conduit flow, convection (free), heat transfer, interferometry, Konopnicki (T.T.), (et al.), *756*
- closed conduit flow, convection (free), heat addition, *2798*
- see Leader (M.E.), *3047*
- experimental mechanics, flexible bodies, rotating shafts, vibration (forced), Leader (M.E.), (et al.), *4433*

Flamand (L.), gears, lubrication (elastohydrodynamic), oil films, rolling contact, wear, Foucher (D.), (et al.), *1027*
- see Berthe (D.), *1931*
- contact stresses, fatigue, gears (spur), hardness, surfaces, Berthe (D.), (et al.), *2562*
- see Houpert (L.), *8064*

flame holders, flames, laser doppler velocimeters, stabilization, Fujii (S.), Eguchi (K.), *837*
- finite difference methods, models, recirculation, Majumdar (S.), Bhaduri (D.), *1748*
- combustors, design, gas turbines, vaporization, Plee (S.L.), Mellor (A.M.), *1767*
- asymptotic methods, combustion, one dimensional flow, Bobrova (N.R.), Burkina (R.S.), (et al.), *2861*
- boron, combustion instability, Clarke (J.F.), Mcintosh (A.C.), *6840*

flame propagation, powdered fuels, suspensions, Shevchuk (V.G.), Goroshin (S.V.), (et al.), *836*
- combustion, kinetics, thermodynamics, vessels, Babkin (V.S.), Babushok (V.I.), (et al.), *1742*
- flow obstructions, methane, turbulence, Moen (I.O.), Donato (M.), (et al.), *1745*
- burning velocity, excitation, radiation, Clements (R.M.), Smith (R.D.), (et al.), *2860*
- spectral analysis, turbulent flow, Gokalp (I.), Lasek (A.), *2864*
- combustion, cracks, solid propellants, Kumar (M.), Kovacic (S.M.), (et al.), *2866*
- laminar flow, mixtures, numerical analysis, Aldushin (A.P.), Zeldovich (Ya.B.), (et al.), *3860*

- chemical kinetics, mathematical models, reaction kinetics, Matkowsky (B.J.), Olagunju (D.O.), *4738*
- dust, explosions, thermal diffusion, Nomura (S.I.), Tanaka (T.), *6839*
- combustion, fire spread, ignition, solid propellants, Andoh (E.), Mizomoto (M.), (et al.), *6845*
- combustion, fire spread, pyrolysis, sublimation, Frenandez-Pello (A.C.), Mao (C.-P.), *6846*
- fire spread, forest fires, mathematical models, stefan problem, Fujii (N.), Hasegawa (J.), (et al.), *6847*
- hot wire, modeling, spark ignition engines, Arques (P.), *6849*
- coal, combustion, dust, pyrolysis, Krazinski (J.L.), Buckius (R.O.), (et al.), *7880*
- combustion, flow measurement, premixed fuel air, Gololobov (I.M.), Granovskii (E.A.), (et al.), *9749*
- convection (free), extinguishment, Krivulin (V.N.), Kudryavtsev (E.A.), (et al.), *9750*
- mathematical models, pressure distribution, Deshaies (B.), Leyer (J.C.), *9752*
- combustion (oscillatory), Ermolaev (B.S.), Sulimov (A.A.), (et al.), *9759*
- combustion, wave equations, Ivleva (T.P.), Merzhanov (A.G.), (et al.), *9764*
- particles, suspensions, Shevchuk (V.G.), Kondratev (E.N.), (et al.), *9768*
- combustion, time dependence, Zeldovich (Y.), *10699*
- flames (turbulent), models, spark ignition engines, Tabaczynski (R.J.), Trinker (F.H.), (et al.), *10700*
- chemical kinetics, flames (laminar), Lovachev (L.A.), *10704*
- flames (laminar), hydrodynamic stability, thermal instability, Zeldovich (Ya.B.), *11782*
- burning rate, inert gases, oxidizers, porous media, Lebedev (A.D.), Sokolov (A.S.), *11791*

flames, flame holders, laser doppler velocimeters, stabilization, Fujii (S.), Eguchi (K.), *837*
- combustion products, mathematical models, methanol, quenching, spark ignition engines, Browning (L.H.), Pefley (R.K.), *840*
- combustion, interaction, jets, schlieren methods, transition, Yule (A.J.), Chigier (N.A.), (et al.), *841*
- measurements, pneumatic components, temperature, Kishimoto (K.), *845*
- combustion chambers, cooling, gas turbines, Sudarev (A.V.), *846*
- detection, ionization, spectral analysis, Nicholson (A.J.C.), Swingler (D.L.), *1750*
- boundary layer, plates, velocity profiles, Garo (A.), Puechberty (D.), (et al.), *1757*
- burners, porous surfaces, Bystrova (T.V.), Librovich (V.B.), *2862*
- combustors, radiation, soot formation, Claus (R.W.), *3869*
- chemical kinetics, models, two dimensional flow, Bracco (F.V.), O'Rourke (P.J.), *4737*
- furnaces, heat transfer, models, radiant interchange, Mastryukov (B.S.), *5639*
- models, radiation, soot, Gouesbet (G.), *6842*
- blowoff, mathematical models, methane, viscous flow, Mikolaitis (D.), Buckmaster (J.), *9755*
- models, Peters (N.), *9756*
- boundary layer, jets, plates, Gateau (P.), Puechberty (D.), (et al.), *9758*
- burners, stabilization, Matkowsky (B.J.), Olagunju (D.O.), *10701*
- gas solid interface, methane, Blint (R.J.), Bechtel (J.H.), *10702*
- combustion products, methane, mixtures, quenching, Fukuda (M.), Korematsu (K.), (et al.), *11794*

flames (diffusion), numerical analysis, pyrolysis, solid fuels, Feng (C.C.), Tien (J.S.), *835*
- hydrogen, kinetics, Allison (R.A.), Clarke (J.F.), *1741*
- hydrogen, jets, Kennedy (I.M.), Kent (J.H.), *1744*
- flames (turbulent), models, Kolbe (W.), Kollmann (W.), *1746*
- natural gas, recirculation, Hatami (R.), *1749*
- heat transfer, Petela (R.), Wilk (K.), (et al.), *3863*
- combustion, lasers, scattering, spectral analysis, Bard (S.), Pagni (P.J.), *3878*
- combustion, electrical properties, jets, Kidin (N.I.), Makhviladze (G.M.), *5633*
- chemical kinetics, exhaust gases, methane, nitric oxide, Mitchell (R.E.), Sarofim (A.F.), (et al.), *5635*
- combustion, hydrogen, methane, turbulent flow, Annushkin (Yu.M.), Maslov (G.F.), *6835*
- burners, combustion, swirl, Hellat (J.), Gunther (R.), *6836*
- kinetics, thermal effects, Mataion (M.), Ludford (G.S.S.), *7879*
- kinetics, mathematical models, Allison (R.A.), Clarke (J.F.), *9751*
- combustion (unsteady), diesel engines, stochastics, Ikegami (M.), Shioji (M.), *10710*
- ionization, reaction zone, Ahlheim (M.), Gunther (R.), *10718*
- ignition, kinetics, laminar mixing, Law (C.K.), Law (H.K.), *11780*
- hydrodynamic stability, thermal diffusion, thermal instability, Joulin (G.), Mitani (T.), *11783*
- combustion products, soot formation, Nishida (O.), *11795*

flames (laminar), combustion (turbulent), models, Libby (P.A.), Bray (K.N.C.), (et al.), *1740*
- drops, evaporation, Harpole (G.M.), *3848*
- mathematical models, nonlinear theory, Matkowsky (B.J.), Putnick (L.J.), (et al.), *3859*
- chemically reactive flow, combustion, mathematical models, numerical methods, Oran (E.S.), Boris (J.P.), *6833*
- combustion instability, mathematical models, thermal effects, Aldushin (A.P.), Kasparyan (S.G.), *7881*
- burning velocity, chemical kinetics, methane, Rallis (C.J.), Garforth (A.M.), *8791*
- chemical kinetics, flame propagation, Lovachev (L.A.), *10704*
- flame propagation, hydrodynamic stability, thermal instability, Zeldovich (Ya.B.), *11782*

flames (turbulent), combustion instability, Sivashinsky (G.I.), Matkowsky (B.J.), *838*
- flames (diffusion), models, Kolbe (W.), Kollmann (W.), *1746*
- models, premixed fuel air, Libby (P.A.), *1747*
- exhaust gases, methane, Moreau (P.), Borghi (R.), *2868*
- coaxial jets, combustion, Kimoto (K.), Shiraishi (I.), (et al.), *3861*
- models, premixed fuel air, Ballal (D.R.), *3862*
- chemical kinetics, combustion, reaction rates, Yoshida (A.), Gunther (R.), *6837*
- chemical kinetics, combustors, statistical mechanics, velocity profiles, Moreau (P.), *6838*
- flame propagation, models, spark ignition engines, Tabaczynski (R.J.), Trinker (F.H.), (et al.), *10700*
- combustion (turbulent), noise, noise (combustion), turbulent flow, Legendre (R.), *10705*

flammability, bolted joints, creep, metallic constructions, Aribert (J.M.), Riaux (H.), *1437*
- moisture, textiles, Zeronian (S.H.), Ellison (M.S.), (et al.), *2867*
- combustion, ignition, textiles, Miller (B.), Martin (J.R.), (et al.), *4739*
- burning rate, combustion, ignition, textiles, Reeves (W.A.), Hammons (M.A.), (et al.), *6834*

Flamme (J.M.), see Debailleux (C.), *12095*

Flanagan (D.P.), computing techniques, finite element techniques, integration, modes, Belytschko (T.), *2059*
- relaxation methods, structural response, vibration (free), Belytschko (T.), *5196*

Flanagan (R.P.), moving source, sound generation, sound propagation, Weinberg (N.L.), *918*

flanges, beams (prestressed), design (optimum), effective widths, Adekola (A.O.), *3284*
- design criteria, machine elements, pressure vessels, Waters (E.O.), Schneider (R.W.), *3570*
- beam columns, beams (variable cross section), buckling (plastic), buckling (torsional), frames, Lee (G.C.), Hsu (T.L.), *5174*
- bolted joints, connections, contact stresses, design, Jofriet (J.C.), Sze (Y.), (et al.), *7635*
- bolted joints, pipes, pressure vessels, Blach (A.E.), Bazergui (A.), *8464*

flaps, airfoil characteristics, delta wings, drag, leading edge, vortex flaps, Marchman (J.F.) III, *683*
- aerodynamic performance, mathematical models, wings, Ovchinnikov (V.A.), Osorgin (V.D.), (et al.), *2736*
- airfoils, incompressible flow, potential flow, vortex sheets, Zaitsev (A.A.), Komarov (A.M.), *3728*
- airfoil characteristics, pressure distribution, Wentz (W.H.) Jr., Fiscko (K.A.), *3730*
- airfoils, compressible flow, viscous flow, Oskam (B.), *6719*
- aerodynamic performance, delta wings, drag, lift, Mattick (A.A.), Stollery (J.L.), *10498*

Flaschka (H.), averaging, inverse method, korteweg de vries equation, mathematical methods, Forest (M.G.), (et al.), *1086*

flashback, combustion (turbulent), combustion instability, combustors, Keller (J.O.), Vaneveld (L.), (et al.), *9754*

Flatte (S.M.), see Esswein (R.), *1799*

flaw detection, elastic waves, electromagnetic loading, nondestructive tests, ultrasonics, Remezov (V.B.), Shkariet (Yu.M.), *499*
- aluminum alloys, ingots, material testing, titanium, ultrasonics, Zavyalova (N.S.), Grishina (V.M.), (et al.), *501*
- cracks, magnetic field, nondestructive tests, Edwards (C.), Palmer (S.B.), *1418*
- microprocessors, nondestructive tests, ultrasonics, welded joints, Rose (J.L.), Nestleroth (J.B.), (et al.), *2481*
- fatigue, fracture, microcracks, surface flaws, Verpoest (I.), Aernoudt (E.), (et al.), *2503*
- defects, inspection, temperature, thermal measurements, Vavilov (V.P.), Gorbunov (V.I.), *2504*
- cracks, nondestructive tests, pressure vessels, radiography, welded joints, x ray techniques, Ruescher (E.H.), Graber (H.C.), *3507*
- bars, eddy currents, surface flaws, wires, Stumm (W.), *3508*
- acoustic properties, reflection, ultrasonics, Haines (N.F.), Langston (D.B.), *3940*
- cracks, spectral analysis, vibration (nonlinear), Wedig (W.), Brautgam (H.), *5205*
- casting, radiography, welded joints, x ray techniques, Closier (M.J.), *5318*
- inspection, nondestructive tests, ultrasonics, Grebennik (V.S.), Taits (M.Z.), *5336*
- cracking, experimental methods, instruments, magnetic field, testing equipment, Luz (H.), *5338*
- deformation, finite element methods, holography, inhomogeneities, interferometry, nondestructive tests, Wachutka (H.), Kordisch (H.), (et al.), *5339*
- defects, nondestructive tests, transducers, Lange (Yu.V.), *6488*

- defects, spectral analysis, surface flaws, ultrasonics, Vopilkin (A.Kh.), Ermolov (I.N.), (et al.), *6492*
- cracks, fatigue, pipes, reflection, threaded joints, Lyapkov (A.A.), Spektorov (I.Sh.), *6494*
- cracks, fatigue, thermography, Rantsevich (V.B.), *6496*
- bonded joints, dispersion, interference, layered media, Budenkov (G.A.), (et al.), *6497*
- cracking, hydrogen embrittlement, steel, Szilard (J.), Haynes (R.), *7561*
- glass fibers, laminates, liquid crystals (cholesteric), nondestructive tests, thermography, Williams (J.H.), Mansouri (S.H.), (et al.), *7574*
- composite materials, laminates, liquid crystal, thermography, Wilson (D.W.), Charles (J.A.), *7576*
- algorithms, frequency domain techniques, transducers (ultrasonic), ultrasonics, Cleveland (D.), Mucciardi (A.N.), *7578*
- delamination, inclusions, nondestructive tests, thermography, Williams (J.H.) Jr., Mansouri (S.H.), (et al.), *7579*
- stainless steel, ultrasonics, welded joints, Tomlinson (J.R.), Wagg (A.R.), (et al.), *7580*
- harmonic analysis, nondestructive tests, transducers (ultrasonic), Pokrovskii (A.D.), *7581*
- cracks, time domain techniques, ultrasonics, welded joints, Silk (M.G.), Lidington (B.H.), (et al.), *7583*
- algorithms, defects, frequency domain techniques, ultrasonics, Cleveland (D.), Barron (A.R.), (et al.), *7584*
- acoustic measurements, j-integral, microstructures, nondestructive tests, residual stresses, stress intensity factor, Kino (G.S.), Barnett (D.M.), (et al.), *7586*
- acoustic measurements, echos, nondestructive tests, plates, Golubev (A.S.), Verevkin (V.M.), (et al.), *8435*
- ceramics, cracks, gas turbines, photoacoustic microscopy, surface flaws, Inglehart (L.J.), Thomas (R.L.), (et al.), *9435*
- acoustic emission, computing techniques, newton method, nondestructive tests, Vasilev (A.M.), Maslov (B.Ya.), *10317*
- acoustic measurements, composite materials, fracture, Frolov (D.I.), Kilkeev (R.Sh.), (et al.), *10319*
- acoustics, machinery, noise measurements, Chaturvedi (G.K.), Thomas (D.W.), *10374*
- diagnostics, gear trains, transmissions, vibration, Randall (R.B.), *11338*

flaws, drawing, forming, sheet metal, Ghosh (S.K.), *2400*
- fracture, permeability, rocks, Goodman (R.E.), Sundaram (P.N.), *4834*
- composite materials, damage (cumulative), delamination, structural stability, Bolotin (V.V.), Zebelyan (Z.Kh.), (et al.), *6241*
- elliptical cracks, fracture mechanics, transfer functions, Chang (R.), *6460*
- ceramics, crystals, grinding, polycrystalline materials, strength, Rice (R.W.), Mecholsky (J.J.), (et al.), *7469*
- elliptical cracks, finite element techniques, stress intensity factor, Newman (J.C.) Jr., Raju (I.S.), *7518*
- experimental mechanics, fatigue, fracture, pipes, Shibata (K.), Oba (T.), (et al.), *7620*
- cracks, fracture mechanics, nozzles, pressure vessels, reactor structures, Atluri (S.N.), Kathiresan (K.), *9463*
- fracture mechanics, multiple cracks, nondestructive tests, Chang (R.), *10285*

Flax (L.), acoustics, cylindrical bodies, resonance, scattering, spherical bodies, Dragonette (L.R.), (et al.), *907*
- acoustics, elastic bodies, resonance, scattering, sound fields, Raju (P.K.), (et al.), *2935*

Flechner (S.G.), see Langhans (R.A.), *3736*

Fleming (D.P.), bearings, dynamics, rotors, turbomachinery, *8068*

Fletcher (A.M.), see Amin (W.M.), *3070*

Fletcher (N.H.), see Thwaites (S.), *2669*
- jets, sound fields, sound propagation, Thwaites (S.), *5768*

Fletcher (R.), approximations, cost control, heat equation, optimal control, quadratic programming, Harley (P.J.), *9100*
- approximations, mathematical methods, optimization, Sinclair (J.W.), *10053*
- see Coope (I.D.), *11081*

Fleury (C.), design (optimum), structural optimization, Schmit (L.A.), *505*
- design (minimum weight), elastic behavior, *4524*

Fleury (F.), sound propagation, suspensions, *6923*

flexibility, fluoroscopy, inspection, nondestructive tests, x ray techniques, Lee-Prampton (J.B.), *2502*
- balancing, impedance, rotors, Shimada (K.), Miwa (S.), *6558*
- lubrication (hydrostatic), seals, squeeze films, vibration, Etsion (I.), Dan (Y.), *7639*
- dynamic analysis, finite element methods, linkages, matrices, mechanisms (spatial), Sunada (W.), Dubowsky (S.), *7629*

flexible bodies, rotating bodies, rotating shafts, stability theory, Samsonov (V.A.), *13*
- dynamic analysis, satellites, Lips (K.W.), Modi (V.J.), *1067*
- fibers, surveys, textiles, tires, yarn, Hearle (J.W.S.) eds., Thwaites (J.J.), (et al.), *1214, book*
- beams, finite element methods, optimal control, Schaechter (D.B.), *2123*
- control, space vehicle structures, Asner (B.A.) Jr., Seltzer (S.M.), *2924*
- bearings (journal), lubrication (hydrodynamic), rotors, Leader (M.E.), Flack (R.D.), (et al.), *3047*
- convergence, finite element techniques, geometric nonlinearities, large displacement, Mohr (G.A.), Milner (H.R.), *3142*
- shafts, shells (cylindrical), strength, Mizoguchi (K.), Shirakawa (K.), (et al.), *3285*
- asymptotic behavior, large displacement, rods, Olshevsky (K.U.), *3288*
- dynamic properties, structural response, vibration, Wodzicki (W.), *3349*
- attitude control, riccati equation, space vehicle structures, Fenton (J.), Gill (K.F.), *3921*
- experimental mechanics, rotating shafts, vibration (forced), Flack (R.D.), Leader (M.E.), (et al.), *4433*
- conical bodies, deformation, pressure distribution, supersonic flow, wedges, Belyaev (N.M.), Khrushch (V.K.), *4585*
- artificial satellites, cables, space vehicle structures, tethered systems, Weber (R.), Wehrli (R.), *4758*
- buried structures, finite element methods, pipes, underground, Moser (K.), Swoboda (G.), *5260*
- design (optimum), high speed, mechanisms, Cleghorn (W.L.), Fenton (R.G.), (et al.), *5377*
- artificial satellites, damping, gravitational stabilization, lyapunov's functions, Hablani (H.B.), Shrivastava (S.K.), *6886*
- distributed parameters, estimation, strings, Schaechter (D.B.), *7239*
- computing techniques, launching, rockets, spinning bodies, Weeks (G.E.), Cost (T.L.), *7922*
- control, rotating shafts, vibration isolation, Stanway (R.), Burrows (C.R.), *8318*
- bending, critical speed, rotating bodies, vibration (forced), Markert (R.), *8320*
- balancing, machine design, rotors, variable mass, vibration, Cveticanin (L.J.), *8476*
- aerodynamic performance, airplanes, dynamic loads, modeling, structural response, Perry (B.) III, Kroll (R.I.), (et al.), *8647*
- artificial satellites, attitude control, modal control, space vehicle structures, Sellappan (R.), Bainum (P.M.), *8947*
- adaptive systems, modal control, space vehicle structures, Johnson (C.R.) Jr., *8949*
- dynamic behavior, modes, space vehicle structures, vibration, Hablani (H.B.), *9309*
- oscillating bodies, piles, vortex shedding, waves, Angrilli (F.), Cossalter (V.), *9512*
- dynamic response, rigid bodies, stiffness matrix, Huston (R.L.), *10012*
- perturbation methods, rotating cylinders, vibration, Lakin (W.D.), Nachman (A.), *10198*
- balancing, dynamic response, rotating shafts, Van De Vegte (J.), *10217*
- balancing, dynamic response, rotating shafts, torque, Markert (R.), Pfutzner (H.), (et al.), *10220*
- axial flow, cylindrical bodies, oscillations, resonance, slender bodies, Paidoussis (M.P.), Issid (N.T.), (et al.), *10765*
- balancing, dynamic analysis, rotating shafts, Shiohata (K.), Fujisawa (F.), *11146*
- bearings, damping, rotors, squeeze films, vibration isolation, Cookson (R.A.), Kossa (S.S.), *11340*
- fluid-structure interaction, membranes, strouhal number, two dimensional flow, Newman (B.G.), Low (H.T.), *11632*
- hulls, ocean waves, wave loads, Bishop (R.E.D.), Price (W.G.), (et al.), *12084*

flexible walls, aorta, blood flow, pulsatile flow, shock waves, Forbes (L.K.), *1041*
- cables, nonlinear analysis, numerical analysis, offshore structures, pipes, Peyrot (A.H.), *1216*
- aorta, elastic constants, heart, pressure measurement, pulsatile flow, Gross (D.R.), Hunter (J.F.), (et al.), *4916*
- aerodynamic interference, automobiles, blockage, models, wind tunnels, Stafford (L.G.), *5513*
- aerodynamic interference, control, influence coefficients, wind tunnels, Dowell (E.H.), *5514*
- blood flow, compressional waves, pulsatile flow, viscoelastic fluids, Kaimal (M.R.), *6020*
- pipe flow, porous walls, unsteady flow, Ohki (M.), *7719*
- biomechanics, blood flow, fluid-structure interaction, muscles, navier stokes equation, Melbin (J.), Noordergraaf (A.), *8073*
- blood flow, closed conduit flow, flexural waves, Bonis (M.), Ribreau (C.), *8074*
- automatic control, transonic flow, two dimensional flow, wind tunnels, Goodyer (M.J.), Wolf (S.W.D.), *8670*
- laser doppler velocimeters, transonic flow, wind tunnels, Davis (S.S.), *9680*
- dispersion relation, ducts, water hammer, Tait (R.J.), Moodie (T.B.), (et al.), *11604*
- axial waves, compressional waves, pulsatile flow, Bauer (H.F.), Metten (S.), (et al.), *11607*
- collapse, compressional waves, ducts (variable area), supercritical flow, Kececioglu (I.), Mcclurken (M.E.), (et al.), *11608*
- compressional waves, duct flow, propagation velocity, Amenzade (R.Yu.), *11631*
- bodies (liquid filled), compressional waves, ducts, Barclay (D.W.), Moodie (T.B.), (et al.), *11661*
- containers (partially filled), containment, nuclear reactors, toroids, Lu (S.C.H.), Mccauley (E.W.), (et al.), *11674*
- pipe flow, unsteady flow, viscoelastic materials, Regirer (S.A.), Rutkevich (I.M.), *11690*

flexural loading, beams (flexural), cyclic loading, plastic behavior, Lyubarov (B.I.), *7319*
- beams (prestressed), buckling, variational methods, Wauer (J.), *8229*

flexural waves, dynamic response, shells (cylindrical), vibration, wave engines, Fuller (C.R.), *374*
- acoustic waves, baffles, vibration, Ko (S.-H.), Sherman (C.H.), *915*
- baffles, barriers, viscoelastic materials, wave absorbers, Ko (S.-H.), *4764*
- beams, dynamic stresses, vibration, Hirano (Y.), Nagaya (K.), (et al.), *5204*
- acoustic waves, dynamic stresses, plates, reflection, shear, wave equations, Dubbelday (P.S.), Rudgers (A.J.), *5209*
- dispersion, path integrals, Brazier-Smith (P.R.), Butler (D.), (et al.), *6322*
- bifurcation, impact, plastic waves, rods, Lee (L.H.N.), *7419*
- blood flow, closed conduit flow, flexible walls, Bonis (M.), Ribreau (C.), *8074*

flexure, boundary integral methods, plates, Bezine (G.), *303*
- buckling, buckling (local), torsion, Wang (S.T.), Pao (H.Y.), *334*
- beams (cantilever), vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), *366*
- dynamic analysis, plates (isotropic), vibration (free), Voyiadjis (G.Z.), Baluch (M.H.), *368*
- holes, inclusions, plates (perforated), strips, Buryshkin (M.L.), *1182*
- elastic foundations, plates (orthotropic), plates (rectangular), Prakash (B.G.), *1227*
- measurements, plates, sensitivity, strain measurement, Stepanov (V.V.), Lanin (A.G.), (et al.), *1413*
- gears, hardness, strength, Bazhenov (V.G.), Kravchenko (A.A.), (et al.), *1471*
- columns, punch problems, reinforced concrete, slabs, strength, Gesund (H.), Goli (H.B.), *3532*
- elastoplasticity, plastic behavior, shells (cylindrical), shells (shallow), Kolesnik (I.A.), Troshin (V.G.), *4372*
- plates (rectangular), semi infinite media, Ramachandra Rao (B.S.), Prakash (B.G.), *5155*
- foundations, soils, Selvadurai (A.P.S.), *5257*
- dynamic analysis, plates (circular), vibration (free), Komissarova (G.L.), *7389*
- bending, ice, strength, Timco (G.W.), *7565*
- axial loading, design (ultimate strength), hydraulic structures, reinforced concrete, Liu (T.C.), Gleason (S.), *7609*
- beams, dynamic response, thin walled structures, vibration (forced), Voveris (A.V.), Kalinin (V.S.), *8296*
- airfoils, beams (cantilever), torsion, Wang (K.-F.), *9259*
- shells, shells (long), torsion (plastic), Tikhomirov (V.V.), *9265*
- aluminum alloys, correlation, endurance limit, fatigue, steel, ultimate strength, Stepnov (M.N.), Evstratova (S.P.), (et al.), *10330*

Flick (R.E.), experimental results, gravity waves (breaking), nonlinear waves, sloping bottom, Guza (R.T.), (et al.), *1611*

Flierl (G.R.), see Mcwilliams (J.C.), *4856*
- bottom irregularities, ocean air interaction, oceanography, stratification, stratified flow, *4867*
- currents, finite amplitude, floating bodies, gravity waves (surface), *8620*
- eddies, vortices, Larichev (V.D.), (et al.), *8979*
- see Fu (L.-L.), *11549*

flight, aerodynamic performance, helicopters, rotors, Azuma (A.), Saito (S.), (et al.), *6732*
- balance system, flying platforms, gliders, models, strain gages, wing body combinations, Ramachandra (S.M.), *8651*
- airplane performance, propellers, Laitone (E.V.), *10508*
- jet engines, sound generation, turbulent flow, Obermeier (F.), *11959*

flight (unsteady), aerodynamic interference, ground effect, jets, moving surfaces, vtol, Kamman (J.H.), Hall (C.L.), (et al.), *9668*

flight control, design, optimal control, Govindaraj (K.S.), Rynaski (E.G.), *193*
- airplanes, control, simulation, vtol, Tinling (B.E.), Cole (G.L.), *1166*
- landing devices, state space techniques, vtol, Guy (C.R.), *1627*
- adaptive systems, control, stol, Nikiforuk (P.N.), Ohta (H.), (et al.), *2157*
- airplanes, digital control, fly-bywire system, navigation, reliability analysis, Berman (H.), Boudreau (J.), *2159*
- airplanes, design, side-force control, Binnie (W.B.), Stengel (R.F.), *2160*
- design, vtol, Lebacqz (J.V.), Radford (R.C.), *2161*
- variable-bend body, Larkin (W.J.), Thomas (M.), *2164*
- design, flutter, optimal control, Newsom (J.R.), *2180*
- digital control, helicopters, Stengel (B.F.), Broussard (J.R.), (et al.), *2195*
- aerodynamic performance, airplanes, flutter, wind tunnels, Winther (B.A.), Shirley (W.A.), (et al.), *4326*
- airplanes, lateral stability, space shuttle, stochastics, Stengel (R.F.), *4672*
- computing techniques, data analysis, stochastic processes, Maine (R.E.), Iliff (K.W.), *6885*
- airplanes, control, lateral stability, longitudinal stability, stability, Etkin (B.), *8646, book*
- airplanes, control surfaces, design, equations of motion, mathematical models, Paljaruci (G.), *11733*

flight loads, airplane performance, digital control, sampled data systems, Keskar (D.A.), Slater (G.L.), *1626*

flight path, airplane performance, control, performance, Ivanov (V.V.), Sirazetdinov (T.K.), *691*
- airplanes, optimization, rockets, supersonic flow, wing body combinations, Large (E.), *4671*
- airplanes, fuel economy, optimization, simulation, Wauer (J.C.), Bruckner (J.M.H.), (et al.), *6729*
- airplanes, fuel economy, optimization, subsonic flow, Large (E.), *8644*

flight stability, airships, design, helicopters, rotors, Nagabhushan (B.L.), Tomlinson (N.P.), *7799*

flight tests, airplane performance, spin recovery, wind tunnels, Tischler (M.B.), Barlow (J.B.), *692*
- control, helicopters, Sinclair (M.), Morgan (M.), *1629*
- porous walls, vortices, wakes, wings, Smith (H.C.), *2730*
- control, stol, Hindson (W.S.), Hardy (G.H.), (et al.), *3735*
- ballistics (exterior), missiles, subsonic flow, Whyte (R.H.), Winchenbach (G.L.), (et al.), *6722*
- aerocrane, cranes, helicopters, lift, lifting bodies, models, Curtiss (H.C.) Jr., Putman (W.F.), *8650*
- airplane performance, design, leading edge, spin recovery, wind tunnels, Dicarlo (D.J.), Stough (H.P.) III, (et al.), *10512*
- jet engines, noise abatement, Fitzsimmons (R.D.), Mckinnon (R.A.), (et al.), *11993*

floating bodies, attenuation, breakwater, mooring, wave loads, Yamamoto (T.), *526*
- cylindrical bodies, free boundary, heaving, singular integral equations, singularities, Ursell (F.), *4099*
- channel flow, cylindrical bodies, drag coefficient, free boundary, froude number, Zein (S.A.A.), *5388*
- design, flow measurement, pulsatile flow, unsteady flow, Maki (H.), Ikeda (Y.), *5508*
- fluid-structure interaction, plates, shear, vibration (forced), Suvorov (A.M.), Cherkesov (L.V.), *6297*
- elastic bodies, fluid-structure interaction, gravity waves (finite depth), plates, Bukatov (A.E.), *7770*
- currents, finite amplitude, gravity waves (surface), Flierl (G.R.), *8620*
- cylindrical bodies, diffraction, elastic bodies, gravity waves (surface), Kudryavtsev (E.P.), *8625*
- diffraction, energy conversion, ocean waves, Haren (P.), Mei (C.C.), *9013*
- dynamic response, ship structures, Kaul (M.K.), *9460*
- dispersion, gravity waves (surface), oscillatory flow, visualization, Ergin (A.), *9633*
- design (optimum), mooring, Jones (H.L.), Nelson (J.K.) Jr., *10343*
- bodies of revolution, capsules, dynamic analysis, pipelines, rafts, rivers, Ginevskii (A.S.), Kolesnikov (A.V.), *11387*
- gravity waves (surface), oscillating bodies, wave generation, Martin (P.A.), *11585*
- ocean waves, oscillating bodies, wave energy, wave engines, Masubuchi (M.), Shinomiya (Y.), *11638*
- gravity waves (surface), oscillating bodies, ships, Kyozuka (Y.), Yoshida (K.), *11644*
- oscillating bodies, wave absorbers, wave energy, Evans (D.V.), *11645*
- cylindrical bodies, damping, virtual mass, Yeung (R.W.), *11654*
- breakwater, gravity waves, transmission, Stiassnie (M.), *11673*
- damping, gravity waves (surface), virtual mass, Falnes (J.), *11675*
- cylindrical bodies, gravity waves (finite depth), virtual mass, waves (long), Sayer (P.), *11681*
- gravity waves (finite depth), heaving, integral methods, oscillating bodies, Sayer (P.), *11682*

floating structures, offshore structures, Smedley (G.P.), *528*
- plates (circular), roofs, tanks, Epstein (H.I.), *3317*
- dynamic response, offshore structures, random loading, wave loads, Etok (E.U.), Kirk (C.L.), *3556*
- drift, nonlinear analysis, wave loads, Pinkster (J.A.), *3714, book*
- elastic bodies, mooring, wave interactions, Yamamoto (T.), Yoshida (A.), (et al.), *4100*
- bridges, dynamic analysis, stochastic processes, wave loads, Langen (I.), Sigbjornesson (R.), *5356*
- dynamic analysis, Naftzger (R.A.), Chakrabarti (S.K.), *8039*
- drag, ocean waves, ship motion, Chakrabarti (S.K.), *8040*
- linear theory, mooring, nonlinear theory, wave interactions, Natvig (B.J.), Pendered (J.W.), *8049*
- gravity waves, icebreakers, Bates (H.F.), Shapiro (L.H.), *8631*

floculation, brownian motion, emulsions, particle size, suspensions, Reddy (S.R.), Fogler (H.S.), *3593*

flood flow, hydrology, watersheds, Kopylov (A.P.), *1897*
- discharges, rivers, sediment transport, Williams (G.P.), *2580*
- precipitation, probability theory, Rao (D.V.), *4044*
- oil removal, petroleum, Tokareva (N.A.), Tsynkova (O.E.), *5842*
- convection, finite element techniques, Jaffre (J.), *8947*
- oil removal, petroleum, recovery systems, Pope (G.A.), *12066*

flood routing, Koussis (A.D.), *975*
- flood waves, floods, runoff, Meynink (W.J.C.), *5905*
- channel flow, finite difference methods, reservoirs, Desikan (V.), Nath (S.C.), *6597*

flood waves, flood routing, floods, runoff, Meynink (W.J.C.), *5905*
- channels, discharges, free boundary, saint venants equation, Sridharan (K.), Mohan Kumar (M.S.), *8506*

floods, decision theory, probability theory, Bernier (J.), Miquel (J.), *4041*

- drainage, Penning-Rowsell (E.C.), Chatterton (J.B.), *4043*
- flood routing, flood waves, runoff, Meynink (W.J.C.), *5905*

floors, experimental methods, friction (sliding), measurements, Malkin (F.), Harrison (R.), *487*
- buildings, earthquake effects, fatigue, multistory frames, Wilson (J.C.), *970*
- conduction (heat), green function, heat sources, heating, De Mey (G.), *1700*
- beam columns, beams, design criteria, Kitipornchai (S.), Trahair (N.S.), *2293*
- duhamel's integral, dynamic loads, stress analysis, Becker (R.), *2541*
- beams, joints, spliced joints, wood structures, Soltis (L.A.), *3297*
- bending, shear walls, slabs, stiffness, Coull (A.), Wong (Y.C.), *3553*
- beams, deflections, stiffness, wood structures, Mccutcheon (W.J.), Vanderbilt (M.D.), (et al.), *3554*
- composite materials, failure, slabs, Davies (J.M.), Fisher (J.), *6229*

Floquet (A.), bearings (unlubricated), contact problems, friction (solid solid), lubrication (solid), Play (D.), *5993*

Florschuetz (L.W.), crossflow, heat transfer, impingement cooling, jets, Truman (C.R.), (et al.), *762*

flotation, turbulence (structure), turbulent flow, Costes (J.), Airan (C.), (et al.), *7750*

flow irregularities, cylindrical bodies, diffraction, gravity waves, nonlinear waves, Miloh (T.), *667*
- diffraction, gravity waves, travelling waves, Hunt (J.N.), Baddour (R.E.), *1590*
- asymptotic methods, kelvin waves, ocean waves, reflection, wave generation, Haines (C.R.), *1603*
- plane flow, three dimensional flow, Chelyshkov (V.S.), *4660*
- cavities, structures, vibration, Milan (D.), *4772*
- channel flow, flow obstructions, pressure drop, reynolds number (high), Unger (J.), *5439*
- gravity waves (surface), propagation, trenches, Lee (J.-J.), Ayer (R.M.), *5472*
- roughness, shear flow, turbulent flow, Schofield (W.H.), *6641*
- containers, rotating fluids, spin-up, stratified flow, vortices, Greenspan (H.P.), *7674*
- boundary layer (turbulent), hot wire, visualization, Taneda (S.), *7700*
- combustion, diesel engines, geometrical properties, Losonci (P.), *8802*
- channel flow, conformal mapping, separated flow, separation, Dzugaev (V.V.), *10436*
- burners, energy methods, sound fields, Magiawala (K.R.), Culick (F.E.C.), *10793*
- jets, noise abatement, sound generation, Shivashankara (B.N.), Bhat (W.V.), *10795*
- pipe flow, pressure drop, two phase flow, unsteady flow, vibration (flow induced), Fokin (B.S.), Goldberg (Ye.N.), *11495*
- cylindrical bodies, diffraction, gravity waves (surface), Miles (J.W.), *11572*
- diffraction, gravity waves (finite depth), reefs, scattering, Miles (J.W.), *11578*
- dispersion relation, surface waves, vortices, Keller (J.J.), Escudier (M.P.), *11583*
- compressional waves, shock waves, two phase flow, Lyakhov (A.G.), *11639*
- channels, gravity waves (surface), submerged bodies, Jeffrey (A.), Mvungi (J.), *11676*

flow measurement, bubble dynamics, buoyant flow, pipes, river beds, Sargent (D.M.), *564*
- heat transfer, hot wire, turbulence, Lecordier (J.C.), Petit (C.), (et al.), *659*
- shear flow, turbulence, turbulent flow, velocity profiles, Harris (S.D.), Williamson (J.W.), (et al.), *660*
- aerodynamics, liquid crystal, optical techniques, thermal measurements, Zharkova (G.M.), *725*
- blood flow, experimental methods, noise (random), Cathignol (D.J.), Fourcade (C.), (et al.), *1043*
- blood flow, doppler effect, experimental mechanics, Gill (R.W.), *1048*
- bed load, discharges, Reid (I.), Layman (J.T.), (et al.), *1498*
- data acquisition, hot wire, velocity measurement, Lehmann (B.), *1640*
- meters, pressure measurement, water tunnels, yawing, Takamatsu (Y.), Takahara (H.), (et al.), *1641*
- internal combustion engines, thermodynamic processes, ultrasonics, Lakshminarayananan (P.A.), Janakiraman (P.A.), (et al.), *1761*
- rivers, streams, Biritskii (M.I.), *1900*
- acoustic measurements, atmospheric circulation, wind, Makarova (T.I.), *1919*
- polymers, stresses (normal), viscoelastic fluids, Roger (D.V.), Denn (M.M.), *2579*
- coastal engineering, sediment transport, sloping bottom, visualization, Honji (H.), Matsunaga (N.), *2589*
- circulation, visualization, vorticity, Brasseur (J.C.), Chang (I.-D.), *2599*
- boundary layer (turbulent), correlation, Repik (Ye.U.), Sosedko (Yu.P.), *2630*
- boundary layer, convex surfaces, separated flow, Lakshmana Gowda (B.H.), Aswatha Narayana (P.A.), *2637*
- aerodynamic performance, discharge coefficients, discharges, nozzles, Ito (H.), Watanabe (Y.), (et al.), *2656*
- compressible flow, pipe flow, viscous flow, Botezatu (N.P.), *2762*
- closed conduit flow, heat transfer, recirculation, Launder (B.E.) eds., Humphrey (J.A.C.), *2826, book*
- digital simulation, elliptic equations, time dependence, Essers (J.A.), *3121*
- boundary layer (turbulent), injection, interaction, shock waves, Squire (L.C.), Smith (M.J.), *3649*
- boundary layer (turbulent), pressure gradient, Schofield (W.H.), *3650*
- bodies of revolution, boundary layer, separation, transition, Meier (H.U.), Kreplin (H.-P.), *3651*
- anemometers, laminar flow, vortex flow, Winoto (S.H.), Crane (R.I.), *3658*
- discharges, mathematical models, potential flow, swirl flow, Murakami (M.), Kito (O.), *3756*
- electromagnetic waves, Springer (E.K.), *3765*
- discharges, elliptic equations, finite difference methods, manifolds, Majumdar (A.K.), *4589*
- boundary layer (turbulent), pressure gradient, roughness, Aswatha Narayana (P.A.), *4601*
- boundary layer (turbulent), wind generation, wind tunnels (environmental), Katayama (T.), Gotoh (S.), (et al.), *4603*
- calibration, electromagnetic loading, geometrical properties, magnetic stabilization, Smigielski (J.), *4683*
- circulatory systems, doppler effect, experimental methods, Gill (R.W.), *4920*
- fluid mechanics, recirculation, steps, turbulent flow, Moss (W.D.), Baker (S.), *5434*
- design, floating bodies, pulsatile flow, unsteady flow, Maki (H.), Ikeda (Y.), *5508*
- design, electromagnetic loading, linearization, Smiegielski (J.), *5509*
- calibration, direction, velocity measurement, Huffman (G.D.), Rabe (D.C.), (et al.), *5510*
- blunt bodies, separation, shear layer, wind tunnels (environmental), Castro (I.P.), *6642*
- boundary layer, interaction, shock waves, Paynter (G.C.), *6643*
- mach reflection, photography, reflection, shock waves, transition, BenDor (G.), Takayama (K.), *6714*
- diffraction, operational methods, oscillators, Yamasaki (H.), Honda (S.), *6740*
- circulatory systems, tracers, transit time, velocity profiles, Huang (S.-C.), *6741*
- boundary layer (turbulent), coatings, compliant materials, Kanarskiy (M.V.), Teslo (A.P.), *7701*
- electromagnetic loading, gases, isotope tracers, liquids, vortex shedding, Scott (R.W.W.) ed., *7811, book*
- calibration, hot wire, low velocity flows, velocity measurement, Christman (P.J.), Podzimek (J.), *7812*
- choked flow, compressible flow, nozzles, saint venants equation, Mollenbruck (W.), *7814*
- fluid mechanics, mass transfer, packed beds, Hoek (P.J.), De Rooij (J.G.), (et al.), *7877*
- oscillatory flow, unsteady flow, viscoelastic fluids, Sigli (D.), Maalouf (A.), *8505*
- boundary layer (turbulent), interface phenomena, richardson number, Piat (J.-F.), Hopfinger (E.J.), *8557*
- calibration, design, discharges, meters, venturi tubes, Inoue (M.), Yano (H.), (et al.), *8665*
- calibration, data analysis, pitot tube, three dimensional flow, velocity measurement, Nishimura (H.), *8673*
- scale effects, suspensions, two phase flow, Lee (J.), Crowe (C.T.), *8891*
- blood flow, laser doppler velocimeters, tissues, Nilsson (G.E.), Tenland (T.), (et al.), *9059*
- bronchi, lungs, respiratory system, Horsfield (K.), Thurlbeck (A.), *9061*
- liquid fuels, longitudinal stability, pogo phenomenon, rockets, unsteady flow, Dordain (J.-J.), *9661*
- calibration, design, vortex shedding, Glockner (G.), Fock (K.), *9673*
- calibration, data reduction, Sievert (G.), *9674*
- combustion, flame propagation, premixed fuel air, Gololobov (I.M.), Granovskii (E.A.), (et al.), *9749*
- calibration, electromagnetic loading, meters, velocity profiles, Tsangaris (S.), Leiter (E.), *10535*
- dynamic stresses, testing equipment, transducers, turbomachinery, Krause (L.N.), Fralick (G.C.), *10731*
- calibration, liquid metals, magneto fluid dynamics, meteorology, Kirshtein (G.Kh.), Kvasnevskii (I.P.), *11833*

flow obstructions, asymptotic behavior, boundary layer (turbulent), incompressible flow, reynolds number (high), Sykes (R.I.), *595*
- numerical methods, stratified flow, two dimensional flow, Granberg (I.G.), *1519*
- flame propagation, methane, turbulence, Moen (I.O.), Donato (M.), (et al.), *1745*
- conformal mapping, existence theorems, potential flow, wakes, Hilbig (H.), *2008*
- euler equations, vortex flow, vortex sheets, vorticity, Saffman (P.G.), *2600*
- inviscid fluid, shear flow, two dimensional flow, vorticity, Shankar (P.N.), Sinha (U.N.), *2609*
- blunt bodies, interaction, vortices, wakes, Belov (I.A.), *3614*
- irrotational flow, perturbations, two dimensional flow, upper atmosphere, wind, Blank (A.D.), *5395*
- channel flow, flow irregularities, pressure drop, reynolds number (high), Unger (J.), *5439*
- fans, noise (aerodynamic), Woodward (R.P.), Glaser (F.W.), *5782*
- duct flow, experimental results, heat transfer, turbulence, turbulent flow, Sparrow (E.M.), Molki (M.), (et al.), *6689*
- combustion (turbulent), fluidized beds, heat exchangers, Miller (G.), Zakkay (V.), *6815*

- cloud physics, latent heat, meteorology (physical), two dimensional flow, Barcilon (A.), Jusem (J.C.), (et al.), *7677*
- navier stokes equation, three dimensional flow, vorticity, Kitchens (C.W.) Jr., Gerber (N.), (et al.), *7711*
- channel flow, free boundary, stratified flow, two dimensional flow, Janowitz (G.S.), *8532*
- axisymmetric flow, compressible flow, impingement, jets, shock waves, supersonic flow, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- boundary layer (three dimensional), iterative methods, separated flow, surface profiles, Sykes (R.I.), *8559*
- biofilm fouling, extended surfaces, fins, fouling, heat exchangers, Chenoweth (J.M.) eds., Impagliazzo (M.), *8754*
- interaction, shallow water, ship dynamics, slender bodies, Yeung (R.W.), Tan (W.T.), *9007*
- boundary layer, laminar flow, separated flow, singularities, Smith (F.T.), Daniels (P.G.), *9569*
- channel flow, channels (divided), poiseuille flow, wedges, Zamir (M.), Camiletti (S.E.), *9575*
- boundary layer, reynolds number (high), two dimensional flow, Smith (F.T.), Brighton (P.W.M.), (et al.), *10423*
- environmental tests, near ground effects, separated flow, siting considerations, vortex flow, wind turbines, Frost (W.), Shieh (C.F.), *10516*
- freezing, ice, pipe flow, Gilpin (R.R.), *10661*
- blunt bodies, finite difference methods, navier stokes equation, unsteady flow, Daiguji (H.), Kobayashi (S.), *11385*

flow reversal, boilers, furnaces, models, visualization, Kaji (M.), Sallam (T.M.), (et al.), *2764*

- buoyant flow, jets, Mcdougall (T.J.), *3689*
- conical flow, ducts (variable area), pressure gradient, swirl flow, Gogolev (I.G.), Korolev (P.V.), *6654*
- heat transfer, transient effects, transport mechanisms, Morrison (F.A.) Jr., Griffiths (S.K.), *6766*
- boundary layer (turbulent), return flow, unsteady state, Cousteix (J.), Le Balleur (J.-C.), (et al.), *7703*
- finite difference methods, manifolds, Datta (A.B.), Majumdar (A.K.), *7725*
- cavitation, mathematical models, pumps, unsteady flow, Ershov (N.S.), Kuchkin (V.N.), *7791*
- duct flow, hydrodynamic stability, porous media, unsteady flow, Bau (H.H.), Torrance (K.E.), *7840*
- channel flow, laminar flow, moving surfaces, navier stokes equation, Brady (J.F.), Acrivos (A.), *8566*
- boundary layer, heat tracer, incompressible flow, shear stress, two dimensional flow, velocity measurement, Westphal (R.V.), Eaton (J.K.), (et al.), *8654*
- airfoil theory, heart, moment coefficient, optimization, valves, Tuck (E.O.), *9513*
- biomechanics, ducts (curved), pressure gradient, pulsatile flow, vortex flow, Chandran (K.B.), Yearwood (T.L.), *11485*
- attenuation, ducts, exhaust gases, noise abatement, Panicker (V.B.), Munjal (M.L.), *11940*

Flower (J.O.), see Knott (G.F.), *1636*

- ocean waves, probability, simulation, stochastic processes, *3108*
- drift waves, moored vessels, mooring, ship dynamics, waves, *7077*
- see Knott (G.F.), *8588*

Floyd (E.R.), ocean, sound propagation, underwater acoustics, *3941*

Floyd (R.W.), see Chestnut (P.C.), *11901*

flue gases, boilers, fluid mechanics, vibration, Leithner (R.), Hermann (W.), (et al.), *6843*

Flueckiger (G.), centrifugal compressors, diffusers, inlet flow, laser doppler velocimeters, velocity profiles, Melling (A.), *10528*

fluid boundaries, froude number, gravity waves (internal), hydrofoils, wave generation, Bukreev (V.I.), *4659*

- impact, shells (cylindrical), Dvorkin (Ya.P.), *6370*
- impact, shells (spherical), Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6371*
- impact, shells (cylindrical), Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6372*
- heat addition, layered media, rayleigh number, thermal instability, Dowden (J.), *6782*

fluid conveyance, heat transfer, porous media, Sophocleous (M.), *969*

- control, cycles, solar collectors, Schiller (S.R.), Warren (M.L.), (et al.), *6822*
- ducts, pumps, sound generation, Kojima (E.), Nagakura (H.), *11957*

fluid injection, filaments, power law fluids, viscoelastic fluids, Kase (S.), Nakajima (T.), *548*

- casting, cavities, finite difference methods, finite element techniques, injection molding, Hieber (C.A.), Shen (S.F.), *549*
- helium, jets, penetration, supersonic flow, Vlagov (V.V.), Masyakin (N.E.), (et al.), *631*
- boundary layer (turbulent), heat transfer, porous media, turbulence, Mamonov (V.N.), *656*
- heat transfer, mass transfer, pipe flow, suction, Zaychik (L.I.), *815*
- nozzles, rockets, thrust, Lazarev (G.P.), Shaikhutdinov (Z.G.), (et al.), *847*
- boundary layer (turbulent), permeability, roughness, Alimpiyev (A.I.), Alimpiyev (V.I.), *1552*
- shock, shock waves, Ovsyannikov (M.P.), *1553*
- eddy viscosity, film cooling, injection, mixing length theory, Kikkawa (S.), Fujii (M.), *1666*
- aerodynamic heating, blunt bodies, chemical reactions, Karashima (K.), Nakahashi (K.), *1733*
- boundary layer, laminar flow, reynolds number (high), subsonic flow, Napolitano (M.), Messick (R.E.), *3656*
- duct flow, noncircular pipes, visualization, Alimpiyev (V.I.), Kalinina (S.V.), (et al.), *3671*
- boundary layer (turbulent), mass transfer, Alp (E.), Strong (A.B.), *3706*
- computing techniques, laminar flow, navier stokes equation, reynolds number, Smith (F.T.), Dennis (S.C.R.), *4613*
- pipe flow, porous walls, transpiration, turbulent flow, Eroshenko (V.M.), Ershov (A.V.), (et al.), *4622*
- injection, supersonic flow, Baranovsky (S.I.), Schetz (J.A.), *4636*
- combustors, gas turbines, sprays, Simmons (H.C.), Harding (C.F.), *5655*
- elastic waves, porous media, Dziecielak (R.), *5850*
- field tests, fracture, geothermal energy, hydraulics, rocks, Solberg (P.), Lockner (D.), (et al.), *5884*
- geothermal energy, heat extraction, Bazant (Z.P.), Ohtsubo (H.), *5886*
- fracture, pressure, rocks, Nolte (K.G.), Smith (M.B.), *6398*
- laminar flow, porous surfaces, Sadhna Khare (K.), *7709*
- duct flow, entrance region, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *7723*
- fracture, hydraulic fracturing, hydraulics, rocks, simulation, Settari (A.), *8354*
- boundary layer, oscillators, supersonic flow, wedges, Kornienko (E.S.), Shmanenkov (V.N.), *8562*
- magneto fluid dynamics, non newtonian flow, pressure gradient, stream function, Cobble (M.H.), *8820*
- deformation, faults, geothermal energy, rocks, Hayashi (K.), Abe (H.), *9373*
- convection, heat transfer (combined modes), injection, plates (vertical), Tsuruno (S.), Iguchi (I.), *9697*
- immiscible fluids, porous media, two phase flow, Mishra (S.K.), Verma (S.P.), *9894*
- generation, jets, oscillations, Favre-Marinet (M.), Binder (G.), (et al.), *10456*
- high enthalpy, supersonic flow, Baev (V.K.), Boshenyatov (B.V.), (et al.), *10463*
- hypersonic flow, shock layer, similarity methods, stagnation point, Plostins (P.), Rubin (S.G.), *10495*
- channel flow, heat transfer, nusselt number, porous walls, suction, Yeroshenko (V.M.), Zaichik (L.I.), (et al.), *10572*
- boundary layer, heat transfer, shells (spherical), supersonic flow, Zinchenko (V.I.), Trofimchuk (E.G.), *10682*
- fluid mechanics, heat transfer, numerical methods, rotating disks, suction, Agarwal (R.S.), Bhargava (R.), *10685*
- compressible flow, nozzles, supersonic flow, Zelentsov (V.V.), Nesterov (A.A.), (et al.), *11400*
- film cooling, mass transfer, porous media, turbulence (freestream), Mironov (B.P.), Lugovskiy (P.P.), (et al.), *11778*

fluid mechanics, convection, galerkin method, numerical methods, surveys, Hughes (T.J.R.) ed., *95, book*

- finite element techniques, free boundary, incompressible flow, surface tension, Ruschak (K.J.), *97*
- design, environmental control, Hunt (J.C.R.), *565*
- modeling, transient effects, turbomachinery, Singh (R.), *696*
- modeling, transient effects, turbomachinery, Singh (R.), *699*
- acoustic waves, aeroacoustics, energy conservation, Pierce (A.D.), *897*
- charged particles, electro-osmosis, porous media, Auriault (J.L.), Strzelecki (T.), *949*
- mathematical methods, porous media, Rudnicki (J.W.), *950*
- asymptotic behavior, computing techniques, nonlinear mechanics, perturbation methods, Glowinski (R.) eds., Lions (J.E.), *1111, book*
- finite element techniques, incompressible flow, newton method, viscous flow, Engelman (M.S.), Strang (G.), (et al.), *1128*
- algorithms, computing techniques, tensor methods, Baker (A.J.), Soliman (M.O.), *1138*
- biomechanics, continuum mechanics, flow, rheology, Dokumentation Rheologie, *1482, book*
- lasers, lasers (gasdynamic), Wendt (J.F.) ed., *1643, book*
- conservation laws, constitutive equations, continuum mechanics, solid mechanics, Spencer (A.J.M.), *1966, book*
- differential equations (partial), mathematical methods, mathematical models, perturbation theory, surveys, Brosowski (B.) eds., Martensen (E.), *2035, book*
- cascades, potential flow, turbomachinery, Keck (H.), *2077*
- hydraulic transport, sand, stratified flow, Smith (L.), *3004*
- aerodynamics, blood flow, Krause (E.) ed., *3064, book*
- infinite medium, interpolation, rock mechanics, soil mechanics, Lynn (P.P.), Hadid (H.A.), *3132*
- continuum mechanics, elasticity (nonlinear), rheology, solid mechanics, Gurtin (M.E.), *4924, book*
- eulerian approaches, lagrangian approach, laminar flow, navier stokes equation, stability theory, Huffenus (J.), Khaletzky (D.), *4989*
- aerothermodynamics, elliptic equations, finite volume method, turbomachinery, Dutoya (D.), Michard (P.-J.), *5014*
- convergence, finite difference methods, viscous flow, vortex flow, Krause (E.), *5409*

- corners, transition, Barclay (W.H.), Ridha (A.H.), *5427*
- boundary layer, reynolds number (high), transition, Fraser (C.J.), Milne (J.S.), *5430*
- flow measurement, recirculation, steps, turbulent flow, Moss (W.D.), Baker (S.), *5434*
- compressional waves, porous media, sand, saturation, Allen (N.F.), Richart (F.E.) Jr., (et al.), *5836*
- infiltration, porous media, Yamagami (K.), Kurashige (M.), *5838*
- fluidized beds, particle fluid flow, Morooka (S.), Kawazuishi (K.), (et al.), *5846*
- dispersed flow, emissions, Kovenskii (V.I.), *5848*
- fredholm equations, incompressible flow, potential flow, Pelant (J.), *6076*
- boilers, flue gases, vibration, Leithner (R.), Hermann (W.), (et al.), *6843*
- complex variables, porous media, Orasanu (M.), *7019*
- bifurcation, catastrophe theory, singularities, topological techniques, Stewart (I.), *7172*
- biomechanics, finite element techniques, peristaltic flow, Stavitsky (D.), Macagno (E.O.), (et al.), *7219*
- computer programming, finite element techniques, mesh generation, triangular elements, Kleinstreuer (C.), Holdeman (J.T.), *7220*
- flow measurement, mass transfer, packed beds, Hoek (P.J.), De Rooij (J.G.), (et al.), *7877*
- circumnavigation, gravity waves, planetary theory, potential theory, Demin (V.G.), Barkin (Yu.V.), *7913*
- finite element techniques, porous media, streamlines, Christian (J.T.), *7981*
- biomathematics, cell behavior, dynamic analysis, mathematical models, Aldis (G.), Tognetti (K.), (et al.), *8178*
- ablation, heat transfer, melting, Omelchenko (K.G.), Trenev (M.G.), *8774*
- chemical kinetics, chemically reactive flow, combustion, rockets, Markatos (N.C.), Spalding (D.B.), (et al.), *8796*
- electro fluid dynamics, permeability, porous media, rocks, Kormiltsev (V.V.), Khachay (O.A.), *8921*
- finite element methods (hybrid), finite element techniques, free boundary, sloshing, solitary waves, Wellford (L.C.) Jr., Ganaba (T.H.), *9146*
- boussinesq equation, conservation laws, finite element techniques, Cliffe (K.A.), *9147*
- boundary layer (three dimensional), disks, machinery, rotational flow, Toren (M.), Solan (A.), (et al.), *9559*
- emulsions, permeability, porous media, shear, surface profiles, surfactants, Kalpakci (B.), Klaus (E.E.), (et al.), *9887*
- fissures, porous media, rock mechanics, Davis (G.B.), Hill (J.M.), *9889*
- computing techniques, finite element methods, heat transfer, matrix methods, Rao (S.S.), *10061*
- asymptotic behavior, boundary layer, heat transfer, navier stokes equation, Kuiken (H.K.), *10424*
- rotating disks, thermodynamics (irreversible), variational methods, Singh (P.), Ram (P.), *10435*
- fluid injection, heat transfer, numerical methods, rotating disks, suction, Agarwal (R.S.), Bhargava (R.), *10685*
- dissociation, gases, moving surfaces, porous media, Verigin (N.N.), Khabibullin (I.L.), (et al.), *10691*

fluid power, hydraulics, piston driven flow, pumps, El Heeny (Y.A.H.), *2757*
- energy conversion, hydraulics, Webb (D.R.) eds., Papadakis (D.N.), *7800, book*

fluid-structure interaction, explosions (underwater), numerical methods, stability (numerical), submerged bodies, Neishlos (H.), Israeli (M.), (et al.), *1604*
- finite element techniques, nuclear reactors, numerical methods, Mcmaster (W.H.), Gong (E.Y.), (et al.), *1605*
- nonlinear analysis, underwater acoustics, Jackson (J.E.) Jr., Cost (T.L.), *1606*
- finite element techniques, lumped systems, numerical methods, Bathe (K.-J.), Sonnad (V.), *1608*
- finite element techniques, three dimensional formulation, Kulak (R.F.), *2075*
- bending, plates (thick), Pierucci (M.), *2709*
- shells (coaxial), shells (fluid-filled), vibration, Stussi (U.W.), Jemelka (P.), *2710*
- impact, numerical methods, shells (cylindrical), Belytschko (T.), Mullen (R.), *2711*
- finite element techniques, plates, vibration, Aggarwal (K.R.), Sinhasan (R.), (et al.), *2714*
- eigenvalue problems, finite element techniques, modal analysis, Daniel (W.J.T.), *2716*
- rotating cylinders, separated flow, Volmir (A.S.), Gulyaev (V.V.), (et al.), *2718*
- elasticity (three dimensional), hydroelasticity, Guz (A.N.), *2947*
- crack penetration, crack propagation, pipes, Emery (A.F.), Perl (M.), (et al.), *3466*
- damping, design, drag, dynamic response, offshore structures, Fish (P.R.), Dean (R.B.), (et al.), *3559*
- mechanics, nuclear reactors, pressure vessels, vibration (forced), Jaeger (T.A.) eds., Boley (B.A.), *3565, book*
- containers (partially filled), dynamic loads, excitation, membranes, sloshing, Bauer (H.F.), *4661*
- gravity waves (finite depth), half space, propagation, unsteady flow, Tkachenko (V.A.), *4663*
- plates, resonance, vibration (flow induced), Strawderman (W.A.), Ko (S.-H.), (et al.), *4767*
- submerged bodies, underwater acoustics, Geers (T.L.), *4791*
- piezoelectric devices, vibration, Borisyuk (A.I.), Kirichok (I.F.), *5222*
- eigenvalue problems, numerical methods, Muller (W.C.), *5479*
- floating bodies, plates, shear, vibration (forced), Suvorov (A.M.), Cherkesov (L.V.), *6297*
- films, rotating disks, vibration (forced), viscous effects, Anikeev (G.I.), Blokhin (I.L.), (et al.), *6306*
- cavitation, piping systems, Kot (C.A.), Hsieh (B.J.), (et al.), *6603*
- currents, cylindrical waves, dynamic stability, Lee (T.S.), *6702*
- cylindrical bodies, submerged bodies, tube bundles, Westermo (B.D.), *6703*
- finite element techniques, frequency domain techniques, Combescure (A.), Gibert (R.J.), (et al.), *6705*
- axial waves, cylindrical bodies, prestressed structures, Bagno (A.M.), *6709*
- elastic bodies, sound propagation, waveguides, Levitskii (L.A.), *6928*
- containers (partially filled), finite element techniques, seismic loading, storage, Liu (W.K.), *7768*
- elastic bodies, floating bodies, gravity waves (finite depth), plates, Bukatov (A.E.), *7770*
- shells (fluid-filled), vibration, Kalumuck (K.M.), Huber (P.W.), *7771*
- surveys, Belytschko (T.), *7772*
- biomechanics, blood flow, flexible walls, muscles, navier stokes equation, Melbin (J.), Noordergraaf (A.), *8073*
- cables, crossflow, towing cables, vibration (forced), vortex shedding, Alexander (C.M.), *8291*
- boundary elements, shells (of revolution), Walker (S.), *8512*
- axial flow, density, tube bundles, vibration (flow induced), Paidoussis (M.P.), Besancon (P.), *8624*
- articulated surfaces, currents, nonlinear analysis, offshore structures, Jain (R.K.), Kirk (C.L.), *8627*
- annuli, shells (fluid-filled), vibration, Pavlovskii (V.S.), Ometsinskaya (E.B.), *8633*
- heat transfer (combined modes), nuclear reactors, thermal effects, tube bundles, Bennett (J.G.), Ju (F.), *8747*
- acoustic loading, shells (cylindrical), wave equations, Gordienko (V.I.), Kubenko (V.D.), (et al.), *9336*
- modes, shells (fluid-filled), vibration, Parkus (H.), *9627*
- cavitation, numerical methods, underwater structures, Dimaggio (F.L.), Sandler (I.S.), (et al.), *9628*
- plasticity, submerged bodies, transient loading, Krajcinovic (D.), *9630*
- acoustics, dynamic effects, piping systems, Schwirian (R.E.), Karabin (M.E.), *10071*
- dynamic analysis, gates, plates (rectangular), vibration, Casacci (S.), Caillot (G.), *10207*
- cylindrical bodies, diffraction, gravity waves, Alliney (S.), *10476*
- panels, sound generation, Schroter (V.), Fahy (F.J.), *10791*
- compressible flow, cylindrical bodies, internal flow, shock waves, Dubrovskaya (L.I.), Kim (A.V.), (et al.), *11410*
- matrix methods, piping systems, vibration (flow induced), Keskinen (R.P.), *11600*
- characteristic methods, cylindrical bodies, numerical methods, Takeuchi (K.), Spencer (A.C.), *11625*
- bodies (liquid filled), shells (cylindrical), vibration, Chung (H.), Turula (P.), (et al.), *11627*
- flexible bodies, membranes, strouhal number, two dimensional flow, Newman (B.G.), Low (H.T.), *11632*
- acoustic waves, submerged bodies, vibration, Clark (A.V.) Jr., Whitman (A.M.), *11634*
- pressure distribution, shells (spherical), submerged bodies, transient effects, transient loading, Neilson (H.C.), Everstine (G.C.), (et al.), *11635*
- axial flow, compressible flow, shells (cylindrical), Paidoussis (M.P.), Ostoja-Starzewski (M.), *11636*
- annuli, bodies (liquid filled), columns, seismic loading, Fujita (K.), *11637*
- beams (timoshenko), equations of motion, follower forces, pipe flow, Laithier (B.E.), Paidoussis (M.P.), *11642*
- finite amplitude, plates, waves, Hasegawa (E.), *11646*
- bodies (liquid filled), dams, finite element techniques, Altinisik (D.), Karadeniz (H.), (et al.), *11649*
- acoustic waves, axisymmetric flow, plates, vibration, Woolley (B.L.), *11650*
- dynamic stability, incompressible flow, panels, Matsuzaki (Y.), *11651*
- crossflow, dynamic stability, tube bundles, vibration (flow induced), Tanaka (H.), Takahara (S.), *11655*
- acoustic waves, shells (cylindrical), shock waves, submerged bodies, Huang (H.), *11656*
- finite element techniques, nuclear reactors, reactor core, thermal effects, Bennett (J.G.), Ju (F.D.), *11658*
- acoustic waves, shells (cylindrical), submerged bodies, transient loading, Geers (T.L.), Yen (C.-L.), *11660*
- shells (fluid-filled), shock waves, submerged bodies, Wright (J.P.), Misovec (A.), (et al.), *11664*
- filaments, impact, submerged bodies, Belov (V.I.), Lenskii (E.V.), *11665*
- hydraulic shock, plates, transforms, Kiiko (I.A.), Nemkova (L.N.), *11666*
- compressible flow, eigenvalue problems, shells, Simonov (I.V.), *11669*
- oscillating bodies, reynolds number (small), viscous flow, Guz (A.N.), *11677*
- acoustic loading, shells (spherical), transient loading, Podstrigach (Ya.S.), Galazyuk (V.A.), (et al.), *11678*

- cavitation, hydroelasticity, unsteady flow, Galiev (Sh.U.), *11680*
- plates (stiffened), radiation, sound generation, Mace (B.R.), *11942*

fluidics, dynamic analysis, pneumatic components, pumps, Baz (A.), Khafagy (S.), (et al.), *219*
- Drzewiecki (T.M.) eds., Franke (M.E.), *1169, book*
- design, diodes, laminar flow, scroll diode, Sher (E.), *1170*
- amplification, fluidic amplifiers, mathematical models, Hayashi (S.), Matsui (T.), (et al.), *3222*
- design, proximity detectors, switching, Siwoff (F.), Stojanow (B.), (et al.), *4327*
- interaction, jets, Dohta (S.), Ohsaka (K.), (et al.), *4634*
- characteristic methods, coding, networks, unsteady flow, Haloulakos (V.E.), *5487*
- airplanes, turbulence, Taylor (D.L.), *6693*
- control, design, hydraulic machinery, pneumatic components, servomechanisms, Mccloy (D.), Martin (H.R.), *11100, book*
- diodes, internal combustion engines, mass transfer, valves, Sher (E.), *11796*

fluidized beds, electrochemical mass transfer, reactors, Barthole-Delaunay (C.), Storck (A.), (et al.), *834*
- granular media, jets, two phase flow, Buevich (Yu.A.), Kolesnikova (N.A.), (et al.), *935*
- inversion, laplace transform, multiphase flow, numerical analysis, special functions, Petho (A.), Kuhne (J.), *1101*
- aerodynamics, vibration (forced), Gupta (R.), Mujumdar (A.S.), *1871*
- granular media, thermal diffusion, Hirama (T.), Adachi (T.), (et al.), *1872*
- bubble dynamics, experimental methods, Tamarin (A.I.), Teplitskii (Yu.S.), (et al.), *2999*
- mass transfer, particles, Pandey (D.K.), Upadhyay (S.N.), (et al.), *4835*
- dispersion, gas solid interface, thermal diffusion, Wakao (N.), Shiozawa (B.), (et al.), *5541*
- experimental methods, laser doppler velocimeters, two phase flow, Levy (Y.), Lockwood (F.C.), *5841*
- expansion, granular media, Ngian (K.-F.), Martin (W.R.B.), *5843*
- multiphase media, reactors, Kuhne (J.), Wippern (D.), *5844*
- gasification, particle size, Weimer (A.W.), Clough (D.E.), *5845*
- fluid mechanics, particle fluid flow, Morooka (S.), Kawazuishi (K.), (et al.), *5846*
- heat transfer, oscillations, Filippovskii (N.F.), Zharkov (A.A.), (et al.), *5849*
- heat transfer, tubes, Tabatabaie-Farashahi (M.), Upadhyay (S.N.), (et al.), *5852*
- combustion (turbulent), flow obstructions, heat exchangers, Miller (G.), Zakkay (V.), *6815*
- asymptotic behavior, bubble dynamics, prediction, Bar-Cohen (A.), Hughes (R.W.), *6989*
- mathematical models, mixed flow, Buevich (Yu.A., Tsyrulnikov (I.M.), *7010*
- frequencies, pressure drop, Sadasivan (N.), Barreteau (D.), (et al.), *7011*
- particle fluid flow, velocity profiles, Grewal (N.S.), Saxena (S.C.), *7013*
- bubbly flow, powders, Abrahamsen (A.R.), Geldart (D.), *7014*
- experimental methods, nozzles, Cebulla (D.), *7015*
- gas solid interface, jet streams, Klimenko (Yu.G.), Rabinovich (M.I.), (et al.), *7016*
- heat transfer, packed beds, Adams (R.L.), *7018*
- bubble dynamics, prediction, two phase flow, Bar-Cohen (A.), Glicksman (L.R.), (et al.), *7965*
- particles, separation, Geldart (D.), Baeyens (J.), (et al.), *7986*
- gasification, particle size, Weimer (A.W.), Clough (D.E.), *7987*
- solid fuels, velocity profiles, Livshits (Yu.E.), Tamarin (A.I.), *7988*
- heat transfer, walls, Sokolov (A.V.), Baskakov (A.P.), (et al.), *7994*
- diffusion, mass transfer, mathematical models, Yasnikov (G.P.), Galperin (L.G.), (et al.), *8777*
- heat transfer, particle fluid flow, Seki (N.), Fukusako (K.), (et al.), *8933*
- high viscosity, pressure, King (D.F.), Mitchell (F.R.G.), (et al.), *8934*
- particle fluid flow, testing equipment, velocity profiles, Ishida (M.), Shirai (T.), (et al.), *8935*
- stability theory, vibration (flow induced), Buevich (Yu.A.), Ryzhkov (A.F.), (et al.), *8936*
- erosion, particles, Lin (L.), Sears (J.T.), (et al.), *8937*
- multiphase flow, transition flow, Didwania (A.K.), Homsy (G.M.), *9895*
- heat transfer, multiphase flow, Kato (Y.), Uchida (K.), (et al.), *9896*
- heat transfer (combined modes), two phase flow, Pikashov (V.S.), Ilchenko (A.I.), (et al.), *10613*
- combustion, combustion chambers, energy conservation, solid wastes, Hamm (J.R.), Kearns (D.L.), *10623*
- bubble dynamics, mass transfer, Buevich (Yu.A.), Deryabin (A.N.), *10653*
- mass transfer, power law fluids, Kumar (S.), *10695*
- heat transfer, radiant interchange, radiation, Borodulya (V.A.), Kovenskii (V.I.), *10840*
- heat transfer, mass transfer, Glicksman (L.R.), Joos (F.M.), *10842*
- carbon, char particles, combustion, mass transfer, particles, Gavalas (G.R.), *11792*
- bubble dynamics, particle dynamics, potential flow, tubes, unsteady flow, Adams (R.L.), *12036*
- heat transfer (combined modes), multiphase flow, packed beds, Kato (Y.), Kago (T.), (et al.), *12068*

fluids, brownian motion, equilibrium, statistical mechanics, Tokuyama (M.), Oppenheim (I.), *2842*
- acoustic waves, scattering, spherical bodies, Gaunaurd (G.), Uberall (H.), *4774*
- elasticity (nonlinear), jump conditions, shock waves, Ting (T.C.T.), *4930*
- sound fields, ultrasonics, Gabrielli (I.), Zugna (S.), *5760*
- cylindrical bodies, thermal stresses, Nabarro (F.R.N.), *6941*
- earthquake effects, oscillations, seismic loading, Seimov (V.M.), Trofimchuk (A.N.), *7039*
- high pressure, low temperature, molecular theory, transport properties, Chung (T.H.), Lee (L.L.), (et al.), *7821*
- bubble dynamics, cavitation, sound generation, Barabanova (G.Ya.), Ilin (V.P.), (et al.), *9853*
- acoustics, cylindrical bodies, scattering, Bennett (C.L.), Mieras (H.), *11986*

Flumerfelt (R.W.), deformation, drops, interface phenomena, shear flow, *6990*

Fluss (H.), see Stubbs (N.), *7311*

flutter, buckling, divergence, follower forces, structural stability, Kounadis (A.N.), *1783*
- design, flight control, optimal control, Newsom (J.R.), *2180*
- airplanes, control, design, external stores, Nissim (E.), Lottati (I.), *2183*
- supersonic flow, vibration (flow induced), viscoelastic materials, Anvarov (R.), Gegel (E.I.), *2907*
- bending, cascades, supersonic flow, torsion, Bendiksen (O.), Friedmann (P.), *2908*
- beams (cantilever), forced systems, Kounadis (A.N.), Katsikadelis (J.T.), *2911*
- aerodynamic performance, airplanes, flight control, wind tunnels, Winther (B.A.), Shirley (W.A.), (et al.), *4326*
- aerodynamic interference, cylindrical bodies, wakes, Tsui (Y.T.), Tsui (C.C.), *4752*
- modeling, panels, perturbation methods, Sinay (L.R.), Reiss (E.L.), *4753*
- aerodynamic loads, bridges (suspension), oscillating bodies, Brancaleoni (F.), Brotton (D.M.), *4754*
- damping, loads, optimization, Claudon (J.-L.), Sunakawa (M.), *5342*
- airfoils, one dimensional flow, oscillating bodies, transonic flow, unsteady flow, wakes, Mccroskey (W.J.), *6716*
- actuator theory, choked flow, compressors, Micklow (J.), Jeffers (J.), *7781*
- airfoils, control, incompressible flow, trailing edge, Nissim (E.), Lottati (I.), *7906*
- aeroelasticity, design, panels, supersonic flow, Pierson (B.L.), Hajela (P.), *7907*
- bifurcation, elastic bodies, limit cycles, modeling, oscillators, Thompson (J.M.T.), Lunn (T.S.), *7910*
- buckling, divergence, follower forces, frames, stiffness, Kounadis (A.N.), Avraam (T.P.), *9804*
- aeroelasticity, blades, turbofan engines, Ford (R.A.J.), *10762*
- composite structures, design (minimum weight), shells (cylindrical), supersonic flow, Kosichenko (A.A.), Pochtman (Yu.M.), (et al.), *10763*
- axial compressors, blades, cascades, testing equipment, Jutras (R.R.), Stallone (M.J.), (et al.), *10764*
- crossflow, shells (cylindrical), thin walled structures, Paidoussis (M.P.), Wong (D.T.-M.), *11841*

flywheels, design, optimal control, railroads, Sweet (L.M.), Keane (M.J.), *2189*
- plates (thick), rotating disks, stress analysis, Pardoen (G.C.), Nudenberg (R.D.), (et al.), *5168*
- high speed, machinery, shafts, vibration, Pandey (R.C.), Midha (A.), *5371*
- composite structures, energy storage, optimization, Portnov (G.G.), Kulakov (V.L.), *6196*

foam, crack growth, fatigue, material testing, polymers, Noble (F.W.), Lilley (J.), *3437*

Fock (K.), see Glockner (G.), *9673*

Focke (K.C.), see Mitchell (S.K.), *5755*

focusing, laser plasma interaction, propagation, theory, wave absorbers, Sodha (M.S.), Sinha (S.K.), (et al.), *2904*
- acoustic waves, arrays, nonlinear waves, Tjotta (J.N.), Tjotta (S.), *2950*
- ionized gases, laser plasma interaction, models, radiation pressure, Del Pizzo (V.), Luther-Davies (B.), *3901*
- acoustic waves, ocean bed, transducers (ultrasonic), Ohgaki (M.), Shimizu (R.), (et al.), *5756*
- optical techniques, radiant interchange, solar collectors, Bendt (P.), Gaul (H.), (et al.), *8768*
- acoustic waves, oscillating bodies, transducers, Madsen (E.L.), Goodsitt (M.M.), (et al.), *11970*
- arrays, underwater acoustics, Claus (A.J.), Labianca (F.M.), *11976*
- arrays, underwater acoustics, Lynch (J.F.), Stokes (R.H.), *12000*

Foda (M.A.), gravity waves, nonlinear analysis, swell, wave generation, wave interactions, Mei (C.C.), *11577*

Fogler (H.S.), see Reddy (S.R.), *3592*
- see Reddy (S.R.), *3593*

Fohrer (W.), see Sachs (G.), *9659*

Foias (C.), mathematical models, navier stokes equation, statistical theory, turbulence, Temam (R.), *641*

Foister (R.T.), brownian motion, diffusion, particle dynamics, shear flow, Van De Ven (T.G.M.), *1731*

Fok Wing Chau, buckling (experimental), buckling (nonlinear), elastic bodies, plates (rectangular), Yuen Ming Fai, *9288*

Fokas (A.S.), burgers equation, evolution equations, korteweg de vries equation, nonlinear analysis, *2002*

- backlund transformations, evolution equations, mathematical methods, transformation, Fuchssteiner (B.), *3103*

Fokin (B.S.), convection (free), critical heat flux, tube bundles, Goldberg (Ye.N.), *749*
- boiling, convection (free), critical heat flux, porous walls, tube bundles, Goldberg (E.N.), *8694*
- flow irregularities, pipe flow, pressure drop, two phase flow, unsteady flow, vibration (flow induced), Goldberg (Ye.N.), *11495*

Fokkema (J.T.), acoustic waves, layered media, reflection, transmission, *2367*
- elastic waves, reflection, solid solid interface, transmission, *2370*

folds, plastic behavior, sheet metal, Johnson (W.), Yu (T.X.), *434*

Folias (E.S.), cracks, elasticity (three dimensional), plates (thick), singular integral equations, singularities, *2434*

follower forces, dynamic stability, nonconservative systems, Bailey (C.D.), Haines (J.L.), *355*
- buckling, divergence, flutter, structural stability, Kounadis (A.N.), *1783*
- nonconservative systems, pfluger rod, rods, Leipholz (H.H.E.), *2291*
- columns, design (optimum), Bogacz (R.), Irretier (H.), (et al.), *4527*
- compression, nonconservative systems, plates, rods, Leipholz (H.H.E.), *5170*
- beams (variable cross section), structural stability, viscoelastic materials, Kar (R.C.), *6267*
- buckling, nonconservative systems, plates (rectangular), simply supported structures, Leipholz (H.H.E.), Waddington (D.), *9289*
- buckling, divergence, flutter, frames, stiffness, Kounadis (A.N.), Avraam (T.P.), *9804*
- buckling, dynamic stability, lyapunov's functions, plates, Leipholz (H.H.E.), *10175*
- beams (timoshenko), equations of motion, fluid-structure interaction, pipe flow, Laithier (B.E.), Paidoussis (M.P.), *11642*

Folsom (B.A.), see Clark (W.D.), *8797*

Fomin (V.M.), see Ermolin (N.E.), *9555*

Fomin (V.N.), bodies of revolution, circumnavigation, gravimetrics, potential theory, *9807*

Fominykh (V.V.), see Sotina (N.B.), *1503*

Fomo (B.K.), see Dhatt (G.), *3143*

Fonash (S.J.), energy conversion, solar cells, solar energy, *4722, book*

Fong (J.T.) eds., design, failure, fatigue, fracture, materials properties, piping systems, pressure vessels, safety, Dobbyn (R.C.), (et al.), *11315, book*

Fontijn (H.L.), berthing, docks, harbors, jetties, mathematical models, ship maneuvers, ships, *7074*

Foody (B.E.), bubble dynamics, liquid vapor mixture, oscillations, two phase flow, Huber (P.W.), *10821*

footings, bearing capacity, layered media, soils, Satyanarayana (B.), Garg (R.K.), *3405*
- soils, winkler foundation, Gazetas (G.), *4463*
- elastic foundations, smoke stacks, winkler foundation, Barvashov (V.A.), Fedorovsky (V.G.), *7321*
- caps, interaction, piles, Akinmusuru (J.O.), *10257*

Forbes (L.K.), aorta, blood flow, flexible walls, pulsatile flow, shock waves, *1041*

force, adhesion, grinding, mechanisms, Yossifon (S.), Rubenstein (C.), *438*
- algorithms, design, kinematics, mechanisms, transmission, Sutherland (G.H.), *3569*
- experimental methods, impact, plates (circular), Shibuya (T.), Koizumi (T.), (et al.), *4460*
- buoys, dynamic analysis, finite difference methods, sudden stop, Grossi (R.O.), Ercoli (L.), *5480*
- bottom irregularities, channel flow, gates, hydraulic jump, Narayanan (R.), Schizas (L.S.), *6602*
- deformable bodies, inviscid fluid, potential flow, three dimensional flow, Vilkhovchenko (S.D.), Yakimov (Yu.L.), *8524*
- calibration, data acquisition, measurements (dynamic), tension, transducers (load), Dalke (D.D.), *9426*
- spherical bodies, stokes flow, torque, viscous flow, Brenner (H.), *9531*
- calibration, measurements, thermoelasticity (transient), transducers (load), Pontius (P.E.), Mitchell (R.A.), *10313*
- flow fields, nonlinear theory, plates, singularities, walls, Sozou (C.), Pickering (W.M.), *11388*
- rarefied gases, rotating bodies, Ivanov (S.G.), Yanshin (A.M.), *11449*
- acoustics, radiation, Anson (L.W.), Chivers (R.C.), *11985*

forced systems, approximations, arcs (magnetically constrained), heat transfer, models, Bublievskii (A.F.), *1776*
- beams (cantilever), flutter, Kounadis (A.N.), Katsikadelis (J.T.), *2911*
- convection (forced), coolers, heat exchangers, heat transfer, pressure drop, Gianolio (E.), Cuti (F.), *6813*
- matrix methods, periodic structure, structures, substructuring, vibration, Fricker (A.J.), Potter (S.), *7209*

Ford (D.G.), cracking, cracks, fatigue, stochastics, *2422*

Ford (J.S.), frames, modeling, reinforced concrete, statically indeterminate structures, Chang (D.C.), (et al.), *509*
- columns, deformation, reinforced concrete, Chang (D.C.), (et al.), *1439*
- collapse, frames, reinforced concrete, ultimate strength, Chang (D.C.), (et al.), *8450*

Ford (R.A.J.), aeroelasticity, blades, flutter, turbofan engines, *10762*

Ford (W.T.), see Anderson (R.M.), *4023*

forecasting, finite difference methods, weather forecasting, Kalenkovich (E.E.), *389*
- atmospheric circulation, clouds, weather forecasting, Falkovich (A.I.), *1903*
- atmospheric circulation, weather forecasting, Anzhina (G.I.), Mashkovich (S.A.), *1914*
- atmospheric circulation, boundary layer (atmospheric), Berkovich (L.V.), Shnaidman (V.A.), *1915*
- algorithms, estimation, Mckenzie (E.), *2201*
- heat transfer (atmospheric), weather forecasting, Shteinbok (D.B.), *3022*
- meteorology (physical), weather forecasting, Ivakhnenko (A.G.), Rao (M.G.), *4067*
- meteorology (physical), ocean air interaction, weather forecasting, Ryasin (V.A.), *4071*
- isobaric processes, meteorology (physical), Kurbanov (B.T.), *4073*
- atmospheric circulation, meteorology (physical), Fuks-Rabinovich (M.S.), *4074*
- clouds, meteorology (physical), moisture, Sholokhova (N.I.), *4077*
- meteorology (physical), weather forecasting, weather satellites, Gubanova (S.I.), Mashkovich (S.A.), (et al.), *4078*
- meteorology (physical), weather forecasting, Belousov (S.L.), *4083*
- meteorology (physical), Kurbatkin (G.P.), Eikher (M.Sh.), (et al.), *4086*
- atmosphere, meteorology, temperature, Bochkova (T.N.), *4089*
- boundary conditions, meteorology (physical), weather forecasting, Gordin (V.A.), Dolmatov (B.K.), *5957*
- meteorology, precipitation, weather forecasting, Kenzhibaev (A.T.), Petrichenko (I.A.), *12082*

Forest (M.G.), see Flaschka (H.), *1086*

forest fires, boundary value problems, fire control, fire spread, Cekirge (H.M.), *5842*
- fire spread, flame propagation, mathematical models, stefan problem, Fujii (N.), Hasegawa (J.), (et al.), *6847*
- fire spread, mathematical models, Anderson (D.H.), Catchpole (E.A.), (et al.), *9777*

forging, dynamic effects, forming, high speed, inertia, materials properties, plane strain, Arora (K.L.), Sachdev (A.S.), (et al.), *1338*
- deformation (plastic), elastoplasticity, finite element techniques, materials properties, Hartley (P.), Sturgess (C.E.N.), (et al.), *2394*
- energy, screw presses, tools, Xi-Xian (J.), *4469*
- gear teeth, gears (spur), grinding, mechanical properties, metallurgy, Abdel-Rahman (A.R.O.), Dean (T.A.), *5274*
- axial loading, cylindrical bodies, friction (solid solid), Hartley (P.), Sturgess (C.E.N.), (et al.), *6254*
- friction, steel, wear, Felder (E.), Montagut (J.L.), *7086*
- conical bodies, work hardening, Stahlberg (U.), *7455*
- casting, deformation (plastic), random media, void closure, Stahlberg (U.), Keife (H.), (et al.), *7462*
- deformation, materials processing, Leutgob (A.), *10267*

Form (J.), buckling, cooling towers, design, shells (hyperbolic), vibration, Krings (W.), (et al.), *321*

Forman (R.G.), see Shivakumar (V.), *8397*

forming, elastoplasticity, plasticity, stress analysis, Lee (E.H.), *273*
- friction (solid solid), metals, plasticity, Oxley (P.L.B.), *1001*
- dynamic effects, forging, high speed, inertia, materials properties, plane strain, Arora (K.L.), Sachdev (A.S.), (et al.), *1338*
- plastic behavior, roughness, sheet metal, surfaces, Yamaguchi (K.), Nishimura (S.), (et al.), *1345*
- cold working, plastic behavior, upset forging, yield condition, Pohlandt (K.), *2393*
- cold working, constitutive equations, polymers, survey, yield condition, Shaw (M.T.), *2396*
- impact, sheet metal, Grieve (R.J.), Wambugu (N.W.), *2398*
- drawing, flaws, sheet metal, Ghosh (S.K.), *2400*
- plane strain, plasticity, stream function, Tomita (Y.), Seguchi (Y.), (et al.), *3274*
- cutting, extrusion, materials properties, plastic flow, Shaw (M.C.), *3420*
- computing techniques, finite element techniques, plastic behavior, Erlmann (K.), Dung (N.L.), *3427*
- materials properties, nuclear reactors, pressure vessels, structural materials, welding, Nichols (R.W.) ed., *3564, book*
- elastoplasticity, necking, nucleation, Chu (C.C.), Needleman (A.), *4471*
- deformation (finite), extrusion, finite element techniques, plasticity, Dung (N.L.), *5272*
- crystals, ductile fracture, fracture mechanics, lattices, Chang (Y.W.), Asaro (R.J.), *6433*
- cylindrical bodies, elastoplasticity, pressurized pipes, Riedel (D.), *7344*
- beams (curved), curved elements, digital simulation, shells (shallow), Stolarski (H.), Belytschko (T.), *8142*
- creep, deep drawing, drawing, interface phenomena, plastics, Ohsawa (H.), Nishimura (H.), *8358*
- compression, crack initiation, fracture, friction, metals, Matsuura (Y.), Morimoto (H.), *8432*
- pipes, rolling, wrinkling, Kiuchi (M.), Shintani (K.), (et al.), *9374*
- tools, ultrasonics, vibration, vibrational forming, Biddell (D.C.), *9375*

- alloys, ausforming, fatigue, rolling, steel, Ohmori (M.), Yokokawa (S.), (et al.), *9378*
- cutting, grinding, metrology, optimization, *10268*
- necking, strain analysis, Chu (C.-C.), *10269*

Forrai (L.), rotating disks, rotating shafts, vibration, *382*

Forrestal (M.J.), conical bodies, penetration, soils, stress analysis, Norwood (F.R.), (et al.), *406*
- conical bodies, penetration, porous media, rocks, Longcope (D.B.), (et al.), *4457*
- see Longcope (D.B.), *6358*

Forsching (H.), aeroelasticity, gust loads, pressure distribution, separated flow, structural response, *2912*

Forste (J.), initial value problems, linearization, plasma, theory, two phase flow, *1778*
- differential equations (partial), hydrodynamics, plasma, theory, two component flow, *3897*
- channel flow, existence theorems, gravity waves (finite depth), unsteady flow, *8623*

Forsyth (P.J.E.), see Bowen (A.W.), *2426*

Forsyth (T.H.), see Khandhadia (P.S.), *6769*

Fort (J.), airfoil theory, numerical methods, potential flow, transonic flow, Kozel (K.), *3726*

Forte (I.), see Steinberg (A.M.), *6146*

Fortner (E.) eds., cast steel, charpy tests, ductility, fracture control, microstructures, steel, Praeger (M.), *6476, book*

Fortune (D.), bending, contact problems, existence theorems, plates, uniqueness, variational methods, Bezine (G.), *7330*

Foschi (R.O.), beams (sandwich), laminates, strength, Barrett (J.D.), *1224*

Fosdick (R.L.), non newtonian flow, rotating bodies, simple fluids, spherical bodies, viscoelastic fluids, Kao (B.G.), *1484*
- beams (curved), bending (elastic), elastica, elasticity (nonlinear), rods, James (R.D.), *2216*
- continuum mechanics, hydrodynamic stability, non newtonian flow, thermodynamics (nonequilibrium), Rajagopal (K.R.), *4128*

Fossman (R.), beams, dynamic response, vibration, Sorensen (A.) Jr., *365*

Foster (C.G.), collapse, compression, postbuckling behavior, shells (cylindrical), *2305*

Foster (F.S.), cylindrical waves, scattering, transducers, ultrasonics, Arditi (M.), (et al.), *3982*
- diagnostics, tissues, ultrasonics, Hunt (J.W.), *7114*

Fotheringham (J.), see Marsters (G.F.), *7733*

Foucher (D.), see Flamand (L.), *1027*

Fouda (I.M.), see El-Nicklawy (M.M.), *7308*
- see El-Nicklawy (M.M.), *7309*

Fougeres (R.), see Dudragne (G.), *12096*

foundations, deformation, displacement, shells (cylindrical), tanks, Brandes (K.), *307*
- optimization, sampling, soils, Rats (M.V.), Pyrchenko (V.A.), *409*
- dynamic analysis, vibration (forced), Gamer (U.), Pao (Y.-H.), *1283*
- approximations, dynamic properties, stiffness, Kitamura (Y.), Sakurai (S.), *1284*
- centrifugation, centrifuge tests, clay, gravity platform, scale models, Andersen (K.H.), Selnes (P.B.), (et al.), *1313*
- clay, scale models, Das (B.M.), *1314*
- finite element techniques, soil structure interaction, substructuring, Dasgupta (G.), *1881*
- sand, stress strain relationships, Gudehus (G.), *2383*
- displacement, layered media, soils, Gazetas (G.), *3406*
- nonhomogeneous soils, slabs, Malikova (T.A.), *3407*
- piles, scale models, soil structure interaction, soils, Wiesner (T.J.), Brown (P.T.), *3409*
- sand, tanks, Abbs (A.F.), Sinclair (T.J.E.), *3413*
- dynamic response, fatigue, loads, offshore structures, resonance, Smith (I.M.), Molenkamp (F.), *3558*
- layered media, seismic loading, soil structure interaction, Waas (G.), *4847*
- flexure, soils, Selvadurai (A.P.S.), *5257*
- buildings, cushioning materials, stress analysis, structural support, thermoplasticity, Klepikov (S.N.), Khorunzhii (V.I.), *5361*
- dynamic response, vibration (forced), vibration (torsional), Sankaran (K.S.), Krishnaswamy (N.R.), (et al.), *6310*
- constitutive relations, numerical analysis, soils, Zienkiewicz (O.C.), *6374*
- design (optimum), dynamic programming, walls, Ladany (S.P.), *6511*
- dynamic response, seismic loading, Adeli (H.), Hejazi (M.S.), (et al.), *7032*
- modeling, seismic loading, soil structure interaction, Fedock (J.J.), Schreyer (H.L.), *7033*
- seismic loading, soil structure interaction, Ellis (B.R.), *7036*
- half space, seismic loading, soil structure interaction, Hamidzadeh-Eraghi (H.R.), Grootenhuis (P.), *7037*
- bridges, matrix methods, piles, reinforced concrete, structural response, Onu (G.), *7607*
- beams, moving loads, Kerr (A.D.), *9263*
- earthquake resistant structures, shear stress, soil structure interaction, underground, Meade (K.P.), Keer (L.M.), *9346*
- buildings, joints, piles, rock mechanics, shear, Dight (P.M.), Chiu (H.K.), *9485*
- bearing capacity, collapse, plastic behavior, slabs, Dolinski (K.), Sawczuk (A.), *10176*
- computing techniques, contact stresses, eccentric loading, Selvadurai (A.P.S.), *10254*
- boilers, elastoplasticity, seismic loading, Nakao (Y.), Murase (Y.), (et al.), *10851*
- soil structure interaction, vibration, Saha (S.), Chattopadhyay (B.C.), *11150*
- axial loading, caissons, piers, strength, Gruodis (R.I.), *11329*

four bar linkage, kinematics, linkages, machine design, mechanisms (planes), Kimbrell (J.E.), Hunt (K.H.), *4558*
- design, kinematics, linkages, mechanisms, Hain (K.), *4560*
- kinematics, linkages, mechanisms (planes), synthesis, Sun (J.W.H.), Waldron (K.J.), *5375*
- design, kinematics, mechanisms (planes), Hain (K.), *5376*
- burmester configuration, kinematics, mechanisms, Watanabe (K.), *6554*
- dynamic analysis, kinematics, linkages, mechanisms (spatial), Oranescu (A.), Bocioaca (R.), *6560*
- couplings, kinematics, linkages, mechanisms (planes), Hunt (K.H.), Fichter (E.F.), *6562*
- design, mechanisms (planes), Heinzl (J.), *7632*
- balancing, kinematics, kinetics, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *8475*
- kinematics, mechanisms (planes), Kimbrell (J.E.), Hunt (K.H.), *8478*
- burmester configuration, computer aided design, linkages, vector methods, Wolford (J.C.), *8481*
- balancing, linkages, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *9478*
- design, dynamic analysis, mechanisms (spatial), velocity profiles, Osman (M.O.M.), Dukkipati (R.V.), *9479*
- balancing, linkages, mechanisms, vibration, Bagci (C.), *10378*
- kinematics, linkages, mechanisms, Baker (J.E.), *11341*

Fourcade (C.), see Cathignol (D.J.), *1043*

fourier series, cylindrical bodies, neumann problem, potential theory, semi infinite media, Beliaev (S.Iu.), Kuzmin (Iu.N.), *44*
- ducts (constant area), magneto fluid dynamics, pressure gradient, viscoelastic fluids, Sengupta (P.R.), Bhattacharyya (S.K.), *4746*
- asymptotic behavior, parabolic equations, Belousov (L.A.), *4963*
- reflection, seismic waves, Marcoux (M.O.), *5863*
- asymptotic behavior, dirichlet problem, tricomi problem, Chebanova (N.A.), *8116*
- computing techniques, finite element techniques, matrix methods, structural analysis, Wang (L.), *8145*
- disks, dynamic analysis, finite element techniques, Srinivasan (V.), Ramamurti (V.), *8152*

fourier transform, algorithms, computer programming, fast fourier transform, Despain (A.M.), *70*
- autocorrelation function, diffraction, lasers, statistical theory, yarn, Toba (E.), *2256*
- codes, error, error control, frequency domain techniques, Blahut (R.E.), *4215*
- eigenvalue problems, stability theory, Malyutin (I.S.), *4967*
- shells (spherical), vibration (free), Bhattacharyya (R.), *5224*
- acoustics (physiological), spectra, Teaney (D.T.), Moruzzi (V.L.), (et al.), *5789*
- acoustics, discrete systems, filters, spectral analysis, Williams (J.R.), *5790*
- design (optimum), laplace transform, mechanisms, nonlinear mechanics, Sandler (B.Z.), *6565*
- data analysis, frequency domain techniques, random excitation, vibration, Bendat (J.S.), *7175*
- elasticity, energy release rate, griffith cracks, stress intensity factor, strips, Dhaliwal (R.S.), Singh (B.M.), *8390*
- incompressible flow, porous surfaces, suction, two dimensional flow, Nayfeh (A.H.), Reed (H.L.), (et al.), *8563*
- multiple scales, oscillations, Jeffrey (A.), Kawahara (T.), *9111*

Fourney (W.L.), see Stecher (F.P.), *424*
- see Rossmanith (H.P.), *2465*
- boreholes, explosive loading, oil wells, photoelasticity (dynamic), Barker (D.B.), (et al.), *8408*

Fournier (J.L.), mixing, turbulence, turbulence model, Gence (J.N.), (et al.), *6690*

Foutch (D.A.), dynamic response, structural response, vibration (torsional), wind loads, Safak (E.), *3378*

Fox (B.), arteries, diagnostics, stenoses, Seed (W.A.), *4118*

Fox (D.B.), design (optimum), nonlinear programming, Liebman (J.S.), *10346*

Fox (D.W.), dynamic properties, plates (reinforced), vibration (free), Sigillito (V.G.), *9311*

Fox (M.J.H.), damping, experimental mechanics, thin films, vibration (forced), Whitton (P.N.), *3387*

Fox (P.G.), biomaterials, composite materials, fibers, mechanical properties, teeth, *1034*

fractographic tests, crack growth, creep rupture, stress intensity factor, Gladshtein (V.I.), Semenova (T.N.), *441*
- crack growth, fatigue, steel, Kunio (T.), Shimizu (M.), (et al.), *442*
- high temperature, low cycle fatigue, notch tests, steel, triaxial loading, Marloff (R.H.), Johnson (R.L.), *2411*
- aluminum alloys, crack initiation, fatigue, fretting, wear, Leadbeater (G.), Kovalevskii (V.V.), (et al.), *5290*
- crack propagation, cracks, fatigue, Schijve (J.), *6413*

- crack growth, elastoplasticity, fatigue, Kobayashi (H.), Sibuya (E.), (et al.), *7481*
- fatigue, fracture, Bondal (G.V.), Kolesnikova (T.V.), *9395*
- crack growth, fasteners, fatigue, Mcgee (W.M.), Hsu (T.M.), *9414*

fractography, axial loading, crack growth, crazing, Aleshin (V.I.), Kuvshinskii (E.V.), *457*

- charpy tests, fracture energy, fracture toughness, notch tests, Oldfield (W.), *2498*
- crack propagation, macroscopic characterization, moisture, polymers, Bretz (P.E.), Hertzberg (R.W.), (et al.), *3434*
- creep, steel, tests, Toth (L.), Szabados (E.), (et al.), *3499*
- crack propagation, environmental tests, fatigue, Grinberg (N.M.), Ostapenko (I.L.), (et al.), *7488*
- fatigue, fracture, fracture toughness, micromechanisms, Stepanenko (V.A.), *7512*

fracture, combined loading, cracks, finite element techniques, stress intensity factor, Ishikawa (H.), *85*

- joints, mining, photography, rocks, Hagan (T.O.), *426*
- concrete, endochronic theory, strain softening, Bazant (Z.P.), Shieh (C.-L.), *430*
- copper, crack growth, fatigue, microstructures, stress intensity factor, Mullner (H.), Weiss (B.), *444*
- composite materials, dynamic stresses, fibers, Sakharova (E.N.), Ovchinskii (A.S.), *1210*
- elastic waves, rock mechanics, shock waves (normal), Kosinski (W.), *1300*
- porous media, pressure, rocks, Gowd (T.N.), Rummel (F.), *1336*
- boreholes, rocks, strength, Stimpson (B.), *1337*
- brittle fracture, grain boundaries, metallurgy, molybdenum, Kumar (A.), Eyre (B.L.), *1355*
- crack growth, j-integral, path integrals, Kishimoto (K.), Aoki (S.), (et al.), *1388*
- crack tip geometry, finite element methods (hybrid), notch sensitivity, singularities, Lin (K.Y.), Tong (P.), *2071*
- crack propagation, fatigue, nuclear reactors, Ermi (A.M.), Bauer (R.E.), (et al.), *2406*
- crack opening displacement, cracks, plastic behavior, plates (weakened), Panasyuk (V.V.), Vitvitskii (P.M.), (et al.), *2440*
- inequalities, microcracks, plastic behavior, Bazant (Z.P.), *2443*
- ductile fracture, plasticity, porous media, Oyane (M.), Sato (T.), (et al.), *2446*
- finite element techniques, fracture mechanics, prediction, structures, Belie (R.G.), Reddy (J.N.), *2463*
- fatigue, flaw detection, microcracks, surface flaws, Verpoest (I.), Aernoudt (E.), (et al.), *2503*
- bones, braces, human body, injuries, Pratt (D.J.), Bowker (P.), (et al.), *3068*
- composite materials, computing techniques, eigenvalue problems, elasticity, finite element methods, optimization, plasticity, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- alloys, brittle materials, ductility, transition, Schulson (E.M.), *3264*
- ductile fracture, elastoplasticity, j-integral, material testing, surveys, Landes (J.D.), Begley (J.A.), (et al.), *3460, book*
- acoustic emission, crack propagation, pressure vessels, shear, Finkel (V.M.), Muravin (G.B.), (et al.), *3506*
- numerical methods, permeability, Bawden (W.F.), Curran (J.H.), (et al.), *4028*
- elasticity (linear), solid mechanics, stress analysis, Faupel (J.H.), Fisher (F.E.), *4330, book*
- conservation laws, continuum mechanics, integral methods, mathematical methods, similarity methods, Cherepanov (G.P.), *4489*
- dynamic fracture, plastics, plates, polymethyl-methacrylate, strength, Tsai (Y.M.), Chen (Y.T.), *4499*
- computing techniques, elastoplasticity, finite element techniques, hardening, Hammel (J.W.), Bodisco (U.V.), (et al.), *4502*
- fatigue, material testing, stochastic processes, Bolotin (V.V.), *4504*
- elasticity, energy methods, fracture mechanics, pressure vessels, steel, Rosenfield (A.R.), Shetty (D.K.), *4518*
- flaws, permeability, rocks, Goodman (R.E.), Sundaram (P.N.), *4834*
- bones, injuries, prosthetic devices, Banks (A.J.), Dervin (E.), *4922*
- elastodynamics, magnetic field, rods, Golovin (Yu.I.), Finkel (V.M.), (et al.), *5087*
- cermets, composite materials, composite structures, fatigue, materials properties, metallic composites, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
- bonded joints, composite materials, edge cracks, singular integral equations, stress intensity factor, Bakioglu (M.), *5127*
- deformation, joints, pore pressure, rocks, Dhowian (A.W.), *5264*
- biaxial loading, brittle fracture, stochastic processes, weibull statistics, Matsuo (Y.), *5295*
- crack opening displacement, multiple cracks, yield condition, Smith (E.), *5305*
- field tests, fluid injection, geothermal energy, hydraulics, rocks, Solberg (P.), Lockner (D.), (et al.), *5884*
- bones, prosthetic devices, stress analysis, Carter (D.R.), Vasu (R.), *6005*
- bones, prosthetic devices, strain measurement, Carter (D.R.), Vasu (R.), (et al.), *6006*
- biological joints, bones, ultrasonics, Dzene (I.Ya.), Dzenis (V.V.), (et al.), *6032*
- fluid injection, pressure, rocks, Nolte (K.G.), Smith (M.B.), *6398*
- acoustic emission, rocks, tests, Radu (C.), Rugina (I.), (et al.), *6401*
- crack initiation, cyclic loading, fatigue, stochastics, Arone (R.), *6416*
- life expectancy, polymers, Narzullaev (B.N.), Karimov (S.N.), (et al.), *6426*
- computing techniques, continuum mechanics, crack propagation, geomechanics, hydraulic fracturing, stress intensity factor, Hanson (M.E.), Shaffer (R.J.), *6434*
- ceramics, glass, high temperature, notch tests, Northover (J.P.), Groves (G.W.), *6440*
- computing techniques, elastoplasticity, newton method, Delorenzi (H.G.), *6446*
- crack propagation, cracks, directivity pattern, nondestructive tests, Maslov (L.A.), Arkhinov (V.I.), *6495*
- deformation, welded joints, welding, Daunis (M.A.), Brazhenas (A.P.), *6567*
- particles, shock waves, thermal stresses, Levin (A.L.), Murzinov (I.N.), (et al.), *6946*
- constitutive equations, creep, nonlinear materials, Barenblatt (G.I.), Botvina (L.R.), *7137*
- residual stresses, steel, surface effect, Iwai (Y.), Arima (J.), *7292*
- composite structures, fatigue, material testing, structural analysis, surveys, Marshall (I.H.) ed., *7296, book*
- bonded joints, composite materials, plastics, transient loading, Suvorova (Yu.V.), Sorina (T.G.), (et al.), *7298*
- composite materials, glass, glass fibers, strength, Roginskii (S.L.), Kanovich (M.Z.), *7307*
- life expectancy, probability, random loading, reliability analysis, Bolotin (V.V.), *7468*
- biaxial loading, fatigue, stochastic systems, Troshchenko (V.T.), Sosnovskii (L.A.), *7485*
- damage (cumulative), fatigue, life expectancy, Kuliev (V.D.), Kaplun (A.B.), *7486*
- cyclic loading, fatigue, inhomogeneities, microcracks, Getman (A.F.), *7487*
- crack initiation, crack propagation, decomposition, stochastics, Ichikawa (M.), Tanaka (S.), *7509*
- fatigue, fractography, fracture toughness, micromechanisms, Stepanenko (V.A.), *7512*
- correlation, stochastics, transition, Puttick (K.E.), *7525*
- brittle fracture, crack propagation, material testing, Nikolaevskii (V.N.), *7530*
- crack resistance, heat treatment, Lazko (V.G.), Lazko (V.E.), (et al.), *7534*
- cyclic loading, stochastics, Troshchenko (V.T.), Sosnovskii (L.A.), *7537*
- boundary integral methods, computing techniques, pressure, Hungr (O.), Morgenstern (N.R.), *7538*
- crack growth, crack opening displacement, finite element techniques, j-integral, microcracks, reinforced concrete, Petersson (P.-E.), *7539*
- buckling, cracks, plates, stability, tension, Dyshel (M.Sh.), *7550*
- continuum mechanics, explosions, modeling, oil shale, rock mechanics, Grady (D.E.), Kipp (M.E.), *7551*
- notch tests, polymers, torsion, yield condition, Truss (R.W.), Duckett (R.A.), (et al.), *7564*
- experimental mechanics, fatigue, flaws, pipes, Shibata (K.), Oba (T.), (et al.), *7620*
- composite materials, fibers, materials properties, strength, Chou (T.-W.), Kelly (A.), *8227*
- fluid injection, hydraulic fracturing, hydraulics, rocks, simulation, Settari (A.), *8354*
- bending, rocks, strength, Swan (G.), *8357*
- compression, crack initiation, forming, friction, metals, Matsuura (Y.), Morimoto (H.), *8432*
- cracking, limit analysis, reinforced concrete, shells, Coenen (J.H.), *8439*
- damage (cumulative), fissured systems, spectral analysis, surveys, Fras (G.), Pons (J.C.), (et al.), *8951*
- acoustic waves, random media, Strizhkov (S.A.), *8959*
- bones, impact, injuries, knees, Viano (D.C.), Stalnaker (R.L.), *9050*
- composite materials, fibers, polymers, tension, Protasov (V.D.), Ermolenko (A.F.), (et al.), *9251*
- cracks, diffraction, elastic waves, lamb problem, Rokhlin (S.I.), *9347*
- bed thickness, joint spacing, joints, models, rocks, Ladeira (F.L.), Price (N.J.), *9371*
- crack initiation, fracture mechanics, strain rate, Kipp (M.E.), Grady (D.E.), (et al.), *9382*
- creep, edge dislocations, sliding, Wirmark (G.), Nilsson (J.-O.), (et al.), *9393*
- fatigue, fractographic tests, Bondal (G.V.), Kolesnikova (T.V.), *9395*
- plastic behavior, Pranckevicius (G.A.), *9410*
- nonlinear materials, plastic behavior, Dougill (J.W.), Rida (M.A.M.), *9411*
- creep, deformation, low cycle fatigue, titanium, Strizhalo (V.A.), *9428*
- impulsive loading, spallation, Dremin (A.N.), Molodets (A.M.), *10246*
- deformation, low temperature, twinning, Tot (L.), *10277*
- deformation (plastic), material testing, metallurgy, work hardening, Aurich (D.), Wobst (K.), *10290*
- composite materials, fibers, Kousiounelos (P.N.), Williams (J.H.) Jr., *10303*
- granular media, stochastics, Shimbo (M.), *10307*
- acoustic measurements, composite materials, flaw detection, Frolov (D.I.), Kikeev (R.Sh.), (et al.), *10319*
- crack tip geometry, fracture toughness, plane strain, specimen design, Wei (S.), Tingshi (Z.), (et al.), *10338*
- acid penetration, exothermic reactions, rocks, thermal effects, Lee (M.H.), Roberts (L.D.), *10679*

- contamination, convection (free), diffusion, porous media, Nuttall (H.E.), Ray (A.K.), *10829*
- poiseuille flow, rocks, viscous flow, Neuzil (C.E.), Tracy (J.V.), *10832*
- design, failure, fatigue, materials properties, piping systems, pressure vessels, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*

fracture angle, rocks, triaxial tests, Seya (K.), *427*
- concentrated load, crack opening displacement, singularities, strain energy, stress intensity factor, Gdoutos (E.E.), *458*

fracture control, cast steel, charpy tests, ductility, microstructures, steel, Fortner (E.) eds., Praeger (M.), *6476, book*

fracture criteria, crack propagation, cracks, strain energy, Chang (K.J.), *1363*
- brittle fracture, fracture mechanics, multiaxial fatigue, Awaji (H.), *1368*
- iron, triaxial loading, Igaki (H.), Ikeda (K.), *1370*
- cracks, plasticity, upset forging, Mizuta (A.), Tsuda (O.), (et al.), *1379*
- aluminum alloys, high cycle fatigue, Botvina (L.R.), Shabalina (V.N.), (et al.), *2425*
- crack growth, crack retardation, ductile fracture, j-integral, Woo (C.W.), Kuruppu (M.D.), *2453*
- composite materials, finite element techniques, notch sensitivity, Backlund (J.), *2454*
- crack propagation, cutting, edge cracks, prediction, Maiti (S.K.), *2460*
- j-integral, mixed mode fracture, unloading, Yoda (M.), *3458*
- composite materials, fibers, shear lag, Goree (J.G.), Gross (R.S.), *5130*
- low cycle fatigue, polymers, probability, rubber, Valanis (K.C.), Yilmazer (U.), *6456*
- crack initiation, crack propagation, Fischer (K.-F.), *7467*
- fracture toughness, metals, structural materials, Volkov (G.S.), Naumenko (V.P.), *7521*
- concrete, energy density, fracture mechanics, Petersson (P.E.), *7522*
- crack growth, inelasticity, thermodynamics, Nikolaevskii (V.N.), *7524*
- crack opening displacement, elastoplasticity, j-integral, material testing, Havas (I.), Czoboly (E.), *7526*
- dugdale model, fracture mechanics, pipelines, welded structures, De Wit (R.), Smith (J.H.), *7531*
- bonded joints, composite materials, interface cracks, singularities, Viola (E.), Piva (A.), *7535*
- composite materials, cyclic loading, fatigue, fibers, Hashin (Z.), *8369*
- composite materials, fatigue, materials properties, Reifsnider (K.), *8378*
- ceramics, fracture mechanics, griffith cracks, Nobile (L.), *8392*
- blunt bodies, crack opening displacement, Kuang (Z.-B.), *8395*
- brittle materials, cracking, strength, Bascoul (A.), Maso (J.C.), *8399*
- bending, cracks, j-integral, pipelines, plasticity, Zahoor (A.), Kanninen (M.F.), *8400*
- crack opening displacement, elastoplasticity, j-integral, Willoughby (A.A.), Pratt (P.L.), (et al.), *8401*
- crack propagation, inhomogeneities, Sih (G.C.), Chen (E.P.), *8414*
- crack arrest, fracture toughness, material testing, pipelines, pressure vessels, Hahn (G.T.) eds., Kanninen (M.F.), *8415, book*
- experimental methods, pressure change, reservoirs, Lee (W.J.), Holditch (S.A.), *8944*
- biaxial loading, crack opening displacement, stress intensity factor, Chou (C.-T.), Kuo (C.-P.), *9397*
- elastoplasticity, finite element techniques, Beremin (F.M.), *9409*
- crack growth, elastoplasticity, Theocaris (P.S.), Andrianopoulos (N.P.), *10300*

fracture energy, adhesives, bonded joints, fracture mechanics, Kinloch (A.J.), Shaw (S.J.), *542*
- brittle fracture, brittle materials, crack growth, graphite, Barinov (S.M.), Grevtsev (S.N.), (et al.), *2497*
- charpy tests, fractography, fracture toughness, notch tests, Oldfield (W.), *2498*

fracture mechanics, brittle materials, crack initiation, mixed mode fracture, Tirosh (J.), Catz (E.), *456*
- crack arrest, crack initiation, dynamic fracture, fracture toughness, Lereim (J.), *498*
- adhesives, bonded joints, fracture energy, Kinloch (A.J.), Shaw (S.J.), *542*
- containment, lng tankers, natural gas, tanks, Kaufman (J.G.), Bucci (R.J.), (et al.), *1349*
- composite materials, kinetic theory, statistical mechanics, three dimensional formulation, Tamuzh (V.P.), *1359*
- brittle fracture, fracture criteria, multiaxial fatigue, Awaji (H.), *1368*
- cyclic loading, missiles, welding, Hrisafovic (N.), Ledey (J.P.), *1384*
- crack initiation, fatigue, notch sensitivity, stress intensity factor, Livesey (V.B.), Knott (J.F.), *2408*
- crack growth, fatigue, metallic composites, Morley (J.G.), Mccoll (I.R.), *2409*
- cracks, fatigue, gas turbines, powder metallurgy, Sheldon (G.P.), Cook (T.S.), (et al.), *2416*
- cyclic loading, fracture toughness, steel, Troshchenko (V.T.), Prokopenko (A.V.), (et al.), *2421*
- microcracks, stress analysis, stress intensity factor, Wilkinson (D.S.), Vitek (V.), *2435*
- airplane structures, stress analysis, survey, Liebowitz (H.), Subramonian (N.), (et al.), *2437*
- crack growth, crack tip geometry, elastoplasticity, finite element methods (hybrid), Rice (J.R.), Drugan (W.J.), (et al.), *2441*
- crack opening displacement, elastoplasticity, fracture toughness, residual strength, Schwalbe (K.-H.), *2442*
- ceramics, glass, life expectancy, random loading, Jakus (K.), Ritter (J.E.) Jr., *2458*
- finite element techniques, fracture, prediction, structures, Belie (R.G.), Reddy (J.N.), *2463*
- cavities, creep, grain boundaries, metals, Greenwood (G.W.), *3253*
- beams (composite), beams (variable cross section), concrete, stress analysis, web openings, Swartz (S.E.), Eliufoo (K.S.), *3294*
- crack propagation, fatigue, material testing, Shimada (H.), Furuya (Y.), *3433*
- crack growth, damage (cumulative), environmental tests, metals, Davidson (D.L.), *3449*
- finite element techniques, stress intensity factor, three dimensional formulation, torsion, wedges, Tseng (A.A.), Berry (J.T.), *3477*
- crack propagation, photoelasticity (dynamic), wave interactions, Rossmanith (H.P.), Shukla (A.), *3481*
- crack growth, creep, fatigue, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), *3494*
- crack growth, creep, fatigue, high temperature, stress intensity factor, Yokobori (T.), Sakata (H.), (et al.), *3495*
- crack opening displacement, j-integral, steel, toughness, Dahl (W.), *3503*
- fracture toughness, notch tests, De Roo (P.), Marandet (B.), *4491*
- cracks, elastic bodies, elliptical cracks, Erzhanov (Zh.S.), Garagash (I.A.), *4493*
- elasticity, energy methods, fracture, pressure vessels, steel, Rosenfield (A.R.), Shetty (D.K.), *4518*
- crack opening displacement, finite element techniques, singularities, Okabe (M.), *5024*
- beams (timoshenko), ice mechanics, Huang (N.C.), *5142*
- dynamic fracture, material testing, micromechanics, spallation, Golubev (V.K.), Novikov (S.A.), (et al.), *5291*
- crack growth, dugdale model, griffith cracks, survey, viscoelastic materials, Kaminskii (A.A.), *5301*
- j-integral, steel, Joyce (J.A.), Ernst (H.), (et al.), *5302*
- crack propagation, gas wells, hydraulics, interface cracks, reservoir engineering, Hanson (M.E.), Shaffer (R.J.), (et al.), *5311*
- composite materials, j-integral, laminates, strength, stress intensity factor, three dimensional formulation, Altus (E.), Rotem (A.), *5312*
- finite element techniques, multiple cracks, singularities, stress intensity factor, Staab (G.H.), Sun (C.T.), *5313*
- crack tip geometry, error, photoelasticity, stress intensity factor, Doyle (J.F.), Kamle (S.), (et al.), *5317*
- elastoplasticity, nuclear radiation, nuclear reactors, pressure vessels, radiation effects, Khan (M.A.), Shoji (T.), (et al.), *5370*
- finite element techniques, singularities, Okabe (M.), *6107*
- blast effects, experimental results, modeling, oil shale, Grady (D.E.), Kipp (M.E.), (et al.), *6399*
- damage, fatigue, material testing, time dependence, Biegler (K.K.), Sandor (B.I.), *6412*
- acoustic waves, fatigue, life expectancy, nondestructive tests, Tittmann (B.R.), Buck (O.), *6417*
- crystals, ductile fracture, forming, lattices, Chang (Y.W.), Asaro (R.J.), *6433*
- composite materials, crack growth, crack initiation, delamination, Wang (A.S.D.), Crossman (F.W.), *6436*
- composite materials, crack growth, crack initiation, delamination, material testing, Crossman (F.W.), Warren (W.J.), (et al.), *6437*
- beams, cements, composite materials, material testing, Visalvanich (K.), Naaman (A.E.), *6439*
- cutting, deformation, dynamic analysis, glass fibers, reinforced plastics, Inoue (H.), Ido (M.), *6449*
- elliptical cracks, flaws, transfer functions, Chang (R.), *6460*
- caustics, cracks, stress intensity factor, Rossmanith (H.P.), *6462*
- crack growth, fracture toughness, steel, Radon (J.C.), De Castro (P.M.S.T.), (et al.), *7472*
- fatigue, life expectancy, sensitivity, Fukuda (S.), *7483*
- cavities, creep rupture, grain boundaries, Beere (W.), *7496*
- concrete, energy density, fracture criteria, Petersson (P.E.), *7522*
- ductile fracture, fracture toughness, steel, Cox (E.P.), Lawrence (F.V.) Jr., *7527*
- continuum mechanics, crack propagation, fracture toughness, j-integral, Nguyen (Q.S.), *7529*
- dugdale model, fracture criteria, pipelines, welded structures, De Wit (R.), Smith (J.H.), *7531*
- crack tip geometry, photoelasticity, stress intensity factor, white light, Chiang (F.P.), Asundi (A.), *7555*
- brittle fracture, caustics, crack tip geometry, photoelasticity, surfaces, Theocaris (P.S.), *7556*
- crack growth, crack initiation, experimental mechanics, fracture toughness, j-integral, Morozov (E.M.), *7572*
- inelasticity, pipes, stress analysis, thermal stresses, Severud (L.K.), *7619*
- elastoviscoplasticity, j-integral, shells (cylindrical), work hardening, yield condition, Carmignani (C.), Vitale (E.), *8151*
- composite materials, disclinations, fibers, peeling, Vladimirov (V.I.), Priemskii (N.D.), (et al.), *8217*
- composite structures, crack propagation, fibers, Mileiko (S.T.), Rabotnov (Yu.N.), *8224*

- microfracture, rocks, strain rate, strength, Lankford (J.), *8351*
- crack growth, rocks, strength, time dependence, Wilkins (B.J.S.), *8352*
- finite element methods, rocks, Ingraffea (A.R.), Heuze (F.E.), *8355*
- oil shale, strain rate, Chong (K.P.), *8356*
- cracks, energy release, j-integral, mixed mode fracture, path integrals, Herrmann (A.G.), Herrmann (G.), *8388*
- ceramics, fracture criteria, griffith cracks, Nobile (L.), *8392*
- cracks, mathematical methods, mathematical models, three dimensional formulation, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *8396*
- crack propagation, fracture toughness, j-integral, Turner (C.E.), *8404*
- crack growth, ductile fracture, fatigue, fracture toughness, Sih (G.C.) eds., Valluri (S.R.), *8405, book*
- crack growth, linear theory, viscoelasticity, Mccartney (L.N.), *8413*
- computing techniques, corners, singular integral equations, stress intensity factor, Ioakimidis (N.I.), Theocaris (P.S.), *8419*
- finite element methods (hybrid), nonlinear materials, three dimensional formulation, Atluri (S.N.), Nakagaki (M.), (et al.), *8420*
- nonhomogeneous media, thermoelasticity (transient), thermoviscoelasticity, Atkinson (C.), Smelser (R.E.), *8881*
- failure, structural analysis, toughness, Sih (G.C.), Hartranft (R.J.), *9381*
- crack initiation, fracture, strain rate, Kipp (M.E.), Grady (D.E.), (et al.), *9382*
- cracks, spectroscopy, stress corrosion, torsion, Briggs (A.), Airey (R.), (et al.), *9391*
- crack opening displacement, crack propagation, creep rupture, stress intensity factor, Riedel (H.), Rice (J.R.), *9406*
- cracks, flaws, nozzles, pressure vessels, reactor structures, Atluri (S.N.), Kathiresan (K.), *9463*
- flaws, multiple cracks, nondestructive tests, Chang (R.), *10285*
- boundary integral methods, elliptical cracks, stress intensity factor, surface flaws, Athanassiadis (A.), Boissenot (J.M.), (et al.), *10287*
- stability theory, tensor methods, triaxial loading, Volkov (S.D.), Dubrovina (G.I.), *10292*
- griffith cracks, micromechanics, nucleation, Bamiro (O.A.), Provan (J.W.), *10299*
- experimental methods, fatigue, finite element methods, power plants, strain gages, stress analysis, Takhar (J.S.), Fryzel (R.A.), *10320*
- earthquakes, modeling, time dependence, Das (S.), Scholz (C.H.), *10846*
- creep, deformation, embrittlement, microstructures, steel, Carlson (R.L.), Lo (H.C.), *11316*
- biaxial loading, fracture toughness, microstructures, steel, Ziebs (J.), Aurich (D.), (et al.), *11317*
- friction (solid solid), models, stress intensity factor, wear, Rosenfield (A.R.), *12090*

fracture toughness, analysis, plane stress, ultimate strength, Markochev (V.M.), Morozov (E.M.), *497*
- crack arrest, crack initiation, dynamic fracture, fracture mechanics, Lereim (J.), *498*
- brittle fracture, composite materials, laminates, plates (holed), Nepershin (R.I.), Klimenov (V.V.), (et al.), *1213*
- brittle fracture, crack initiation, energy methods, inhomogeneities, Pranckevicius (G.), *1369*
- steel, surface effect, Ivanova (V.S.), Terentyev (V.F.), (et al.), *1416*
- aluminum alloys, porosity, porous media, welded joints, Mccarthy (W.A.) Jr., Lamba (H.), (et al.), *1476*
- cyclic loading, fracture mechanics, steel, Troshchenko (V.T.), Prokopenko (A.V.), (et al.), *2421*
- crack propagation, plates, torsion, Chow (C.L.), Ngan (K.M.), *2438*
- crack opening displacement, elastoplasticity, fracture mechanics, residual strength, Schwalbe (K.-H.), *2442*
- charpy tests, fractography, fracture energy, notch tests, Oldfield (W.), *2498*
- crack opening displacement, material testing, stress intensity factor, surface flaws, weight function, Bar-Tikva (D.), Grandt (A.F.) Jr., (et al.), *3478*
- ferrous metals, mechanical properties, micromechanisms, stainless steels, toughness, Lula (R.A.) ed., *3501, book*
- fracture mechanics, notch tests, De Roo (P.), Marandet (B.), *4491*
- crack initiation, material testing, steel, Chizhik (A.A.), *4495*
- charpy tests, crack resistance, dynamic loads, steel, strain energy, Basko (E.M.), Makhutov (N.A.), *4519*
- biaxial loading, crack propagation, Gdoutos (E.E.), *5296*
- dynamic response, mathematical methods, nondestructive tests, ultrasonics, Fu (L.S.), *5315*
- bending, defects, plane strain, steel, Boichenko (Yu.A.), Sosnin (A.V.), (et al.), *5333*
- crack growth, deformation (plastic), Maslov (L.I.), *6448*
- high temperature, inert gases, tension, testing equipment, vacuum, Babak (A.V.), Uskov (E.I.), *6477*
- aluminum alloys, crack growth, crack resistance, notch tests, Munz (D.), *6478*
- crack tip geometry, plastic flow, pressure vessels, steel, Kotilainen (H.), *6479*
- crack growth, fracture mechanics, steel, Radon (J.C.), De Castro (P.M.S.T.), (et al.), *7472*
- aluminum alloys, boron, material testing, Reedy (E.D.) Jr., *7507*
- fatigue, fractography, fracture, micromechanisms, Stepanenko (V.A.), *7512*
- brittle materials, failure, notch tests, stress intensity factor, Shih (T.T.), *7519*
- fracture criteria, metals, structural materials, Volkov (G.S.), Naumenko (V.P.), *7521*
- ductile fracture, fracture mechanics, steel, Cox (E.P.), Lawrence (F.V.) Jr., *7527*
- continuum mechanics, crack propagation, fracture mechanics, j-integral, Nguyen (Q.S.), *7529*
- acoustic emission, cleavage, microcracks, stability, Khan (M.A.), Shoji (T.), (et al.), *7558*
- brittle materials, carbides, crack resistance, variable loading, Novikov (N.V.), *7570*
- brittle materials, crack propagation, notch tests, stress intensity factor, Munz (D.), Bubsey (R.T.), (et al.), *7571*
- crack growth, crack initiation, experimental mechanics, fracture mechanics, j-integral, Morozov (E.M.), *7572*
- crack propagation, fracture mechanics, j-integral, Turner (C.E.), *8404*
- crack growth, ductile fracture, fatigue, fracture mechanics, Sih (G.C.) eds., Valluri (S.R.), *8405, book*
- crack arrest, fracture criteria, material testing, pipelines, pressure vessels, Hahn (G.T.) eds., Kanninen (M.F.), *8415, book*
- calibration, notch tests, specimen design, stress intensity factor, Bubsey (R.T.), Munz (D.), (et al.), *9430*
- crack growth, cyclic testing, steel, Troshchenko (V.T.), Pokrovskii (V.V.), (et al.), *9431*
- aluminum alloys, brittle fracture, crack growth, sheet metal, stress intensity factor, Yablonskii (I.S.), *9432*
- bending, crack growth, steel, Mubeen (A.), *9433*
- aluminum alloys, material testing, Latiere (H.J.), *10278*
- elastoplasticity, extensometers, Williams (J.A.), Carlson (K.W.), *10279*
- calibration, crack growth, finite element methods, specimen design, stress intensity factor, Beech (J.F.), Ingraffea (A.R.), *10337*
- crack tip geometry, fracture, plane strain, specimen design, Wei (S.), Tingshi (Z.), (et al.), *10338*
- biaxial loading, fracture mechanics, microstructures, steel, Ziebs (J.), Aurich (D.), (et al.), *11317*

Fradkov (A.L.), adaptive systems, algorithms, control, lyapunov's functions, *187*

Fraifeld (V.E.), accelerated testing, creep, life expectancy, material testing, Sorokin (O.V.), *2229*

Fralick (G.C.), see Krause (L.N.), *10731*

framed structures, beam columns, structural stability, Garcia (G.), *1247*
- buckling, lattices, structural stability, Anderson (M.S.), *1250*
- critical load, multistory frames, structural stability, Roberts (T.M.), *1251*
- statics, variational methods, Goldshtein (Yu.B.), Solomeshch (M.A.), *1422, book*
- collapse, imperfections, random media, La Tegola (A.), *6242*
- collapse, columns, failure, structural analysis, welded structures, Kanba (T.), Kanatani (H.), (et al.), *6244*
- design (optimum), duality, minimax techniques, Imai (K.), Shoji (M.), *6510*
- deformation, elastoplasticity, inelasticity, variable loading, work hardening, Tin Loi (F.), *6528*
- damping, dynamic behavior, experimental results, multistory frames, wind loads, Lam (L.C.H.), Lam (R.P.), *6529*
- buckling, columns, sway, Lay (M.G.), *6530*
- beams (continuous), buckling, elastic foundations, finite element techniques, shafts, Bagci (C.), *8261*
- inelasticity, reinforced concrete, structural analysis, Krishnamoorthy (C.S.), Mosi (D.R.), *8451*

frames, arches, dynamic analysis, Henrych (J.), *300, book*
- postbuckling behavior, Rizzi (N.), Di Carlo (A.), (et al.), *342*
- beams, buckling, hinged bodies, postbuckling behavior, Pignataro (M.), Rizzi (N.), (et al.), *343*
- design (optimum), Saka (M.P.), *504*
- modeling, reinforced concrete, statically indeterminate structures, Ford (J.S.), Chang (D.C.), (et al.), *509*
- nonlinear analysis, reinforced concrete, Hsu (C.-T.T.), Mirza (M.S.), (et al.), *523*
- bars, structural analysis, Abdul-Shafi (A.), *1226*
- frequency response, sensitivity, vibration (free), Yaghmai (I.), Frohrib (D.A.), *1291*
- buckling, structural stability, sway, Kounadis (A.N.), Economou (A.P.), *2285*
- buckling, structural stability, Kounadis (A.N.), *2299*
- beam columns, finite element methods, Ioannides (S.A.), Tarpy (T.S.) Jr., *2300*
- cyclic testing, inelasticity, offshore structures, seismic loading, Popov (E.P.), Mahin (S.A.), (et al.), *2535*
- multistory frames, shear walls, structural analysis, Basu (A.K.), Nagpal (A.K.), *2536*
- finite element methods (hybrid), nonlinear analysis, structural stability, Karamanlidis (D.), *3334*
- design (minimum weight), optimization, plates (stiffened), Bennett (J.A.), *3518*
- elastoplasticity, geometric nonlinearities, random loading, reliability analysis, Casciati (F.), Faravelli (L.), *3527*
- axial loading, dynamic response, Ovunc (B.A.), *3547*
- buildings (tall), shear walls, variational methods, Arvidsson (K.), *3549*
- beam columns, beams (variable cross section), buckling (plastic), buckling (torsional), flanges, Lee (G.C.), Hsu (T.L.), *5174*

- buckling, impulsive loading, snap-through, Kounadis (A.N.), *5187*
- design (minimum weight), kinematics, limit design, optimization, Brousse (P.), *5345*
- design (optimum), substructuring, Govil (A.K.), Arora (J.S.), (et al.), *5347*
- buildings, reinforced concrete, seismic loading, Emori (K.), Schnobrich (W.), *5890*
- airplane structures, eccentrically braced frames, seismic loading, Jain (A.K.), Goel (S.C.), *5891*
- beams (elastic), deformation (finite), large displacement, Milner (H.R.), *6213*
- dynamic response, motorcycles, structural response, vehicles, Verma (M.K.), Scott (R.A.), (et al.), *6313*
- earthquake resistant structures, multiple degree of freedom, stiffness, Capecchi (D.), Rega (G.), (et al.), *7040*
- beams, deflections, elastoplasticity, plasticity, yield condition, Bandyszewski (W.), Sawczuk (A.), *8438*
- collapse, reinforced concrete, ultimate strength, Ford (J.S.), Chang (D.C.), (et al.), *8450*
- buckling, postbuckling behavior, Pignataro (M.), Di Carlo (A.), (et al.), *9281*
- buckling (nonlinear), limit analysis, postbuckling behavior, Vlachinos (A.S.), Kounadis (A.N.), *9287*
- buckling, divergence, flutter, follower forces, stiffness, Kounadis (A.N.), Avraam (T.P.), *9804*
- buckling, structural stability, Williams (F.W.), *10173*
- arches, dynamic stability, shells (cylindrical), Simitses (G.J.), Sheinman (I.), *11124*

France (P.W.), channels, divergence, free boundary, hydraulic jump, *6595*

Franceschetti (G.), electromagnetic waves, measurements (dynamic), mechanical instruments, Papas (C.H.), *5250*

Francescutto (A.), see Cardo (A.), *10877*

Franciosi (V.), computing techniques, slopes, stability, Migliore (M.), *3415*

Francis (B.A.), feedback, sensitivity, stability theory, *131*

Francis (E.J.), see Dugger (G.L.), *5671*

Franck (D.), bearings (tilted pad), helium, labyrinth seals, turbines, Noack (G.), (et al.), *4556*

Frangopol (D.), beam columns, columns (variable cross section), probability theory, safety, Nguyen Dang Hung, *335*
- modeling, probabilistic design, reliability, structural analysis, *5350*

Frank (W.), compressible flow, condensation (dropwise), nozzles, prandtl-meyer flow, *586*

Franke (D.), bilinear systems, control, design, lyapunov's functions, *5042*

Franke (M.E.), see Drzewiecki (T.M.) eds., *1169, book*
- annuli, frequency domain techniques, laminar flow, unsteady flow, Farney (G.R.), (et al.), *8573*

Franke (R.), finite element techniques, finite element techniques, mathematical programming, parabolic equations, stiffness matrix, Salinas (D.), *2045*

Frankignoul (C.), see Muller (P.), *8996*

Franklin (R.N.), dispersion relation, modes, nonlinear characteristics, plasma, waves, Edgley (P.D.), (et al.), *4750*

Franko (N.V.), see Ryadno (A.A.), *9683*

Franz (G.), high temperature, lattices, oxidation, semiconductors, strain, stress analysis, Hartmann (W.), *9421*

Fras (G.), damage (cumulative), fissured systems, fracture, spectral analysis, surveys, Pons (J.C.), (et al.), *8951*

Frasca (P.), biomechanics, bones, dynamic properties, experimental methods, Harper (R.A.), (et al.), *3073*

Fraser (C.J.), boundary layer, fluid mechanics, reynolds number (high), transition, Milne (J.S.), *5430*

Fraser (W.B.), anisotropic media, harmonic waves, waveguides, *4450*

Fraser-Smith (A.C.), see Harker (K.J.), *5720*

Frauenholz (R.B.), interplanetary probes, space vehicles, trajectories, *1792*

Frederking (R.), see Schwarz (J.), *5324*

Frederking (R.M.W.), see Svec (O.J.), *5145*

fredholm equations, approximations, convergence, Vorobev (S.N.), *2014*
- linear equations, Hong (I.), Yanagi (T.), *2017*
- potential flow, three dimensional flow, Groh (G.), *4166*
- contact problems, continuum mechanics, hydrodynamics, volterra equations, Aleksandrov (V.M.), Kovalenko (E.V.), *4167*
- approximation methods, vortex sheets, vortices, Gorelov (D.N.), *4580*
- airfoils, irrotational flow, least squares, singularities, sources, Campbell (G.S.), *4587*
- equilibrium, magneto fluid dynamics, resistance, toroids, Lo Surdo (C.), *4748*
- boundary conditions, cylindrical bodies, perturbation methods, potential theory, Rosenfeld (A.M.), Timsit (R.S.), *4957*
- duct flow, fins, magneto fluid dynamics, velocity profiles, Ariel (P.D.), Aggarwala (B.D.), *5672*
- air water entry, cavities, inviscid fluid, wedges, Kuznetsov (A.V.), *5967*
- fluid mechanics, incompressible flow, potential flow, Pelant (J.), *6076*
- beams (nonhomogeneous), inclusions, tension, Stadnik (M.M.), Silovanyuk (V.P.), *6163*
- boundary integral methods, channel flow, stokes flow, two dimensional flow, Bezine (G.), Bonneau (D.), *6620*
- linear theory, planing surfaces, surface tension, Tuck (E.O.), *7076*
- computing techniques, iterative methods, pade approximation, Adhikari (S.K.), *7186*
- axisymmetric flow, bodies of revolution, least squares, singularities, source distribution, Jones (D.J.), *7681*
- computing techniques, elliptic equations, matrix methods, singularities, Christiansen (S.), *8119*
- integro differential equations, nonlinear analysis, radiation, Ueno (S.), *8120*
- cracks, stress concentration, Stadnik (M.M.), Gorbachevskii (I.Ya.), *8187*
- irrotational flow, ships, source distribution, Miloh (T.), *9015*
- blood flow, liver, organs, Holt (J.N.), Bracken (A.J.), *9066*
- optimization, regularization, smoothing of data, Butler (J.P.), Reeds (J.A.), (et al.), *9116*
- analogies, eigenvalue problems, Fernando (K.V.M.), Nicholson (H.), *9118*
- discretization, finite element methods, free boundary, gravity waves, matrices, variational methods, Berhault (C.), *9546*
- gravity waves, green function, hulls, potential flow, wave trains, Noblesse (F.), *9944*
- cracks, plates (thick), stress intensity factor, Sladek (J.), Sumec (J.), *10294*
- boundary integral methods, free boundary, sluices, spillways, surface flow, Cheng (A.H.-D.), Liggett (J.A.), (et al.), *10391*
- boundary integral methods, free boundary, gates, irrotational flow, Sohngen (B.), Bischoff (H.), *10401*

Fredricks (D.A.), see Shapiro (E.Y.), *6141*

free boundary, finite element techniques, stress analysis, Allison (I.M.), Soh (A.K.), *87*
- finite element techniques, fluid mechanics, incompressible flow, surface tension, Ruschak (K.J.), *97*
- inviscid fluid, supercritical flow, waterfalls, Naghdi (P.M.), Rubin (M.E.), *554*
- bottom irregularities, channel flow, friction (skin), sediment transport, Engel (P.), Lau (Y.L.), *557*
- channel flow, flumes, inviscid fluid, surface profiles, velocity profiles, Davis (R.W.), Deutsch (S.), *560*
- boundary integral methods, nonlinear analysis, pressure distribution, two dimensional flow, Schwartz (L.W.), *566*
- boundary conditions, potential flow, time dependence, two dimensional flow, Longuet-Higgins (M.S.), *567*
- coding, finite difference methods, hydrodynamics, Hirt (C.W.), Nichols (B.D.), *1115*
- inequalities, invariant imbedding, variational methods, Donnelly (J.D.P.), *1119*
- channel flow, discharges, sediment transport, Chang (H.H.), *1492*
- ice, rivers, velocity profiles, Shen (H.T.), Ackermann (N.L.), *1493*
- channel flow, finite difference methods, one dimensional flow, open channels, unsteady flow, Maczuga (T.), *1501*
- cavitation flow, singularities, wedges, Sotina (N.B.), Fominykh (V.V.), *1503*
- choked flow, gravity, water, waterfall, Simpson (H.C.), Rooney (D.H.), (et al.), *1517*
- boundary layer, gravity waves (surface), surface tension, viscosity, Trad (A.), *1593*
- channel flow, one dimensional flow, stratified flow, Gardner (G.C.), *2581*
- channel flow, froude number, sediment transport, Barr (D.I.H.), Alam (M.K.), (et al.), *2592*
- laminar flow, modeling, n body problems, nonlinear theory, turbulent flow, Greenspan (D.), *2720*
- groundwater, simulation, Korolev (A.V.), Shvidler (M.I.), *2998*
- numerical methods, porous media, Alt (H.W.), *3002*
- bottom irregularities, channel flow, slots, Nasser (M.S.), Venkataraman (P.), (et al.), *3599*
- channel flow, sediment transport, velocity profiles, Itakura (T.), Kishi (T.), *3606*
- cylindrical bodies, gravity waves (surface), two dimensional flow, walls, Boucher (G.), *3631*
- potential flow, spherical bodies, Khabarov (G.S.), *3634*
- acoustic waves, immiscible fluids, liquid liquid interface, Bedeaux (D.), Oppenheim (I.), *3713*
- cylindrical bodies, floating bodies, heaving, singular integral equations, singularities, Ursell (F.), *4099*
- bottom irregularities, channel flow, particle fluid flow, turbulence, Sumer (B.M.), Deigaard (R.), *4572*
- channel flow, jets, mixing, velocity measurement, weirs, Naib (S.K.A.), *4576*
- estuaries, finite difference methods, hydraulics, lakes, water pollution, Fischer (H.B.) ed., *4577, book*
- magneto fluid dynamics, plasma (toroidal), tokamak, Berestycki (H.), Brezis (H.), *4969*
- bifurcation, elliptic equations, plasma, tokamak, Sijbrand (J.), *4975*
- incompressible flow, jets, two dimensional flow, Alt (H.W.), Caffarelli (L.A.), (et al.), *4977*
- channel flow, cylindrical bodies, drag coefficient, floating bodies, froude number, Zein (S.A.A.), *5388*
- algorithms, finite difference methods, navier stokes equation, Bulgarelli (U.), Casulli (V.), (et al.), *5408*
- infiltration, nonlinear mechanics, porous media, variational methods, Quarteroni (A.), Visintin (A.), *5835*
- finite element techniques, seepage, Isaacs (L.T.), *5862*
- anisotropic media, displacement, half space, seismic waves, Kosaryev (G.L.), Makeyeva (L.K.), (et al.), *5869*
- cylindrical waves, elastic bodies, reflection, Kasiak (M.), Wlodarczyk (E.), *6354*

- channels, divergence, hydraulic jump, France (P.W.), *6595*
- hydrodynamic stability, liquids, surface tension, Svechkareva (M.A.), Tyuptsov (A.D.), *6675*
- induced drag, magneto fluid dynamics, propellers, theory, Yakovlev (V.I.), *6864*
- attenuation, nonhomogeneous media, surface waves, Lapin (A.D.), *7422*
- rheology, rotating cylinders, viscoelastic fluids, Beavers (G.S.), Yoo (J.Y.), (et al.), *7642*
- bed load, channel flow, secondary flow, Ikeda (S.), *7647*
- channel flow, froude number, stability, turbulent flow, Berlamont (J.E.), Vanderstappen (N.), *7648*
- channel flow, energy dissipation, variational methods, Song (C.C.S.), Yang (C.T.), *7650*
- channels, discontinuities, surface profiles, surge, Barr (D.I.H.), Das (M.M.), *7651*
- channel flow, critical speed, particle fluid flow, pipe flow, Bonapace (A.C.), *7658*
- nonhomogeneous media, nonlinear theory, porous media, Popa (V.), *7976*
- ellipsoids, oscillating bodies, ship motion, singularities, source distribution, Inglis (R.B.), Price (W.G.), *8037*
- liquid vapor interface, shear flow, viscometry, Krieg (R.D.), Son (J.E.), (et al.), *8500*
- channels, discharges, flood waves, saint venants equation, Sridharan (K.), Mohan Kumar (M.S.), *8506*
- cavitation flow, plates, surface tension, Vanden-Broeck (J.-M.), *8515*
- channel flow, flow obstructions, stratified flow, two dimensional flow, Janowitz (G.S.), *8532*
- porous media, unsteady flow, Rasmussen (H.), Salhani (D.), *8920*
- asymptotic methods, ship motion, slender bodies, Troesch (A.W.), *9006*
- finite element methods (hybrid), finite element techniques, fluid mechanics, sloshing, solitary waves, Wellford (L.C.) Jr., Ganaba (T.H.), *9146*
- reflection, ultrasonics, Kutzner (J.), *9343*
- bottom irregularities, channel flow, hydraulic jump, separation, Bouhadef (M.), Bauche (B.), (et al.), *9510*
- discretization, finite element methods, fredholm equations, gravity waves, matrices, variational methods, Berhault (C.), *9546*
- boundary integral methods, fredholm equations, sluices, spillways, surface flow, Cheng (A.H.-D.), Liggett (J.A.), (et al.), *10391*
- aeration, gravity waves, jets, weirs, Rogala (R.), *10392*
- boundary integral methods, fredholm equations, gates, irrotational flow, Sohngen (B.), Bischoff (H.), *10401*
- equilibrium, interface phenomena, layered media, magneto fluid dynamics, Kiryushin (V.V.), Chung Za Bin, *10744*

free jets, jets, pulsejets, Lai (J.C.S.), Simmons (J.M.), *628*
- boundary layer, similarity methods, transformation, transition flow, Hunt (R.), Wilks (G.), *1532*
- buoyancy, thermal plumes, Gersten (K.), Schilawa (S.), (et al.), *2661*
- melting, phase changes, shielded arc welding, Kolesnichenko (A.F.), *6570*
- conformal mapping, incompleteness, plates, potential flow, streamlines, Van Der Zanden (J.), *7663*
- laminar flow, viscoelastic fluids, Jimenez (J.), Daguenet (M.), (et al.), *8595*
- interaction, nozzles, surfaces, Lengrand (J.-C.), Allegre (J.), (et al.), *8596*
- shape, tubes, Dvoinishnikov (V.A.), Laryushkin (M.A.), *11524*

free shear layer, laminar flow, reynolds number, transition, turbulence, Demetriades (A.), Ortwerth (P.J.), (et al.), *4605*
- hydrodynamic stability, mathematical models, reynolds number (high), Huerre (P.), Scott (J.F.), *7742*
- jets, turbulence, turbulence model, Ahmadi (G.), *7753*

Freedman (A.), acoustics, barriers, plates, *1810*

Freeman (W.J.), biocontrol, dynamic analysis, electroencephalography, mathematical models, nervous system, nonlinear systems, nonlinear theory, *5149*

Freese (C.E.), see Tracey (D.M.), *278*
- see Bowie (O.L.), *8391*

freezing, casting, cooling, rupture, shells, stefan problem, Oki (S.), *440*
- conduction (heat), dispersed flow, dispersed media, melting, thermophysical properties, Pavlov (A.R.), Permyakov (P.P.), (et al.), *2815*
- permeability, snow, soils, thawing, Shtykov (V.I.), *3402*
- integral methods, liquid solid interface, solidification, solutions (material), O'Callaghan (M.G.), Cravalho (E.G.), (et al.), *3821*
- melting, models, transient, Cheung (F.B.), *4727*
- convection (forced), energy storage, phase changes, Hsu (C.F.), Sparrow (E.M.), *5577*
- hydrodynamic stability, pipe flow, thermal instability, turbulent flow, Thomason (S.B.), Mulligan (J.C.), *5578*
- crystals, heat transfer, mass transfer, Wheeler (A.A.), *5613*
- modeling, phase changes, soils, Hromadka (T.V.) II, Guymon (G.L.), *6388*
- cyclic testing, elastic constants, soils, Czajkowski (R.L.), Vinson (T.S.), *6389*
- soils, tunneling, Miyoshi (M.), Tsukamoto (T.), (et al.), *6390*
- cylindrical bodies, melting, phase changes, Lunardini (V.J.), *6800*
- experimental results, soils, Booth (D.B.), *9358*
- ice, solidification, Hsu (T.R.), Pizey (G.), *9716*
- heat transfer, mass transfer, porous media, Jame (Y.-W.), Norum (D.I.), *9900*
- conduction (heat), phase changes, soils, Mostaghimi (J.), Pfender (E.), *10563*
- crossflow, darcy flow, packed beds, porous media, tubes, Okada (M.), *10697*
- bubble dynamics, diffusion, liquid solid interface, solidification, two phase flow, Petrie (D.J.), Linehan (J.H.), (et al.), *10598*
- condensation, heat exchangers, pressure drop, tube bundles, Berg (W.F.), Berg (J.L.), *10626*
- flow obstructions, ice, pipe flow, Gilpin (R.R.), *10661*
- phase changes, phase velocity, Cho (S.H.), Sunderland (J.E.), *11773*
- kinetics, soils, Danielyan (Yu.S.), Yanitskii (P.A.), *11774*

Freiman (Yu.A.), see Manzhelii (V.G.), *5528*

Freishist (N.A.), see Perelman (R.G.), *5251*

Frelat (J.), see Zarka (J.), *7295*

Frenandez-Pello (A.C.), combustion, fire spread, flame propagation, pyrolysis, sublimation, Mao (C.-P.), *6846*

French (E.P.), see Sadunas (J.A.), *7893*

frequencies, feeding mechaaisms, vibration, Okabe (S.), Yokoyama (Y.), *1473*
- biomaterials, bones, impact, material testing, Khalil (T.B.), Viano (D.C.), (et al.), *1961*
- plates (circular), vibration (free), Gelos (R.), Ficcadenti (G.M.), (et al.), *2331*
- plates (rectangular), vibration (free), Gottlieb (H.P.W.), *2332*
- mindlin plates, plates (circular), vibration (free), Takahashi (S.), Suzuki (K.), (et al.), *2334*
- shells (of revolution), vibration (free), Goldenveizer (A.L.), *2339*
- modal analysis, multistory frames, vibration (free), Roberts (E.H.), Wood (R.H.), *2343*
- dynamic analysis, girders (curved), Yoo (C.H.), Fehrenbach (J.P.), *3295*
- concrete, impact, nondestructive tests, tests, Alexander (A.M.), *3496*
- bending, blades, eigenvalues, steam turbines, vibration (torsional), Belohradsky (H.-J.), *4430*
- plates (sandwich), vibration (free), Vestyak (A.V.), *4435*
- plates (rectangular), vibration, Irie (T.), Yamada (G.), (et al.), *5212*
- fluidized beds, pressure drop, Sadasivan (N.), Barreteau (D.), (et al.), *7011*
- beams, vibration (free), Hutchinson (J.R.), *7381*
- blades, experimental mechanics, rotating bodies, turbines, vibration (free), Beckmann (J.), Wachter (J.), *7399*
- elastic bodies, parallelepipeds, vibration (free), Gottlieb (H.P.W.), *8294*
- eigenvalues, modal analysis, vibration, Bugeat (L.P.), Lallement (G.), *8323*
- accelerated testing, correlation, endurance limit, high cycle fatigue, Kuzmenko (V.A.), *10339*
- buckling, dynamic analysis, Meziere (Y.), *11126*
- constraints, design (minimum weight), optimization, Khan (M.R.), Willmert (K.D.), *11318*
- eigenvalue problems, gravity waves (internal), stratified flow, Tam (K.K.), *11623*

frequency domain techniques, feedback, multivariable systems, synthesis, Doyle (J.C.), Stein (G.), *108*
- digital control, multivariable systems, process control, state space techniques, Seborg (D.E.), Fisher (D.G.), *205*
- biomechanics, gait, kinematics, Cappozzo (A.), *1033*
- discrete systems, identification, information theory, Zarrop (M.B.), *2126*
- decoupling, multivariable systems, pole placement, Koussiouris (T.G.), *3152*
- decoupling, design, feedback, Argoun (M.B.), Van De Vegte (J.), *3158*
- frequency response, identification, simulation, Frisch (H.P.), *3165*
- adaptive systems, arrays, error, Keating (P.N.), *3955*
- codes, error, error control, fourier transform, Blahut (R.E.), *4215*
- mathematical models, model reduction, transfer functions, Shieh (L.S.), Datta-Barua (M.), (et al.), *4222*
- algorithms, automatic control, design, matrix methods, multivariable systems, Frisch (H.P.), *4224*
- linear systems, multivariable systems, nyquist theory, stability theory, Postlethwaite (I.), Edmunds (J.M.), (et al.), *4225*
- controllability, graph theory, interconnected systems, multivariable systems, observability, Fessas (P.), *4234*
- harmonic balance, harmonic linearization, nonlinear systems, oscillations, Pismennyy (I.L.), *4243*
- analytical methods, digital control, frequency response, Whitbeck (R.F.), Didaleusky (D.G.J.), (et al.), *4258*
- internal combustion engines, pressure measurement, vibration, Arques (P.), *5649*
- finite element techniques, fluid-structure interaction, Combescure (A.), Gibert (R.J.), (et al.), *6705*
- data analysis, fourier transform, random excitation, vibration, Bendat (J.S.), *7175*
- frequency response, sampled data systems, simulation, Frisch (H.P.), *7232*
- algorithms, flaw detection, transducers (ultrasonic), ultrasonics, Cleveland (D.), Mucciardi (A.N.), *7578*
- algorithms, defects, flaw detection, ultrasonics, Cleveland (D.), Barron (A.R.), (et al.), *7584*
- dynamic response, gravity platforms, offshore structures, stochastic processes, vibration (random), wave loads, Sigbjornsson (R.), Smith (E.K.), *7614*
- acoustic loading, piping systems, vibration (forced), El-Raheb (M.), *8295*
- annuli, laminar flow, unsteady flow, Franke (M.E.), Farney (G.R.), (et al.), *8573*
- conical bodies, ducts (variable area), dynamic response, unsteady flow, Muto (T.), Kinoshita (Y.), (et al.), *8574*

- design, sampled data systems, time delay systems, Schnieder (E.), Kraft (K.H.), *9162*
- design, feedback, multivariable systems, process control, state space techniques, Bar (W.), *9163*
- pole placement, stability margin, stability theory, state space techniques, Noisser (R.), *9177*
- damping, design (optimum), stochastic systems, Reznikov (L.M.), Fishman (G.M.), *9179*
- control, design, state space techniques, Hippe (P.), Wurmthaler (C.), *9181*
- controllability, linear systems, linear theory, observability, Olbrot (A.W.), Zak (S.H.), *10080*

frequency response, estimation, mathematical models, plasma, Gvozdkov (Yu.V.), *138*
- shells (cylindrical), vibration (free), Palchevskii (A.S.), Pryadko (A.A.), (et al.), *375*
- servomechanisms, spool valves, Takahashi (K.), Takahashi (Y.), *1171*
- structural response, vibration, Sengupta (G.), *1258*
- accelerometers, calibration, dynamic testing, Yu (Z.-M.), Li (W.-L.), (et al.), *1269*
- plates (rectangular), plates (stiffened), vibration (free), Saito (H.), Yamaguchi (H.), *1275*
- plates (rectangular), plates (simply supported), vibration (free), Gupta (R.K.), *1277*
- frames, sensitivity, vibration (free), Yaghmai (I.), Frohrib (D.A.), *1281*
- dynamic analysis, pipelines, pneumatic components, Matsumoto (Y.), Okazaki (M.), *1598*
- slabs, vibration (free), Stoyan (Yu.G.), Makarovskii (E.L.), *2336*
- buildings (tall), dynamic analysis, structural response, vibration (free), Ellis (B.R.), *2347*
- cooling towers, dynamic analysis, finite element methods, vibration (free), Cedolin (L.), Mang (H.A.), (et al.), *2348*
- dynamic analysis, structural response, Geering (H.P.), *2359*
- frequency domain techniques, identification, simulation, Frisch (H.P.), *3165*
- dynamic analysis, vibration (forced), Vulfson (M.N.), *3345*
- analytical methods, digital control, frequency domain techniques, Whitbeck (R.F.), Didaleusky (D.G.J.), (et al.), *4258*
- beams (cantilever), vibration (free), Kumar (D.), Kulkarni (S.V.), (et al.), *5197*
- beams, vibration (forced), Edstrom (C.R.), *5198*
- beams (timoshenko), vibration (free), Rao (J.S.), Kulkarni (S.V.), (et al.), *5199*
- beams (cantilever), vibration (torsional), Subrahmanyam (K.B.), Kulkarni (S.V.), *5200*
- head, impact, injuries, Hu (A.S.), *6031*
- airplanes, lateral stability, unsteady flow, Wells (W.R.), Banda (S.S.), (et al.), *6730*
- blood flow, circulation, elastic constants, laplace transform, Skidmore (R.), Woodcock (J.P.), *7120*
- frequency domain techniques, sampled data systems, simulation, Frisch (H.P.), *7232*
- plates (rectangular), vibration (free), Gorman (D.J.), *7390*
- crack initiation, deformation (plastic), high cycle fatigue, Lindner (A.), Bajons (P.), (et al.), *7508*
- mathematical models, spectra, wavemakers, Hudspeth (R.T.), Leonard (J.W.), *7809*
- rotating shafts, vibration (free), Bauer (V.O.), *8319*
- canals, gates, mathematical models, unsteady flow, Corriga (G.), Sanna (S.), (et al.), *8509*
- combustion instability, solid propellants, thermal waves, De Luca (L.), *8799*
- design, optimal control, Gupta (N.K.), *9156*
- combustion chambers, gases, vibration, Furletov (V.I.), *9765*
- analytical methods, control, oscillations, pulse-frequency, Krasnoselskii (M.A.), Pokrovskii (A.V.), (et al.), *10076*
- fast fourier transform, vibration (free), Mitchell (L.D.), *10196*
- bubble dynamics, creeping flow, drops, unsteady flow, Stewart (M.B.), Morrison (F.A.) Jr., *11362*

fretting, corrosion fatigue, fatigue, metals, survey, Kovalevskii (V.V.), *453*
- corrosion fatigue, fatigue, surveys, wear, Waterhouse (R.B.) ed., *1358, book*
- hardness, oxidation, steel, wear, Kayaba (T.), Iwabuchi (A.), *4894*
- aluminum alloys, crack initiation, fatigue, fractographic tests, wear, Leadbeater (G.), Kovalevskii (V.V.), (et al.), *5290*
- design criteria, failure, Hoeppner (D.W.), Gates (F.L.), *9390*
- heat exchangers, tube bundles, vibration (flow induced), Ko (P.L.), Rogers (R.J.), *11624*

Freudenstein (F.), kinematics, mathematical methods, rigid bodies, Primose (E.J.F.), *6049*
- balancing, high speed, machinery, pitching, rotating shafts, yawing, Macey (J.P.), (et al.), *6553*

Freudenstein (K.), see Ebeling (K.J.), *5772*

Freund (E.), control, decoupling, design, manipulators, robotics, Hoyer (H.), *8178*

Freund (L.B.), elastoplasticity, impact, shear waves, supersonic flow, Douglas (A.S.), *11161*

Friberg (P.O.), see Akesson (B.A.), *3354*

Frick (H.), boussinesq equation, convection (benard), convection (free), heat addition, navier stokes equation, Clever (R.M.), *10579*

Frick (K.), design, multivariable systems, time optimal systems, trajectory optimization, *9178*

Fricker (A.J.), forced systems, matrix methods, periodic structure, structures, substructuring, vibration, Potter (S.), *7209*

friction, contact stresses, continuum mechanics, lubrication (elastohydrodynamic), rolling contact, wear, Cheng (H.S.) eds., Keer (L.M.), *996, book*
- debris, friction (solid solid), wear, Suh (N.P.), Sin (H.-C.), *998*
- adhesion, contact problems, deformation, Tabor (D.), *1000*
- contact problems, roughness, surface profiles, wear, Kragelskii (I.V.), *1002*
- lubricants (solid), polymers, roughness, Ainbinder (S.B.), *1003*
- brakes, clutches, friction drives, Chichinadze (A.V.), Braun (E.D.), (et al.), *1006*
- additives, lubricants (liquid), lubrication (boundary), wear, Kragelskii (I.V.), Rybakova (L.M.), (et al.), *1021*
- additives, chemical reactions, lubrication (boundary), metals, Sanin (P.I.), *1022*
- landing, runways, space shuttle, Yager (T.J.), Horne (W.B.), *1332*
- chip formation, drawing, plastic flow, rolling, Dobrucki (W.), Odrzywolek (E.), *1341*
- adhesion, bearings, lubrication, traction, Dowson (D.) eds., Taylor (C.M.), (et al.), *1924, book*
- lubrication, survey, wear, Rundesanstalt Fur Materialprufung, *1925, book*
- cutting, wear, Childs (T.H.C.), Kinsella (F.H.), *1929*
- additives, adsorption, lubrication (boundary), thermal effects, Matveeskii (R.M.), *1942*
- dissipation, dynamic properties, vibration (forced), Plakhtienko (N.P.), *2316*
- rocks, strength, Stimpson (B.), *2391*
- kinetics, optimization, torque, Bellomo (N.), Monaco (R.), *2556*
- bearings (journal), bearings (roller), gear trains, transmissions (planetary), Jarchow (F.), Theissen (J.), *2566*
- blades, cascades, pressure distribution, trailing edge, Ribaut (M.), Niessner (H.), *2654*
- leaks, lubrication (hydrostatic), seals, wear, Lebeck (A.O.), *3036*
- composite materials, copper, polymers, Savitskii (A.I.), *3046*
- correlation, metals, shear strength, Miyoshi (K.), Buckley (D.H.), *3492*
- gears (spur), lubrication (elastohydrodynamic), Martin (K.F.), *3573*
- internal combustion engines, pressure measurement, thermodynamic processes, Vogt (R.), *3882*
- carbides, high temperature, surfaces, Miyoshi (K.), Buckley (D.H.), *4002*
- dissipation, experimental mechanics, vibration (forced), Karius (D.), *4408*
- pneumatic components, torque, valves, Lin (F.N.), Moore (W.I.), (et al.), *4571*
- finite element techniques, mechanical properties, upset forging, Hartley (P.), Sturgess (C.E.N.), (et al.), *5275*
- axial loading, bending, ice, mechanical properties, tests, Schwarz (J.), Frederking (R.), (et al.), *5324*
- boundary layer (turbulent), pressure gradient, Nesterenko (B.N.), Fedorov (A.V.), (et al.), *5429*
- adhesion, chemical reactions, lubricants, lubrication, wear, Buckley (D.H.), *5972, book*
- bearings (slider), couple stresses, lubrication (hydrodynamic), non newtonian flow, Ramanaiah (G.), Sarkar (P.), *5986*
- beams, stability theory, vibration (parametric), Zajaczkowski (J.), *6279*
- cylindrical bodies, rotating bodies, spherical bodies, viscous flow, Greenstein (T.), Zocco (J.G.), *6623*
- bearings, lubrication, machine design, wear, Cameron (A.), Ettles (C.M.Mc.), *7078, book*
- roughness, surface profiles, tires, Taneerananon (P.), Yandell (W.O.), *7082*
- bearings (liquid lubricated), lubrication (boundary), wear, Habig (K.-H.), Broszeit (E.), (et al.), *7084*
- forging, steel, wear, Felder (E.), Montagut (J.L.), *7086*
- compaction, dies, powder metallurgy, powders, punch problems, Lammens (R.F.), Liem (T.B.), (et al.), *7465*
- dynamic response, piles, soil structure interaction, vibration, Akiyoshi (T.), *8014*
- dynamic response, nonlinear characteristics, vibration isolation, Dragani (R.), Sarra (M.), *8325*
- compression, crack initiation, forming, fracture, metals, Matsuura (Y.), Morimoto (H.), *8432*
- additives, lubricants (liquid), lubrication (boundary), scoring, Matveeskii (R.M.), Buyanovskii (I.A.), (et al.), *9036, book*
- bearings (thrust), film thickness, lubrication (hydrodynamic), pressure distribution, Safar (Z.S.), *9043*
- algorithms, dynamic analysis, gears, Majewski (L.), *9475*
- decelerators, drag, vehicles, Korst (H.H.), White (R.A.), *9658*
- energy conservation, lubrication, tribology, wear, Jost (H.P.), Schofield (J.), *9880*
- elasticity, stress concentration, Dundurs (J.), Comninou (M.), *10288*
- biological joints, prosthetic devices, tribology, wear, Dumbleton (J.H.), *10882*
- pressure distribution, rotating bodies, roughness, surfaces, Sansonov (V.A.), *10885*
- bearings (hydrostatic), leaks, piston driven flow, positive displacement pumps, Bakhin (I.I.), (et al.), *11752*

friction (internal), critical heat flux, flashing, pipe flow, pressure drop, thermodynamics (nonequilibrium), void fraction, Miropolskiy (Z.L.), Shneyerova (R.I.), (et al.), *747*

- annular flow, heat transfer, laminar flow, pressure drop, rotating disks, Mochizuki (S.), Yang (W.-J.), *761*
- damping, experimental methods, metals, strain, Hooker (R.J.), Mead (D.J.), *7587*
- creep, dislocations, models, stress relaxation, Mclean (M.), *12093*

friction (rolling), contact problems, tires, wheels, Browne (A.L.) eds., Tsai (N.T.), *1454, book*

- simulation, tires, Guntur (R.), Sankar (S.), *1456*
- friction (sliding), lubrication (boundary), steel, wear, Aksenov (A.F.), Belyanskii (V.P.), (et al.), *3042*
- contact stresses, dynamic properties, rubber, tires, Sakai (H.), *5367*
- film thickness, friction (sliding), lubrication (elastohydrodynamic), rolling contact, Conry (T.F.), *5984*
- automobiles, drag coefficient, resistance, Roussillon (G.), *6726*
- cold working, friction (sliding), lubrication (boundary), wear, Sethuramiah (A.), Shukla (B.M.), (et al.), *7096*
- contact problems, finite element techniques, rolling contact, Zeid (I.), Padovan (J.), *7210*
- compaction, dies, materials properties, powder metallurgy, Lammens (R.F.), Struyk (C.), (et al.), *7463*
- fatigue, friction (sliding), rolling contact, Dawson (P.H.), *9946*
- adhesion, roughness, rubber, surfaces, Fuller (K.N.G.), Roberts (A.D.), *9950*
- adhesion, rails, rolling contact, wheels, Furmanik (K.), *9978*
- additives, friction (sliding), lubrication (boundary), wear, Martin (J.-M.), Georges (J.-M.), *9979*

friction (skin), bottom irregularities, channel flow, free boundary, sediment transport, Engel (P.), Lau (Y.L.), *557*

- boundary layer (turbulent), turbulence (freestream), Prihoda (J.), *597*
- aerodynamic heating, boundary layer (three dimensional), hypersonic flow, leading edge, Dudin (G.N.), Neiland (V.Ya.), *598*
- finite difference methods, internal flow, rotating disks, viscous flow, Kullen (A.), *1510*
- bond number, contact angle, dimensional analysis, films, Eichhorn (R.), *1536*
- interferometry, lasers, Monson (D.J.), *1644*
- convection (free), magneto fluid dynamics, plates, similarity methods, Brar (G.S.), *2885*
- poiseuille flow, porous surfaces, suction, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *3669*
- damping, rolling motion, roughness, ship motion, Myrhaug (D.), *4098*
- boundary layer, porous surfaces, supersonic flow, three dimensional flow, Brykina (I.G.), Gershbein (E.A.), (et al.), *4606*
- boundary layer (turbulent), separation, Dumitrescu (H.), Cleja (V.), (et al.), *4612*
- convection (free), plates (parallel), unsteady flow, Rath (R.S.), Jena (G.), *4617*
- boundary layer, convection, laminar flow, plates (vertical), shear stress, Hunt (R.), Wilks (G.), *4696*
- boundary layer, porous media, suction, unsteady state, Lal (K.), *5435*
- boundary layer, calibration, preston tubes, shear, Nitsche (W.), *5507*
- boundary layer (turbulent), heat transfer, reynolds analogy, Repik (E.U.), Kuzenkov (V.K.), *6765*
- convection, heat transfer, reynolds number (critical), tubes, viscous flow, Addiesee (A.J.), *7671*
- compressible flow, diffusers, radial flow, Brandt (U.), Teipel (I.), *7731*
- boundary layer (turbulent), roughness, spherical bodies, stanton number, transpiration cooling, velocity profiles, Ligrani (P.M.), Kays (W.M.), (et al.), *7824*
- planing surfaces, plates, wakes, Payne (P.R.), *8045*
- laminar flow, pipe flow, unsteady flow, Achard (J.L.), Lespinard (G.M.), *8565*
- concentration, discharges, pressure drop, slurries, Carstens (M.R.), Addie (G.), *10398*
- separated flow, three dimensional flow, topological techniques, Horstman (C.C.), Settles (G.S.), (et al.), *10432*
- interferometry, oil films, optical techniques, Tanner (L.H.), *10536*

friction (sliding), adhesives, plastics, polymers, Korshak (V.), Gribova (I.A.), *275*

- experimental methods, floors, measurements, Malkin (F.), Harrison (R.), *487*
- debris, high speed, lubricants (liquid), lubrication (boundary), wear, Conor (P.C.), Mcrobie (D.E.), *997*
- lubricants (solid), polymers, wear, Sviridenok (A.I.), Savkin (V.G.), *1004*
- elastomers, polymers, space, vacuum, Silin (A.A.), *1005*
- lubrication (boundary), metals, wear, Rabinowicz (E.), *1006*
- metals, wear, work hardening, x ray techniques, Sasada (T.), Norose (S.), (et al.), *1009*
- deformation, rotating bodies, seals, Metcalfe (R.), *1017*
- high speed, wear, Carignan (F.J.), Rabinowicz (E.), *1926*
- contact stresses, gear teeth, gears (worm), hydrodynamics, Winter (H.), Wilkesmann (H.), *2557*
- failure, scuffing, sliding, thermoelasticity, wear, Durkee (D.B.), Cheng (H.S.), *3037*
- friction (rolling), lubrication (boundary), steel, wear, Aksenov (A.F.), Belyanskii (V.P.), (et al.), *3042*
- gears, lubrication (elastohydrodynamic), transmissions, wear, Drozdov (Yu.N.), *3049*
- abrasion, brittle materials, ductility, hardness, wear, Beckmann (G.), Westermier (G.), *4106*
- lubricants (solid), lubrication (solid), Ravindran (K.A.), Ramasamy (P.), (et al.), *4112*
- adhesives, lubricants (dry film), lubrication (boundary), metals, thin films, Iliuc (I.), *4889, book*
- abrasion, deformation (plastic), metals, wear, Miyoshi (K.), Buckley (D.H.), *4891*
- sliding, stiffness, vibration, Budanov (B.V.), Kudinov (V.A.), (et al.), *4892*
- lubrication (boundary), lubrication (hydrodynamic), roughness, steam turbines, Rohde (S.M.) eds., Cheng (H.S.), *4895, book*
- contact problems, friction (solid solid), sliding, Lisowski (Z.), Stolarski (T.), *5091*
- dynamic properties, vibration, Ivlev (V.I.), *5190*
- heat transfer (direct contact), polymers, wear, Kar (M.K.), Bahadur (S.), *5973*
- brakes, heat transfer (direct contact), Newcomb (T.P.), *5974*
- electron microscopy, particles, polymers, wear, Belin (M.), Mansot (J.L.), (et al.), *5975*
- film thickness, friction (rolling), lubrication (elastohydrodynamic), rolling contact, Conry (T.F.), *5984*
- lubricants, lubrication (boundary), Kajdas (C.), Nita (J.), (et al.), *7080*
- lubricants (liquid), metals, scoring, viscosity, wear, Drozdov (Yu.N.), Archegov (V.G.), *7081*
- elasticity, roughness, surface profiles, Phan-Thien (N.), *7083*
- interference fits, sliding, temperature, thermocouples, Spurr (R.T.), *7085*
- aluminum alloys, copper, delamination, finite element methods, wear, Ohmae (N.), Tsukizoe (T.), *7089*
- experimental methods, steel, wear, Play (D.), *7090*
- cold working, friction (rolling), lubrication (boundary), wear, Sethuramiah (A.), Shukla (B.M.), (et al.), *7096*
- heat transfer (direct contact), lubricants (liquid), lubrication (boundary), scoring, Fujita (K.), Obata (F.), *7097*
- dynamic analysis, strings, vibration (forced), Cabannes (H.), *7379*
- blades, finite element methods, turbines, vibration (forced), vibration (free), Zmitrowicz (A.), *7397*
- deformation (plastic), surface profiles, wear, Mikhin (N.M.), Frolov (S.V.), (et al.), *8050*
- heat transfer (direct contact), thermal contact resistance, wear, Amosov (A.P.), *8051*
- bearings (unlubricated), friction (solid solid), lubricants (solid), lubrication (boundary), Kato (S.), Yamaguchi (K.), (et al.), *9018*
- metallography, metals, wear, Blau (P.J.), *9019*
- loads, steel, vacuum, Gamulya (G.M.), Dobrovolskaya (G.V.), (et al.), *9021*
- friction (solid fluid), lubrication (boundary), lubrication (elastohydrodynamic), testing equipment, Capone (E.), Capone (G.), (et al.), *9034*
- failure, lubrication (elastohydrodynamic), oil films, thin films, viscosity, Begelinger (A.), De Gee (A.W.J.), *9037*
- contact problems, deformation, roughness, surface profiles, thermal effects, Burton (R.A.), *9041*
- fatigue, friction (rolling), rolling contact, Dawson (P.H.), *9946*
- abrasion, lubrication (boundary), wear, Jahanmir (S.), *9947*
- carbides, coatings, gases, high pressure, lubricants (gas), wear, Skinner (J.), *9948*
- abrasion, metals, wear, Spurr (R.T.), *9951*
- additives, friction (rolling), lubrication (boundary), wear, Martin (J.-M.), Georges (J.-M.), *9979*
- attenuation, pore pressure, seismic waves, Winkler (K.W.), Nur (A.), *10844*
- roughness, surface profiles, surfaces, Koura (M.M.), Omar (M.A.), *10883*
- friction (solid solid), roughness, surface profiles, surfaces, Zmitrowicz (A.), *10884*
- contact stresses, hardness, lubrication (hydrodynamic), scoring, viscosity, Drozdov (Yu.N.), Archegov (V.G.), *10888*
- experimental methods, roughness, sound generation, Yokoi (M.), Nakai (M.), *11945*
- experimental methods, sound generation, Yokoi (M.), Nakai (M.), *11946*
- coatings, models, plastic flow, Heilmann (P.), Rigney (D.A.), *12089*

friction (solid fluid), bearings (journal), finite element methods, lubrication (hydrodynamic), non newtonian flow, Tayal (S.P.), Sinhasan (R.), (et al.), *7093*

- elastomers, seals, surfaces, wear, Varga (G.), Toth (O.), *8477*
- bearings (hydrodynamic), couette flow, torque, viscosity, Pascovici (M.D.), *9025*
- friction (sliding), lubrication (boundary), lubrication (elastohydrodynamic), testing equipment, Capone (E.), Capone (G.), (et al.), *9034*
- film thickness, lubrication (elastohydrodynamic), seals, Kalsi (M.S.), *9962*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), mathematical models, Usov (P.P.), Toder (I.A.), (et al.), *9970*
- geometrical properties, lubrication (hydrodynamic), seals, Dhagat (S.K.), Sinhasan (R.), (et al.), *12091*
- bearings (conical), bearings (hydrodynamic), lubrication (hydrodynamic), oil films, stiffness, Murthy (T.S.R.), *12094*

friction (solid solid), contact problems, indentation, variational methods, Kravchuk (A.S.), *249*

- electrical analogies, heat transfer (direct contact), thermal effects, Lenk (D.), Zscherpel (W.), *933*

- debris, friction, wear, Suh (N.P.), Sin (H.-C.), *998*
- forming, metals, plasticity, Oxley (P.L.B.), *1001*
- automobiles, brakes, high temperature, Ricco (M.), *1469*
- contact problems, wear, Galin (L.A.), Goryacheva (I.G.), *3246*
- photoplasticity, plasticity, strain measurement, Gomide (H.A.), Burger (C.P.), *3483*
- dissipation, moon, planetary satellites, stochastics, tides, Cappallo (R.J.), Counselman (C.C.) III, (et al.), *3913*
- contact problems, friction (sliding), sliding, Lisowski (Z.), Stolarski (T.), *5091*
- experimental methods, interference fits, photoelasticity, stress analysis, Ghosh (S.P.), Dattaguru (B.), (et al.), *5316*
- bearings (unlubricated), contact problems, lubrication (solid), Floquet (A.), Play (D.), *5993*
- computing techniques, contact problems, elastic behavior, stiffness matrix, Sachdeva (T.D.), Ramakrishnan (C.V.), *6115*
- axial loading, cylindrical bodies, forging, Hartley (P.), Sturgess (C.E.N.), (et al.), *6254*
- hot working, oxidation, steel, Luong (L.H.S.), Heijkoop (T.), *7079*
- bearings (unlubricated), friction (sliding), lubricants (solid), lubrication (boundary), Kato (S.), Yamaguchi (K.), (et al.), *9018*
- abrasion, explosives, ignition, Amosov (A.P.), *9772*
- algorithms, contact problems, mechanical joints, tools, Sachdeva (T.D.), Ramakrishnan (C.V.), *9945*
- friction (sliding), roughness, surface profiles, surfaces, Zmitrowicz (A.), *10884*
- fracture mechanics, models, stress intensity factor, wear, Rosenfield (A.R.), *12090*

friction drives, brakes, clutches, friction, Chichinadze (A.V.), Braun (E.D.), (et al.), *1006*
- nutation, traction, transmissions, Kemper (Y.), *1470*
- contact stresses, fatigue, rolling contact, traction, Rohn (D.A.), Loewenthal (S.H.), (et al.), *8473*

friction factor, hydraulic diameter, noncircular pipes, turbulent flow, Bandopadhayay (P.C.), Ambrose (C.W.), *614*
- analysis, ducts, roughness, Pyle (R.), Novak (P.), *1563*
- natural surfaces, reynolds number, roughness, Musker (A.J.), *1564*
- laminar flow, poiseuille flow, transition, Barr (D.I.H.), *2643*
- pipelines, roughness, Kumar (A.), *2650*
- heat transfer, mass flow, mass transfer, Kast (W.), *5625*
- annular flow, moving surfaces, pipe flow, transition, Shands (J.), Alfredsson (H.), (et al.), *6648*
- capillary flow, drag reduction, eddies, Dschagarowa (E.), Bochossjan (T.), *6657*
- duct flow, fins, heat transfer, turbulent flow, Scott (M.J.), Webb (R.L.), *8613*
- acceleration, pipe flow, roughness, Baibikov (B.S.), Oreshkin (O.F.), (et al.), *9574*
- materials possessing memory, non newtonian flow, pipe flow, thixotropic media, Kemblowski (Z.), Petera (J.), *11504*
- channels, perturbation methods, tidal waves, Kabbaj (A.), Le Provost (C.), *11610*

Fridman (L.I.), dynamic response, plates (thick), vibration (free), *8315*
Fridman (Sh.D.), see Nazarov (I.M.), *4095*
Fridman (V.E.), nonlinear characteristics, ocean, shock waves, sound propagation, underwater acoustics, *6916*
Fridman (V.M.), bending, powder metallurgy, scale effects, strength, Shcherban (N.I.), *3480*
Fridman (V.Ye.), blast waves, explosions (underwater), ocean, underwater acoustics, *9643*
Fried (I.), elastica, finite element techniques, mathematical methods, nonlinear characteristics, stability theory, stiffness matrix, *5034*
- finite element methods, plates (circular), plates (nonlinear), *9278*

Friedlander (A.L.), astronautics, celestial mechanics, design, mission analysis, optimization, orbits, space vehicles, trajectories, Cefola (P.J.), (et al.), *7911*
Friedlander (S.), gravity waves (internal), ocean waves, rotational flow, stratified flow, Siegmann (W.L.), *11619*
Friedman (A.), axisymmetric flow, equilibrium, gravity, rotating fluids, Turkington (B.), *3627*
- see Caffarelli (L.A.), *7165*

Friedman (C.N.), asymptotic behavior, differential equations (ordinary), dynamic behavior, transient effects, *1076*
Friedman (M.), fuel elements, thermal stresses, thermoelasticity, Argel (A.), (et al.), *3987*
Friedman (M.A.), see Anderson (S.J.), *7885*
Friedmann (P.), see Bendiksen (O.), *2908*
Friedmann (P.P.), see Straub (F.K.), *9806*
Friedrich (H.), mechanical systems, probability theory, stochastic processes, Hennig (K.), *3526*
Fries (R.H.), dynamic response, experimental mechanics, railroads, trains (railroad), Cooperrider (N.K.), (et al.), *7151*
Frink (N.T.), see Lamar (J.E.), *5494*
Frisch (H.P.), frequency domain techniques, frequency response, identification, simulation, *3165*
- algorithms, automatic control, design, frequency domain techniques, matrix methods, multivariable systems, *4224*
- frequency domain techniques, frequency response, sampled data systems, simulation, *7232*

Frisk (G.V.), see Oppenheim (A.V.), *4173*
- interface phenomena, ocean bed, reflection, refraction, sound propagation, underwater acoustics, Doutt (J.A.), (et al.), *5725*
- see Macpherson (M.K.), *6906*

Fritz (D.E.), see Sackheim (R.L.), *10725*
Frobin (W.), see Brinckmann (P.), *6004*
Froeschle (C.), see Gonczi (R.), *9810*
Frogner (B.), control, design, nuclear power, power generation, Rao (H.S.), *2176*
Frohlich (C.), aerodynamics, disks, trajectories, wind, *11731*
Frohiy (J.), see Lefebvre (J.), *6349*
Frohrib (D.A.), see Yaghmai (I.), *1281*
Froishteter (G.B.), laminar flow, non newtonian flow, pipe flow, yield condition, Vinogradov (G.V.), *619*
Frolov (D.I.), acoustic measurements, composite materials, flaw detection, fracture, Kilkeev (R.Sh.), (et al.), *10319*
Frolov (S.V.), see Mikhin (N.M.), *8050*
Frolov (V.F.), convection, heat pipes, heat transfer, liquid vapor interface, wick, Vernikov (E.M.), (et al.), *1717*
Frommlet (H.), see Huber (H.), *10515*

frost, heaving, modeling, soils, Gilpin (R.R.), *1322*
- reynolds number, transition (reverse), transition flow, Lysenko (V.I.), Maslov (A.A.), *1539*
- convection (forced), plates, White (J.E.), Cremers (C.J.), *10660*

Frost (R.B.), biomechanics, gait, transducers (load), Cass (C.A.), *1948*
Frost (R.W.), see Brockenbrough (R.L.), *1435*
Frost (W.), see Steely (S.L.) Jr., *3707*
- charged particles, fog, jets, nozzles, precipitation, survey, Collins (F.G.), (et al.), *3893*
- environmental tests, flow obstructions, near ground effects, separated flow, siting considerations, vortex flow, wind turbines, Shieh (C.F.), *10516*

froude number, boundary layer (turbulent), computer programming, hulls, three dimensional formulation, Krogstad (P.-A.), *1537*
- channel flow, free boundary, sediment transport, Barr (D.I.H.), Alam (M.K.), (et al.), *2592*
- film flow, reynolds number, rotating cylinders, surface tension, weber number, Kovac (J.), Balmer (R.T.), *3628*
- fluid boundaries, gravity waves (internal), hydrofoils, wave generation, Bukreev (V.I.), *4659*
- channel flow, cylindrical bodies, drag coefficient, floating bodies, free boundary, Zein (S.A.A.), *5388*
- boundary value problems, hulls, nonlinear theory, ship resistance, wavemaking resistance, Maruo (H.), *5969*
- entrainment, plumes, two dimensional flow, Phillips (W.F.), *6667*
- hydraulics, models, particle size, sewerage, Halliwell (A.R.), Saul (A.J.), *7544*
- channel flow, free boundary, stability, turbulent flow, Berlamont (J.E.), Vanderstappen (N.), *7648*
- plumes, rivers, stratified flow, surface tension, Mcclimans (T.A.), Saegrov (S.), *10399*
- atmosphere, blunt bodies, stagnation point, stratified flow, Kitabayashi (K.), *11306*

frozen flow, boundary layer, chemically reactive flow, lasers (gasdynamic), nozzles, supersonic flow, Bassina (I.A.), Dorot (V.L.), (et al.), *2639*
Fruman (D.H.), drag reduction, jets, polymers, slots, viscoelasticity, Galivel (P.), *7667*
Frunze (I.P.), see Kalmutskii (V.S.), *5285*
Fryer (G.J.), compressional waves, ocean bed, sedimentation, shear waves, wave interactions, *10237*
Fryzel (R.A.), see Takhar (J.S.), *10320*
Fu (L.L.), buoyancy, ocean, stratification, turbulence (geophysical), turbulence model, Fliert (G.R.), *11549*
Fu (L.S.), dynamic response, fracture toughness, mathematical methods, nondestructive tests, ultrasonics, *5315*
- data analysis, nondestructive tests, surveys, ultrasonics, *7999*

Fu-Lung (L.), see Dintenfass (L.), *8083*
Fuchs (M.B.), see Felton (L.P.), *5343*
- design (minimum weight), trusses, *7590*
- design (optimum), move limits, trusses, *7595*
- matrix methods, structural analysis, variational methods, *8189*
- design (optimum), trusses, *8442*

Fuchssteiner (B.), see Fokas (A.S.), *3103*
Fuchssteiner (W.), crack propagation, cracks, holes, shear, Olsen (O.W.), *7520*

fuel economy, control, engines, nonlinear programming, Rao (H.S.), Cohen (A.I.), (et al.), *2122*
- airplanes, flight path, optimization, simulation, Wauer (J.C.), Bruckner (J.M.H.), (et al.), *6729*
- airplanes, flight path, optimization, subsonic flow, Large (E.), *8644*
- automobiles, design (optimum), drag, geometrical properties, Stapleford (W.R.), *10606*
- combustion chambers, diesel engines, heat transfer, injection systems, Kamel (M.), Watson (N.), *11797*

fuel elements, nuclear reactors, safety, thermal effects, Minashin (V.E.), Gorelov (I.N.), (et al.), *3886*
- thermal stresses, thermoelasticity, Friedman (M.), Argel (A.), (et al.), *3987*

- creep, nonlinear materials, nuclear reactors, Chan (D.P.), Jackson (R.J.), *4346*
- mathematical models, melting, nuclear reactors, Chen (W.L.), Ishii (M.), (et al.), *5589*
- deformation (plastic), grain boundaries, thin walled structures, Wire (G.L.), Duncan (D.R.), (et al.), *6550*
- cladding, conformal mapping, heat transfer, nuclear reactors, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *8729*
- heat transfer, hydraulics, nuclear fuels, numerical methods, Araki (T.), Takeda (T.), (et al.), *11802*

fuel jets, combustion, diesel engines, injectors, Greeves (G.), *1765*
- diesel engines, injection systems, thermodynamic processes, Watson (N.), Kamel (M.), *2869*

fuels, air pollution, diesel engines, emulsions, heat engines, Thorp (I.), Armstrong (G.), (et al.), *1759*
- energy, energy conservation, energy conversion, Krenz (J.H.), *4715, book*
- energy conservation, gas turbines, jet engines, noise abatement, Gal-Or (B.) ed., *7805, book*

Fuerstenau (D.W.), see Abouzeid (A.-Z.M.), *8917*

Fuhrmann (P.A.), automatic control, duality, geometric control, linear theory, time invariant systems, *99*

Fujii (F.), cracking, reinforced concrete, slabs, *2520*

Fujii (M.), see Kikkawa (S.), *1666*

Fujii (N.), fire spread, flame propagation, forest fires, mathematical models, stefan problem, Hasegawa (J.), (et al.), *6847*
- distributed parameters, galerkin method, observers, Hirai (M.), *11062*

Fujii (S.), flame holders, flames, laser doppler velocimeters, stabilization, Eguchi (K.), *837*
- see Fujimoto (H.), *2033*
- jet engines, noise, noise abatement, turbofan engines, Nishiwaki (H.), (et al.), *3951*

Fujimoto (H.), convergence, nonlinear programming, optimization, penalty function, Fujii (S.), (et al.), *2033*

Fujisawa (F.), see Shiohata (K.), *10216*
- see Shiohata (K.), *11146*

Fujisawa (N.), see Kobayashi (R.), *1577*

Fujisawa (T.), see Kobayashi (M.), *2491*

Fujita (H.), counterflow, duct flow, film flow, heat transfer, mass transfer, roughness, Takahama (H.), (et al.), *10581*

Fujita (K.), friction (sliding), heat transfer (direct contact), lubricants (liquid), lubrication (boundary), scoring, Obata (F.), *7097*
- annuli, bodies (liquid filled), columns, fluid-structure interaction, seismic loading, *11637*

Fujita (T.), elasticity (nonhomogeneous), half space, inhomogeneities, stress concentration, Tsuchida (E.), *1177*
- earthquake effects, nonlinear systems, vibration (random), Hattori (S.), *2320*
- elasticity (three dimensional), indentation, semi infinite media, stress concentration, Tsuchida (E.), (et al.), *3235*
- collision models, nonlinear analysis, random excitation, vibration (random), Hattori (S.), *3346*

Fujita (Y.), see Nishikawa (K.), *739*

Fukano (T.), fans, noise abatement, sound generation, Kodama (Y.), (et al.), *905*
- axial fans, noise, sound generation, Kodama (Y.), (et al.), *4765*
- slug flow, transient effects, two phase flow, Sekoguchi (K.), (et al.), *4825*

Fukao (M.), see Schumacher (R.W.), *10760*

Fukayama (H.), bearings (journal), non newtonian flow, polymers, turbulence, Tanaka (M.), (et al.), *1938*

FuksRabinovich (M.S.), atmospheric circulation, forecasting, meteorology (physical), *4074*

Fukuda (H.), see Hasegawa (E.), *3616*
- composite materials, discontinuities, fibers, metallic composites, shear lag, Chou (T.-W.), *6194*
- see Kuriyama (Y.), *7774*

Fukuda (M.), combustion products, flames, methane, mixtures, quenching, Korematsu (K.), (et al.), *11794*

Fukuda (S.), fatigue, fracture mechanics, life expectancy, sensitivity, *7483*

Fukumoto (Y.), beams (curved), beams (plastic), ultimate strength, Nishida (S.), *2263*
- beams, buckling (experimental), lateral stability, statistical design, welded joints, Itoh (Y.), *9285*

Fukumura (T.), see Imai (M.), *2057*

Fukuoka (H.), see Hirao (M.), *8334*
- acoustic measurements, acoustoelasticity, beams, residual stresses, rolling, transducers, Toda (H.), (et al.), *8428*

Fukuoka (N.), see Hasegawa (E.), *609*

Fukusako (K.), see Seki (N.), *8933*

Fukusako (S.), see Seki (N.), *1718*

Fukusako (T.), casting, solidification, thermal properties, vacuum technology, Kubo (K.), (et al.), *2403*

Fuller (A.T.), model reduction, optimal control, suboptimal control, time optimal systems, *10088*
- approximation methods, control, relay systems, stochastic systems, *11063*

Fuller (C.R.), dynamic response, flexural waves, shells (cylindrical), vibration, wave engines, *374*

Fuller (E.R.) Jr., see Malkus (D.S.), *4200*

Fuller (K.N.G.), adhesion, friction (rolling), roughness, rubber, surfaces, Roberts (A.D.), *9950*

Fulop (I.), see Koczy (L.), *5137*

Fumero (R.), blood, circulatory systems, hemolysis, prosthetic devices, pumps, *6022*

functional analyis, constitutive equations, convexity conditions, elastoplasticity, Krawietz (A.), *266*
- differential equations (partial), dirichlet problem, nonlinear analysis, Thews (K.), *1093*
- continuum mechanics, kinematics, Misicu (M.), *1967*
- differential equations (ordinary), inverse method, scattering, Shabat (A.B.), *1998*
- bifurcation, group theory, hamiltonian equations, marsden (j.e.), *2001, book*
- history, survey, Nowinski (J.L.), *2009*
- smoothing of data, variational methods, Penenko (V.V.), Obraztsov (N.N.), *2028*
- constraints, graph theory, networks, optimization, Burdyuk (V.Ya.), Reva (V.N.), *2032*
- algorithms, design, linear programming, optimal control, Bershchanskii (Ya.M.), Meerov (M.V.), *3185*
- nonlinear methods, optimal control, Barbu (V.), Da Prato (G.), *3187*
- boundary value problems, constraints, elasticity (linear), Rostamian (R.), *3228*
- boundary value problems, differential equations (partial), elasticity (three dimensional), Tereshchenko (V.Ya.), *3231*
- continuum mechanics, discrete systems, topological techniques, Wozniak (C.), *4123*
- boundary value problems, plasticity, variational methods, Kuznetsov (V.N.), *4355*
- plasticity, stress invariants, vector methods, yield criteria, Stokes (V.K.), *4927*
- existence theorems, integro differential equations, nonlinear analysis, D'Ambrosio (U.), Krivocheine (L.E.), (et al.), *4981*
- elasticity, plasticity, solid mechanics, Necas (J.), Hlavacek (I.), *5068, book*
- couple stresses, elasticity (linear), Martynenko (M.D.), Shipka (I.G.), (et al.), *5077*
- boundary value problems, elastoplasticity, Brovko (G.L.), *5109*
- geophysics, iterative methods, Oganesyan (S.M.), Starostenko (V.I.), *5881*
- continuum mechanics, stability theory, thermodynamics (nonequilibrium), Elzanowski (M.), *6041*
- continuum mechanics, thermodynamics (nonequilibrium), Kopisz (M.), *6042*
- elasticity, existence theorems, strips, uniqueness, Lebedev (L.P.), *6152*
- constraints, contact problems, elasticity (linear), Demkowicz (L.), *6165*
- energy density, stresses, traction, Day (W.A.), *7132*
- continuum mechanics, geometrical properties, topological techniques, Banfi (C.), Fabrizio (M.), *7135*
- atmosphere, geometrical properties, relativity, Defrise (P.), *7136*
- banach space, control, functional equations, nonconvex control, Caligaris (O.), Oliva (P.), *7242*
- continuum mechanics, deformation, kinematics, motion, Roj (J.), *8084*
- constitutive equations, dielectrics, group theory, Chowdhury (K.L.), Glockner (P.G.), *8085*
- elastoplasticity, polycrystalline materials, Malyi (V.I.), *8208*
- hamilton principle, tensor methods, variational methods, vector methods, Reddy (J.N.), Rasmussen (M.L.), *9090*
- boundary elements, energy methods, finite element methods, galerkin method, Fusco (F.B.) Jr., *9132*
- elasticity (three dimensional), hilbert space, mathematical methods, variational methods, Nowinski (J.L.), *10013*
- bifurcation, boundary value problems, imperfections, Hoffman (W.), Kupper (T.), *10169*

functional equations, banach space, differential equations (ordinary), time delay systems, Thompson (R.J.), *32*
- noise (random), stochastic processes, volterra series, Kenefic (R.), Nuttall (A.), (et al.), *2026*
- bifurcation, duality, nonlinear programming, variational methods, Sewell (M.J.), *2027*
- bifurcation, existence theorems, hopf bifurcation, De Oliveira (J.C.F.), *4153*
- banach space, control, functional analyis, nonconvex control, Caligaris (O.), Oliva (P.), *7242*

Fung (K.-Y.), caustics, compressible flow, conduction (unsteady), shock waves, supersonic flow, *1612*

Fung (Y.C.), arteries, biomaterials, elasticity (nonlinear), tissues, *1039*
- biomechanics, blood, blood flow, tissues, *3054, book*
- biomaterials, lungs, rheology, tissues, *3062*
- biomaterials, elastic behavior, fixation agents, tissues, Sobin (S.S.), *4911*

Furletov (V.I.), combustion chambers, frequency response, gases, vibration, *9765*

Furmanik (K.), adhesion, friction (rolling), rails, rolling contact, wheels, *9978*

Furmanski (P.), see Gogol (W.), *1208*

furnaces, adaptive systems, digital control, glass furnace, identification, process control, Kaviczky (L.), Haber (R.), (et al.), *206*
- heat exchangers, regenerators, swirl flow, Elkjaer (H.P.), *788*
- boilers, flow reversal, models, visualization, Kaji (M.), Sallam (T.M.), (et al.), *2764*

- coaxial jets, confined jets, Guruz (K.), Ilcali (C.), *2863*
- flames, heat transfer, models, radiant interchange, Mastryukov (B.S.), *5639*

Furnes (G.K.), boundary layer (atmospheric), mass transfer, ocean air interaction, *985*

Furnes (O.), collision models, energy dissipators, offshore structures, ship maneuvers, Amdahl (J.), *993*

- design, offshore structures, shells, Loset (O.), *4544*

Fursenko (A.A.), see Zhmakin (A.I.), *11425*

Fursov (V.P.), combustion, diffusion, evaporation, metals, oxidation, Shevtsov (V.I.), (et al.), *9767*

Furst (J.), see Roetzel (W.), *784*

Furue (H.), composite materials, fatigue, plastics, polymers, Shimamura (S.), *7958*

Furuhama (S.), internal combustion engines, piston rings, tribology, Hiruma (M.), (et al.), *5650*

Furukawa (M.), cylindrical bodies, gravity gradient, solar radiation, space vehicle structures, thermal effects, *5702*

- fins, heat addition, heat pipes, radiant interchange, radiators, space vehicles, *9735*

Furushiro (N.), aluminum alloys, copper alloys, damping capacity, deformation (plastic), superplastics, Takimoto (J.), (et al.), *6188*

Furuta (T.), see Toei (R.), *10640*

Furutsu (K.), mathematical methods, particles, random media, waves, *8339*

Furuya (Y.), see Shimada (H.), *3433*

- crack arrest, crack opening displacement, crack propagation, fatigue, Shimada (H.), *10271*

Fusco (F.B.) Jr., boundary elements, energy methods, finite element methods, functional analyis, galerkin method, *9132*

Fusco (G.), see Buratti (A.), *10777*

fusion, containment, experimental methods, plasma (toroidal), stabilization, Schumacher (R.W.), Fukao (M.), (et al.), *10760*

Fussey (D.E.), particles, pyrolysis, shock tubes, Gosling (A.J.), (et al.), *839*

Fuyuki (M.), discontinuities, finite element techniques, rayleigh waves, scattering, Matsumoto (Y.), *401*

fuzzy control, grinding, optimization, stochastics, Sakai (Y.), Tanaka (Y.), (et al.), *439*

Fyfe (I.M.), see Rajendran (A.M.), *9286*

G

G'Sell (C.), deformation (plastic), material testing, polymers, yield criteria, Jonas (J.J.), *2235*

Gabdullin (I.Z.), see Bubnov (V.A.), *5401*

Gabitto (J.F.), convection (free), mass transfer, packed beds, porous media, Bohm (E.), *10689*

Gabov (S.A.), gravity waves (stratified), liquid liquid interface, propagation, Castro (R.), *3712*

Gabovich (M.D.), electro fluid dynamics, ion generators, liquid metals, nonlinear waves, theory, Poritskii (V.Ya.), *2889*

Gabrielli (I.), fluids, sound fields, ultrasonics, Zugna (S.), *5760*

Gad-El-Hak (M.), boundary layer, entrainment, hydrodynamic stability, turbulence, Blackwelder (R.F.), (et al.), *6686*

Gadala (M.S.), metals, plasticity, porous media, yield criteria, Mullins (M.L.), (et al.), *2243*

Gadjiev (A.G.), design, optimization, queue theory, *9176*

Gadzhiev (A.D.), compressible flow, finite difference methods, one dimensional flow, viscous effects, Pisarev (V.N.), *2624*

Gaffuri (G.), see De Socio (L.M.), *1840*

- see De Socio (L.M.), *10568*

gages, particle fluid flow, precipitation, snow, wind tunnels (environmental), Haasz (A.A.), Raimondo (S.), *9002*

- surface waves, wave height, Vaisband (V.B.), Shanin (V.N.), *10871*

Gagne (R.), see Boulos (M.I.), *3898*

Gagneux (G.), convection, immiscible fluids, nonlinear theory, porous media, *10835*

Gagnon (M.), biomechanics, center of volume, human body, statics, Montpetit (R.), *7128*

Gai (E.), see Daly (K.C.), *7927*

Gai (S.L.), airfoils, base pressure, drag, subsonic flow, trailing edge, Sharma (S.D.), *3725*

- aerodynamic interference, base pressure, blunt bodies, jets, wakes, Kapoor (K.), *9657*

Gai (Y.-C.), crack opening displacement, elastoplasticity, mixed mode fracture, *5408*

Gaidaichuk (V.V.), see Aronson (A.Ya.), *9270*

Gaiduk (S.I.), heat transfer, impact, thermal shock, Dobrushkin (V.A.), *4971*

- impact, rods, viscoelastic waves, waves, *8343*
- impulse, rods, time dependence, *10029*

Gaidukov (N.I.), deposition, diffusion, filtration, particles, turbulent flow, *1842*

Gaillard (M.), high speed, lubrication (hydrodynamic), rotating shafts, tools, Boudet (R.), *3048*

Gaillard (P.), cooling, digital simulation, plumes, *1574*

Gairola (B.K.D.), copper, elastic constants, lattices, polycrystalline materials, shear, strain, Kroner (E.), *6468*

Gaishun (I.V.), see Adamenko (G.M.), *5047*

gait, locomotion, stabilization, walking apparatus, Bordyug (B.A.), *539*

- biomechanics, frequency domain techniques, kinematics, Cappozzo (A.), *1033*
- biomechanics, experimental mechanics, transducers (load), Gola (M.M.), *1047*
- biomechanics, estimation, three dimensional formulation, Woltring (H.J.), *1168*
- biomechanics, transducers (load), Frost (R.B.), Cass (C.A.), *1948*
- biological joints, biomechanics, human body, Winter (D.A.), *3058*
- human body, locomotion, shock absorbers, shock waves, Voloshin (A.), Wosk (J.), (et al.), *4117*
- biomechanics, human body, pressure measurement, Arvikar (R.), Seireg (A.), *4908*
- biological joints, kinematics, muscles, Boccardi (S.), Pedotti (A.), (et al.), *4910*
- feedback, prosthetic devices, simulation, Hirokawa (S.), Sugiyama (H.), (et al.), *6150*
- biomechanics, human body, Kairento (A.-L.), Hellen (G.), *7110*
- biocontrol, locomotion, optimization, Beletskii (V.V.), Kovaleva (E.D.), (et al.), *7111*
- biodynamics, muscles, optimization, Patriarco (A.G.), Mann (R.W.), (et al.), *9052*
- biodynamics, biomechanics, locomotion, Tibarewala (D.N.), Ghosh (A.K.), (et al.), *9055*
- human body, locomotion, rigid bodies, Hardt (D.E.), Mann (R.W.), *9056*
- biodynamics, human body, pressure, Cavanagh (P.R.), Lafortune (M.A.), *9068*
- diagnostics, experimental methods, spine, Thurston (A.J.), Whittle (M.W.), (et al.), *9071*

Gaitsgori (V.G.), aggregation, control, large scale systems, linear systems, model reduction, Pervozvanskii (A.A.), *4227*

Gajewski (A.), columns, modal analysis, vibration, *367*

Gajewski (P.), bgk model, channels, condensation, rarefied gases, two dimensional flow, Wisniewski (A.), *6534*

Gak (M.Z.), see Bondarenko (N.F.), *6856*

Gal-Or (B.) ed., energy conservation, fuels, gas turbines, jet engines, noise abatement, *7805, book*

galactic system, gravity, waves, Lau (Y.Y.), Lin (C.C.), *6044*

- kepler orbits, planetary theory, stability theory, Szebehely (V.), *8844*

Galaktionov (V.A.), conduction (heat), mathematical models, variable thermal properties, *2809*

- asymptotic methods, conduction (heat), mathematical models, transient effects, Kurdyumov (S.P.), (et al.), *2810*
- conduction (heat), mathematical models, nonlinear materials, transient effects, Kurdyumov (S.P.), (et al.), *10591*

Galasi (A.A.), see Pelekh (B.L.), *2268*

Galati (A.), boiling, compressional waves, hydrodynamic stability, nuclear reactors, sodium, thermal instability, *6770*

Galazyuk (V.A.), see Podstrigach (Ya.S.), *11678*

Galchinskiy (L.Yu.), see Dubrovin (O.F.), *3190*

Galdi (G.P.), elasticity (linear), infinite medium, uniqueness, well-posedness, Rionero (S.), *4124*

Galeev (Z.M.), arcs, energy transport, numerical methods, plasma, turbulence (transport), Ziganshin (R.R.), (et al.), *6866*

galerkin method, cauchy problem, hyperbolic equations, kolmogorov equation, noise (random), Girya (T.V.), *42*

- convection, fluid mechanics, numerical methods, surveys, Hughes (T.J.R.) ed., *95, book*
- optimal control, parabolic equations, Winther (R.), *168*
- oscillators, random excitation, Bergman (L.A.), Heinrich (J.C.), *1267*
- hartmann flow, magneto fluid dynamics, nonlinear theory, stability theory, two dimensional flow, Lifshits (A.M.), Shtern (V.N.), *1771*
- boundary value problems, elliptic equations, finite element techniques, rayleigh ritz method, Schreiber (R.), Eisenstat (S.C.), *2058*
- finite element methods, oil films, reynolds equation, seals, Dhagat (S.K.), Sinhasan (R.), (et al.), *2569*
- binary flow, convection (benard), poiseuille flow, thermodynamics (nonequilibrium), Artiz-Cohen (J.A.), Velarde (M.G.), *2801*
- air pollution, dispersion, numerical methods, Pepper (D.W.), Kern (C.D.), (et al.), *3028*
- bearings (journal), lubrication (hydrodynamic), reynolds equation, Schmidt (J.), *3044*
- axisymmetric flow, jets, swell, Omodei (B.J.), *3692*
- boundary value problems, elasticity, Agaev (G.N.), Gamidov (V.S.), *4168*
- plates (circular), rotary inertia, shear, vibration (nonlinear), Chia (C.Y.), Sathyamoorthy (M.), *4423*
- chemical reactions, composite materials, differential equations (partial), diffusion, Cavendish (J.C.), Oh (S.H.), *4731*
- finite element techniques, first passage, particle dynamics, random excitation, stochastic systems, Bergman (L.A.), Heinrich (J.C.), *4985*
- control-volume methods, finite element techniques, poisson equation, Ramadhyani (S.), Patankar (S.V.), *5013*
- beams, vibration (nonlinear), Yamamoto (Y.), Yasuda (K.), (et al.), *5201*
- cascades, two dimensional flow, unsteady flow, Daiguji (H.), Shirahata (H.), *5448*
- damping, mathieu-hill equation, stability theory, Pedersen (P.), *6069*
- dispersion, finite element techniques, korteweg de vries equation, waves, Sanz-Serna (J.M.), Christie (I.), *6088*
- collocation, computer programming, elliptic equations, finite element methods, rayleigh ritz method, Weiser (A.), Eisenstat (S.C.), (et al.), *6096*
- finite difference methods, finite element techniques, peclet number, Smith (R.M.), *6120*
- estuaries, stratified flow, two dimensional flow, Rasmussen (H.), *6607*
- boundary layer (turbulent), computing techniques, convergence, Soliman (M.O.), Baker (A.J.), *6639*
- boundary integral methods, computing techniques, differential equations (partial), finite difference methods, iterative methods, surveys, Noye (J.) ed., *7180, book*
- convergence, estimation, norms, parabolic equations, Thomee (V.), *7199*
- plates (circular), plates (orthotropic), rotary inertia, shear, vibration (nonlinear), Sathyamoorthy (M.), *7393*
- plates (simply supported), plates (triangular), vibration (free), Chaudhuri (S.K.), *7394*
- large displacement, plates (orthotropic), plates (rectangular), vibration (free), Pesotskaya (N.K.), *7395*
- navier stokes equation, rotating disks, stream function, vorticity, Adams (M.L.), Szeri (A.Z.), *7665*
- finite element techniques, navier stokes equation, reynolds number (small), viscous flow, Heinrich (J.C.), Marshall (R.S.), *7679*
- boundary layer, finite element techniques, mesh generation, steps, viscous flow, Leone (J.M.) Jr., Gresho (P.M.), *7713*
- finite element methods, lubrication (hydrodynamic), navier stokes equation, non newtonian flow, Tayal (S.P.), Sinhasan (R.), (et al.), *8062*
- beams, dynamic behavior, vibration (nonlinear), Vaughan (N.D.), Adams (R.D.), *8293*
- extrusion, high temperature, plastic flow, Shestopal (V.O.), Shestopal (O.Ya.), *8360*
- acoustic loading, airplane structures, fatigue, monte carlo analysis, panels, Maekawa (S.), *8434*
- channel flow, simulation, turbulent flow, Rozhdestvensky (B.L.), Priymak (V.G.), *8569*
- diffusion coefficient, moisture, soils, Hromadka (T.V.) II, Guymon (G.L.), *8779*

- absorption, diffusion, moisture, soils, Tolikas (P.K.), Tzimopoulos (C.D.), (et al.), *8790*
- anisotropy, convection (free), diffusion, Kelly (D.W.), Nakazawa (S.), (et al.), *8786*
- boundary elements, energy methods, finite element methods, functional analyis, Fusco (F.B.) Jr., *9132*
- boundary layer, convergence, finite difference methods, finite element techniques, Soliman (M.O.), Baker (A.J.), *9573*
- boundary layer (thermal), convection (forced), cylindrical bodies, laminar flow, mathematical models, Graebel (W.P.), Hsu (C.C.), *9711*
- mixed flow, porous media, Ewing (R.E.), Wheeler (M.F.), *9904*
- ocean air interaction, oceanography, Davies (A.M.), *9927*
- finite element techniques, probability theory, weighted residual methods, Bergman (L.A.), Heinrich (J.C.), *10033*
- data analysis, existence theorems, finite element techniques, navier stokes equation, penalty function, Sani (R.L.), Gresho (P.M.), (et al.), *10072*
- half space, layered media, surface waves, viscoelasticity, Chiroiu (V.), Nicolae (V.), *10234*
- distributed parameters, observers, Fujii (N.), Hirai (M.), *11062*

Galershtein (D.M.), see Dryabin (V.A.), *6997*

Galgani (L.), see Benettin (G.), *4954*

Gali (S.), adhesives, bonded joints, finite element methods, interlaminar stresses, stiffness, time dependence, Ishai (O.), *8483*

Galiev (Sh.U.), cavitation, fluid-structure interaction, hydroelasticity, unsteady flow, *11680*

Galimov (K.Z.), boundary conditions, displacement, shells (shallow), *315*
- plates, shells, theory, *3298*
- large displacement, nonlinear theory, shells (nonlinear), *4376*

Galimov (K.Z.) eds., plates, shells, stability theory, stress analysis, vibration, Sachenkov (A.V.), *6215, book*

Galimov (Sh.K.), plates (orthotropic), shells, theory, *2277*

Galin (L.A.), contact problems, friction (solid solid), wear, Goryacheva (I.G.), *3246*

Galiullin (I.A.), dynamic analysis, gyrodynamics, rotating bodies, *6054*

Galivel (P.), see Fruman (D.H.), *7667*

Galkevich (E.P.), see Nedostup (V.I.), *10548*

Galkin (V.S.), gases, theory, thermal stresses, Kogan (M.N.), *11446*

Gallagher (B.), closure, shear flow, turbulence model, turbulent flow, Magaard (L.), (et al.), *6685*

Gallagher (R.H.), see Shephard (M.S.), *5031*
- see Shephard (M.S.), *6104*

Galleguillos (E.), see Kittl (P.), *8225*

Galletly (G.D.), buckling (experimental), collapse, shells (ellipsoidal), shells (torispherical), structural stability, *2309*
- buckling, elastoplasticity, large displacement, pressurized components, shells, *10185*

Gallez (D.), see Steinchen (A.), *8275*

Galligani (I.), aquifers, computing techniques, identification, perturbation theory, quasilinearization, *8127*

galloping, towers, vortex shedding, wind loads, Parkinson (G.V.), Wawzonek (M.A.), *867*
- towers, turbulence (freestream), wind loads, wind tunnels, Kwok (K.C.S.), Melbourne (W.H.), *3907*
- blunt bodies, turbulent flow, vortex shedding, Nakamura (Y.), Tomonari (Y.), *7905*

Galoussis (E.G.), see Dooley (J.F.), *8259*

Galperin (L.G.), see Yasnikov (G.P.), *8777*

Gambarotta (L.), see Bozzo (E.), *7611*

Gambhir (M.L.), see Batchelor (B. De V.), *2257*

Gambolati (G.), gradient techniques, iterative methods, matrices (sparse), newton method, *1116*

Gamby (D.), elastic waves, numerical methods, transient effects, Lamy (R.), *6357*

Gamer (U.), dynamic analysis, foundations, vibration (forced), Pao (Y.-H.), *1283*
- cylindrical bodies, half space, interface phenomena, sh waves, *6331*
- rayleigh waves, seismic loading, structural response, *7042*
- half space, inclusions, seismic waves, sh waves, stress analysis, *8004*

games, convex programming, iterative methods, Khachiyan (L.G.), Erlikh (A.I.), *2034*
- integration, monte carlo analysis, random search, Goldfain (I.I.), *5011*

Gamidov (V.S.), see Agaev (G.N.), *4168*

Gamulya (G.M.), friction (sliding), loads, steel, vacuum, Dobrovolskaya (G.V.), (et al.), *9021*

Ganaba (T.H.), see Wellford (L.C.) Jr., *9146*

Ganapathy Chettiar (C.), see Subramanian (N.), *6532*

Ganapol (B.D.), atmosphere, mathematical models, radiant interchange, scattered light, *3828*
- boltzmann equation, collision models, particles, transport, unsteady flow, Boffi (V.C.), *11436*

Ganchev (V.G.), critical phenomena, film boiling, film flow, hydrodynamic stability, Bokov (A.Ye.), *748*

Ganesan (N.), see Ramachandra Reddy (C.V.), *1282*
- see Prabhu (T.J.), *9956*

Ganesh (S.), see Amin (K.E.), *4510*

Gangadharaiah (T.), see Rajaratnam (N.), *8601*
- see Rajaratnam (N.), *10452*

Gangarao (H.V.S.), bridges (highway), dynamic response, vibration (forced), Hasiebacher (C.A.), *3383*

Ganguli (A.), see Inoue (A.), *11761*

Gangwar (S.S.), coordinate systems, geometrical properties, magneto fluid dynamics, three dimensional formulation, vortex lines, Babu (R.), *1775*

Ganic (E.N.), critical heat flux, film cooling, film flow, heat transfer, pipe flow, surface tension, Roppo (M.N.), *8686*
- see Sha (W.C.), *9714*

Ganiev (R.F.), control, modal control, satellites, Zakrzhevskii (A.E.), (et al.), *192*

Ganoulis (J.), see Latinopoulos (P.), *8582*

Gansheimer (J.), grease, lubricants, threaded joints, *9038*

Ganzha (V.L.), filtration, steam, Zhuravskii (G.I.), *5817*
- filtration, granular media, heat transfer, mass transfer, Zhuravskii (G.I.), *12060*

Gao (Y.-C.), constitutive relations, crack opening displacement, elastoplasticity, plane strain, *9407*

Gaonkar (G.H.), see Peters (D.A.), *11736*
- blades, damping, flapping, helicopters, rotors, Peters (D.A.), *11737*

Gaponov (S.A.), boundary layer, hydrodynamic stability, perturbations, supersonic flow, *11529*

Garabedian (P.), airplanes, design, supercritical wings, swept wings, Mcfadden (G.), *9645*

Garaev (K.G.), compressible flow, convection (forced), heat transfer, noether theorem, variable thermal properties, *7823*

Garagash (I.A.), see Erzhanov (Zh.S.), *4493*

Garanin (V.P.), see Vigdorovich (V.N.), *5524*

Garas (F.K.), shear strength, slabs, stress analysis, ultimate strength, Waine (B.R.), (et al.), *2517*

Garber (M.), pressure distribution, soil structure interaction, vehicles, vehicles (tracked), Wong (J.Y.), *531*
- dynamic response, pressure distribution, vehicles, vehicles (tracked), Wong (J.Y.), *3561*

Garcia (E.A.), diffusion, gas solid interface, transient effects, *1739*

Garcia (G.), beam columns, framed structures, structural stability, *1247*

Garcia De Jalon (J.), algorithms, kinematics, linkages, mechanisms, Serna (M.A.), (et al.), *11342*

Garcia-Diaz (A.), bridge replacement, bridges, highways, integer programming, mathematical models, operations research, Liebman (J.S.), *3192*

Garde (R.J.), see Ranga Raju (K.G.), *9519*

Gardiner (T.), cyclic testing, high temperature, low cycle fatigue, steel, strain softening, *10329*

Gardner (G.C.), channel flow, free boundary, one dimensional flow, stratified flow, *2581*

Garfinkel (B.), asteroids, libration theory, perturbation methods, regularization, resonance, *871*

Garforth (A.M.), see Rallis (C.J.), *8791*

Garg (D.P.), dynamic response, gust loads, magnetic levitation, modeling, suspension systems, vehicles, wind loads, Barrows (T.M.), *10768*

Garg (H.P.), see Malhotra (A.), *6821*

Garg (R.K.), see Satyanarayana (B.), *3405*

Garg (S.), control, modeling, space vehicles, thrusters, *6852*

Garg (S.B.L.), see Chand (S.), *7623*

Garg (S.K.), geothermal reservoirs, transient effects, two phase flow, *5840*

Garg (V.K.), see Chu (K.H.), *3382*
- see Gupta (S.C.), *3696*
- see Gupta (S.C.), *3700*
- see Garivaltis (D.S.), *4485*
- developing flow, hydrodynamic stability, pipe flow, reynolds number (critical), velocity profiles, *5460*
- developing flow, hydrodynamic stability, pipe flow, reynolds number (critical), three dimensional flow, Gupta (S.C.), *6676*
- see Gupta (S.C.), *10464*
- annular flow, hydrodynamic stability, perturbations, stability curve, *11526*

Garger (V.I.), algorithms, optimization, queue theory, Ioffe (L.Sh.), *2153*

Garifullin (F.A.), convection, critical flow, viscoelastic fluids, Zapparov (F.I.), *8724*

Garivaltis (D.S.), damage (cumulative), locomotives, spectral analysis, stochastic processes, suspension systems, Garg (V.K.), (et al.), *4485*

Garmash (L.I.), design (optimum), panels (stiffened), plates (anisotropic), plates (stiffened), Olshanskii (V.P.), *8249*

Garner (D.R.), bearings (journal), damping, lubrication (hydrodynamic), surface profiles, whirling shafts, Lee (C.S.), (et al.), *3052*

Garnet (H.), bending, dynamic analysis, finite element techniques, plates, Crouzet-Pascal (J.), (et al.), *6109*

Garo (A.), boundary layer, flames, plates, velocity profiles, Puechberty (D.), (et al.), *1757*

Garrison (G.R.), see Schulkin (M.), *898*

Garro (A.), see Calderale (P.M.), *4743*

Garrott (W.R.), automobiles, digital simulation, human engineering, man machine systems, maneuverability, Wilson (D.L.), (et al.), *5020*

Garry (K.P.), design (optimum), drag, geometrical properties, trucks, *10507*

Garson (R.C.), failure, risk, systems, weakest link systems, *2514*

G

gas solid interface, diffusion, transient effects, Garcia (E.A.), *1739*
- chemical reactions, convection (free), Sotnichenko (L.V.), Shtessel (E.A.), *2851*
- dispersion, fluidized beds, thermal diffusion, Wakao (N.), Shiozawa (B.), (et al.), *5541*
- fluidized beds, jet streams, Klimenko (Yu.G.), Rabinovich (M.I.), (et al.), *7016*
- flames, methane, Blint (R.J.), Bechtel (J.H.), *10702*
- acoustics, nonlinear waves, shock waves, Babaev (A.E.), *11919*

gas surface interaction, combustion products, heat transfer, radiant interchange, Popov (Yu.A.), Melman (M.M.), (et al.), *10707*

gas turbines, compressors, performance, pipelines, pumps, Kuznetsov (A.L.), Evdokimov (V.E.), (et al.), *700*
- blades, cylindrical bodies, film cooling, heat transfer, leading edge, thermal measurements, Mirhosseini (A.), Barrow (H.), *733*
- combustion chambers, cooling, flames, Sudarev (A.V.), *846*
- boilers, cogeneration, design (optimum), energy conversion, steam power plants, Clifford (D.), Coates (R.), (et al.), *1766*
- combustors, design, flame holders, vaporization, Plee (S.L.), Mellor (A.M.), *1767*
- jet engines, multivariable systems, optimal control, Dehoff (R.L.), Hall (W.E.) Jr., *2186*
- cracks, fatigue, fracture mechanics, powder metallurgy, Sheldon (G.P.), Cook (T.S.), (et al.), *2416*
- disks, high speed, steel, strength, Shikida (M.), Kanayama (Y.), (et al.), *2501*
- boundary layer (turbulent), heat exchangers, heat transfer, roughness, Coleman (H.W.), Moffat (R.J.), (et al.), *2629*
- injection, power generation, steam, Brown (D.H.), Cohn (A.), *2749*
- cycles, design, heat engines, thermodynamic processes, Harman (R.T.C.), *2870, book*
- combustors, cooling, Sudarev (A.V.), *2871*
- aerodynamic performance, axial turbines, cooling, design, Yamamoto (A.), Takahara (K.), (et al.), *3741*
- combustors, emissions, Odgers (J.), *3870*
- combustors, mathematical models, pyrolysis, soot formation, Kesten (A.S.), Sangiovanni (J.J.), (et al.), *3871*
- shells (thin), structural analysis, Elkelish (M.S.), Elsawaf (A.), (et al.), *3883*
- conduction (heat), thermal stresses, Vytchikov (Yu.S.), Khoroiskii (V.M.), *3988*
- axial turbines, convection (forced), cooling, surface jets, Repukhov (V.M.), Shvets (I.T.), *4676*
- cascades, contamination, deposition, inlets, nozzles, Nealy (D.A.), Timmerman (W.H.), (et al.), *4744*
- blades, spectral analysis, vibration, Kanunnikov (I.P.), Sidorenko (M.K.), *5216*
- combustors, film cooling, film flow, Sturgess (G.J.), *5622*
- combustion chambers, jets, mixing, Spiridonov (Yu.A.), Premet (E.I.), (et al.), *5637*
- combustors, emissions, mixing, Noyce (J.R.), Sheppard (C.G.W.), (et al.), *5640*
- combustion chambers, scale models, Dan-Zhi (C.), *5641*
- combustors, control, design, Egan (W.J.) Jr., Reilly (R.S.), (et al.), *5654*
- combustors, fluid injection, sprays, Simmons (H.C.), Harding (C.F.), *5655*
- combustors, high temperature, Evin (O.A.), Yankovskii (V.M.), (et al.), *5656*
- blades, cooling, high temperature, water, El-Masri (M.A.), Louis (J.F.), *5657*
- high temperature, radial turbines, stresses, Arnold (D.J.), Balje (O.E.), *5658*
- airplanes, design (optimum), Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5659*
- design (optimum), ducted fans, turbofan engines, Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5660*
- particles, wear, Mucklow (P.A.), *5976*
- blades, film cooling, jets, Ito (S.), Goldstein (R.J.), (et al.), *6850*
- control, design, lyapunov's functions, model reference systems, Monopoli (R.V.), *7256*
- endurance limit, fatigue, high temperature, nickel alloys, Palienko (E.Ya.), *7475*
- energy conservation, fuels, jet engines, noise abatement, Gal-Or (B.) ed., *7805, book*
- combustors, emissions, scale models, Roberts (P.B.), Kubasco (A.J.), (et al.), *7883*
- combustors, emissions, vaporization, Sjoblom (B.G.A.), *7884*
- catalyzed ignition, emissions, scale models, Anderson (S.J.), Friedman (M.A.), (et al.), *7885*
- combustion, emissions, swirl flow, Mestre (A.), *7887*
- mechanical joints, residual stresses, thermoplasticity, Kravchenko (B.A.), Gutman (G.N.), (et al.), *7953*
- dynamic analysis, rotating disks, Dondoshanskii (V.K.), *8317*
- boundary layer, compressible flow, deposition, particles, two dimensional flow, Menguturk (M.), Sverdrup (E.F.), *8564*
- combined cycles, combustors, power generation, reheat, Mori (K.), Kitajima (J.), (et al.), *8806*
- rotors, thermoelasticity (nonlinear), thermoelasticity (transient), Hagen (K.), Sandsmark (N.), *8872*
- ceramics, cracks, flaw detection, photoacoustic microscopy, surface flaws, Inglehart (L.J.), Thomas (R.L.), (et al.), *9435*
- crack initiation, data analysis, low cycle fatigue, prediction, stresses, Doner (M.), Bain (K.R.), (et al.), *10328*
- axial flow, hydrogen, Bykov (N.N.), Chekalov (M.A.), *10625*
- compressors, energy conservation, exhaust gases, heat engines, heat exchangers, pipelines, Ludtke (K.), *10647*
- blades, convection (forced), heat transfer, thermal loading, Graham (R.W.), *10667*
- combustion products, combustors, hybrid fuels, Lew (H.G.), Decorso (S.M.), (et al.), *10711*
- combustion products, combustors, hybrid fuels, Novick (A.S.), Troth (D.L.), (et al.), *10712*
- mathematical models, optimization, starting regime, Agrawal (R.K.), Yunis (M.), *10722*
- composite materials, materials processing, steel, titanium, Meetham (G.W.) ed., *11337, book*
- combustors, design, jets, Novick (A.S.), Arvin (J.R.), (et al.), *11513*
- closed cycle, design, materials properties, thermodynamic properties, working fluids, Lee (J.C.), Campbell (J.) Jr., (et al.), *11740*
- aerodynamic performance, blades, film cooling, pressure drop, Ito (S.), Eckert (E.R.G.), (et al.), *11743*
- axial turbines, cascades, cooling, heat transfer, Gorelov (G.M.), Fishbein (V.D.), (et al.), *11748*
- combustion products, combustors, hybrid fuels, Cutrone (M.B.), Hilt (M.B.), (et al.), *11785*

gas wells, crack propagation, fracture mechanics, hydraulics, interface cracks, reservoir engineering, Hanson (M.E.), Shaffer (R.J.), (et al.), *5311*
- crack propagation, hydraulic transport, Evans (R.D.), Carroll (H.B.) Jr., *8925*

Gasenko (V.G.), acoustics, bubble dynamics, nonlinear characteristics, Nakoryakov (V.E.), (et al.), *6917*
- bubble dynamics, two phase flow, waves, Nakoryakov (V.E.), (et al.), *12030*

gaseous fuels, arcjets, generators, plasma jets, Chan (A.K.F.), Hilliard (J.C.), (et al.), *2906*

gases, centrifugation, thin wing theory, turbomachinery, Sakurai (T.), *702*
- concentration, impurities, porous media, Zyabrev (N.B.), Kudryashov (N.A.), (et al.), *823*
- diffusion, finite difference methods, navier stokes equation, stratified flow, Ukeguchi (N.), Okamoto (H.), (et al.), *825*
- empirical methods, equations of state, thermodynamic properties, Rogankov (V.B.), Chumachenko (A.V.), *1654*
- polyatomic gases, spectral analysis, spectroscopy, thermal properties, Miller (G.H.), Mulac (A.J.), *1660*
- acoustics, ducts, nonlinear waves, Kraiko (A.N.), Ni (A.L.), *1803*
- bubbly flow, membranes (permeable), Ramchandran (N.), Didwania (A.K.), (et al.), *1876*
- blast waves, particulate flow, Eidelman (S.), Oved (Y.), (et al.), *2725*
- conductivity, density, heat transfer, thermal measurements, transient effects, Filippov (L.P.), Eldarov (F.G.), (et al.), *2780*
- condensation, drops, evaporation, Rakhmatulina (I.Kh.), *2840*
- expansion, nozzles, rarefied flow, Nanbu (K.), Watanabe (Y.), *3646*
- imperfection sensitivity, solidification, thermal properties, Manzhelii (V.G.), Freiman (Yu.A.), (et al.), *5528*
- convection, heat transfer, radiant interchange, radiation, spectroscopy, Mattick (A.T.), *5585*
- dissociation, porous media, unsteady flow, Lippy (D.), Evans (R.D.), *5832*
- mixtures, particles, pipe flow, Ginestra (J.C.), Rangachari (S.), (et al.), *5833*
- compressible flow, discontinuities, dissociation, Sharma (V.D.), *6710*
- ideal gas, refraction, shock waves, Legowski (Z.), Wlodarczyk (E.), *6712*
- mixtures, modes, sound propagation, Huck (R.J.), Johnson (E.A.), *6920*
- acoustic waves, impedance, nonlinear characteristics, thermal effects, Artamonov (K.I.), Vorobev (A.P.), *6921*
- electromagnetic loading, flow measurement, isotope tracers, liquids, vortex shedding, Scott (R.W.W.) ed., *7811, book*
- equations of state, high pressure, nitrogen, Antanovich (A.A.), *7820*
- binary flow, conduction (heat), conductivity, kinetic theory, mixtures, multicomponent flow, Assael (M.J.), Wakeham (W.A.), (et al.), *8675*
- channel flow, ducts (curved), three dimensional flow, Sepp (V.A.), *8688*
- mixtures, sound propagation, sound speed, Huck (R.J.), Johnson (E.A.), *8860*
- characteristic methods, discontinuities, dissociation, Sharma (V.D.), Sharma (J.), (et al.), *9636*
- combustion chambers, frequency response, vibration, Furletov (V.I.), *9765*
- carbides, coatings, friction (sliding), high pressure, lubricants (gas), wear, Skinner (J.), *9948*
- mixtures, real gas effects, thermal properties, Nedostup (V.I.), Galkevich (E.P.), *10548*
- boltzmann equation, mixtures, molecular theory, Bobylev (A.V.), *10550*
- absorption, radiant interchange, radiation, transmission, Yuen (W.W.), *10604*
- heat transfer, mass transfer, suspensions, Sheiman (V.A.), Nikolaichik (L.V.), *10654*
- dissociation, fluid mechanics, moving surfaces, porous media, Verigin (N.N.), Khabibullin (I.L.), (et al.), *10691*
- boltzmann equation, kinetic theory, particles, Chen (M.), *11440*
- bgk model, kinetic theory, shock waves, Narusawa (U.), *11441*
- shock waves, two dimensional flow, variational methods, Bratos (M.), Herczynski (R.), *11444*
- heat transfer, mixtures, plates (parallel), Nosik (V.I.), *11445*
- theory, thermal stresses, Galkin (V.S.), Kogan (M.N.), *11446*
- couette flow, heat transfer, plates (parallel), Bishaev (A.M.), Rykov (V.A.), *11450*

- heat transfer, plates (parallel), Vestner (H.), *11455*
- acoustics, sound generation, thermal effects, vibration (self excited), Kilchinskaya (G.A.), Protsenko (O.P.), *11920*

gasification, boiling, capillary flow, cryogenics, porous surfaces, Orlov (V.K.), Savelev (V.N.), *5543*
- fluidized beds, particle size, Weimer (A.W.), Clough (D.E.), *5845*
- immersion, mathematical methods, phase changes, thermal expansion, thermal loading, Hunter (L.W.), *7852*
- fluidized beds, particle size, Weimer (A.W.), Clough (D.E.), *7987*

Gaskell (D.R.), materials properties, metallurgy, thermodynamic processes, thermodynamics, *2773, book*

Gasparetto (C.A.), see Ulbrecht (J.J.), *7675*

Gasparini (D.A.), dynamic response, excitation, noise (random), random excitation, Debchaudhury (A.), *518*
- beams (cantilever), random excitation, vibration (random), Debchaudhury (A.), (et al.), *10201*

Gateau (P.), boundary layer, flames, jets, plates, Puechberty (D.), (et al.), *9758*

gates, karnaugh map, networks, synthesis, Srivatsa (S.K.), Biswas (N.N.), *105*
- cavitation flow, discharges, hydroelectric power, tunnels, vibration (flow induced), Giezendanner (W.), Henry (P.), *2582*
- hodograph methods, weirs, Han (T.Y.), Chow (W.L.), *3600*
- bottom irregularities, channel flow, force, hydraulic jump, Narayanan (R.), Schizas (L.S.), *6602*
- canals, frequency response, mathematical models, unsteady flow, Corriga (G.), Sanna (S.), (et al.), *8509*
- dynamic analysis, fluid-structure interaction, plates (rectangular), vibration, Casacci (S.), Caillot (G.), *10207*
- boundary integral methods, fredholm equations, free boundary, irrotational flow, Sohngen (B.), Bischoff (H.), *10401*

Gates (E.M.), see Billet (M.L.), *1638*

Gates (F.L.), see Hoeppner (D.W.), *9390*

Gates (W.L.), atmospheric circulation, climatology, ocean air interaction, *987*

Gatti (A.M.), biological joints, hips, prosthetic devices, *9067*

Gatti (G.), experimental methods, piles, reinforced concrete, strain gages, Collotta (T.), (et al.), *10260*

Gatto (M.), circulation, hydrology, inlet flow, lakes, models, outflow, Rinaldi (S.), *7660*

Gauchel (H.-J.), computer aided design, design (optimum), linkages, mechanisms (planes), optimization, *4563*

Gaudefroy (A.), absorption, acoustics, adaptive systems, *1800*
- acoustics, attenuation, ducts, energy methods, noise abatement, *11996*

Gaul (H.), energy storage, optical techniques, radiant interchange, solar collectors, Rabl (A.), *8767*
- see Bendt (P.), *8768*

Gaumet (J.-L.), atmosphere, laser doppler velocimeters, lasers, lidar, meteorology, Renaut (D.), (et al.), *1917*

Gaunaurd (G.), see Brill (D.), *3947*
- acoustic waves, fluids, scattering, spherical bodies, Uberall (H.), *4774*

Gaunaurd (G.C.), acoustics, bubble dynamics, sound propagation, Uberall (H.), *5742*

Gaur (Y.N.), see Chaudhary (R.C.), *10683*

Gavalas (G.R.), asymptotic behavior, conduction (unsteady), one dimensional flow, parabolic equations, short-time solutions, Yortsos (Y.C.), *1087*
- carbon, char particles, combustion, fluidized beds, mass transfer, particles, *11792*

Gaviglio (J.), hot wire, thermal diffusion, turbulent flow, Anguillet (J.-P.), (et al.), *4652*

Gavrilenko (G.D.), buckling, shells (cylindrical), shells (stiffened), Sitnik (A.S.), *10178*

Gavrilenko (V.G.), bubble dynamics, micromeritics, turbulent flow, Martyanov (A.I.), *9885*

Gavrilin (A.I.), boiling, nucleate boiling, transition boiling, tube bundles, *1672*

Gavrilin (B.L.), see Voropayev (S.I.), *2668*

Gavrilov (D.A.), bending, cyclic loading, fatigue, steel, *6470*

Gavrilov (S.V.), earth, mantle, modeling, stability, thermomechanical model, Zharkov (V.N.), *8006*

Gawecki (A.), bars, beams (anisotropic), beams (variable cross section), torsion, Boruszak (A.), *10137*

Gawthrop (P.J.), adaptive systems, pole placement, regulator problem, *185*

Gay (C.), eddy diffusivity, heat transfer (atmospheric), radiation, turbulence (geophysical), Thomas (G.E.), *5947*

Gay (D.), beams (torsional), torsion, warping, Boudet (R.), *3289*

Gaysinskiy (Yu.F.), see Segal (R.B.), *5819*

Gazetas (G.), displacement, foundations, layered media, soils, *3406*
- footings, soils, winkler foundation, *4463*
- dynamic response, seismic loading, soils, vibration, *8349*

Gazley (C.) Jr., see Wazzan (A.R.), *1540*

Gdoutos (E.E.), concentrated load, crack opening displacement, fracture angle, singularities, strain energy, stress intensity factor, *458*
- crack propagation, direction, photoelasticity, prediction, *2469*
- biaxial loading, crack propagation, fracture toughness, *5296*

Ge (Z.-M.), analytical methods, nonholonomic system, particle dynamics, variable mass, Cheng (Y.-H.), *10010*

gear teeth, bending, finite element techniques, Reinhart (W.R.), Ferguson (R.J.), (et al.), *1132*
- dynamic contact, dynamic loads, Smith (J.D.), *1308*
- contact stresses, friction (sliding), gears (worm), hydrodynamics, Winter (H.), Wilkesmann (H.), *2557*
- contact stresses, fatigue, kinematics, surface profiles, wear, Huston (R.L.), Coy (J.J.), *2568*
- dynamic loads, gear trains, transmissions, Birjukov (L.V.), Krusev (S.D.), *2563*
- graphical methods, hobbing, surface profiles, Terashima (K.), Ueno (T.), (et al.), *2564*
- bending, fatigue, strength, Oda (S.), Shimatomi (Y.), (et al.), *2565*
- finishing, rolling, surface profiles, Ozaki (T.), Imamura (A.), *3574*
- forging, gears (spur), grinding, mechanical properties, metallurgy, Abdel-Rahman (A.R.O.), Dean (T.A.), *5274*
- dynamic interaction, vibration isolation, Benton (M.), Seireg (A.), *8324*
- contact stresses, deflections, elasticity, half space, Terauchi (Y.), Nagamura (K.), *8472*
- conformal mapping, numerical methods, stress intensity factor, Cardou (A.), Tordion (G.V.), *9472*
- backlash, gears (trochoidal), surface profiles, Lehmann (M.), *9474*
- computer aided design, Koller (R.), Esser (H.), *9484*
- beams (timoshenko), deflections, design, dynamic loads, transmissions, Nagaya (K.), Uematsu (S.), *10372*
- design, dynamic loads, surface profiles, Hidaka (T.), Terauchi (Y.), (et al.), *10373*
- acoustics, diagnostics, holography, vibration, Umezawa (K.), Houjoh (H.), *11339*

gear trains, cams, linkages, machine design, mechanisms, transmissions, Kozhevnikov (S.N.) ed., *2549, book*
- dynamic loads, gear teeth, transmissions, Birjukov (L.V.), Krusev (S.D.), *2563*
- bearings (journal), bearings (roller), friction, transmissions (planetary), Jarchow (F.), Theissen (J.), *2566*
- dynamic loads, runge kutta method, transmissions (planetary), Jarchow (F.), Vonderschmidt (R.), *3575*
- kinematics, transmissions, Ferguson (R.J.), Kerr (J.H.), *6557*
- dynamic properties, experimental mechanics, vibration (forced), Drago (R.J.), Brown (F.W.), *7414*
- diagnostics, flaw detection, transmissions, vibration, Randall (R.B.), *11338*

gears, lubrication (elastohydrodynamic), oil films, rolling contact, wear, Flamand (L.), Foucher (D.), (et al.), *1027*
- flexure, hardness, strength, Bazhenov (V.G.), Kravchenko (A.A.), (et al.), *1471*
- circular arc gears, contact stresses, surface profiles, Lingaiah (K.), Ramachandra (K.), *2569*
- friction (sliding), lubrication (elastohydrodynamic), transmissions, wear, Drozdov (Yu.N.), *3049*
- film thickness, oil films, roughness, surfaces, Tudor (A.), *3050*
- curvature, design, gears (hypoid), gears (spiral), surface profiles, synthesis, Litvin (F.L.), *4555*
- contact problems, flash temperature, temperature, Kolonits (F.), *4904*
- design, kinematics, Colbourne (J.R.), *9470*
- cutting, design, kinematics, Mitome (K.), *9471*
- algorithms, dynamic analysis, friction, Majewski (L.), *9475*

gears (spur), film thickness, lubricants (liquid), oil films, wear, Hirano (F.), Ichimaru (K.), (et al.), *1016*
- machine design, transmissions, Anderson (N.E.), Loewenthal (S.H.), *2560*
- dynamic loads, film thickness, lubrication (elastohydrodynamic), surfaces, temperature, Wang (K.L.), Cheng (H.S.), *2561*
- contact stresses, fatigue, hardness, surfaces, Flamand (L.), Berthe (D.), (et al.), *2562*
- friction, lubrication (elastohydrodynamic), Martin (K.F.), *3573*
- forging, gear teeth, grinding, mechanical properties, metallurgy, Abdel-Rahman (A.R.O.), Dean (T.A.), *5274*
- damping, design, dynamic loads, runge kutta method, stiffness, Kasuba (R.), Evans (J.W.), *8471*

gears (worm), contact stresses, friction (sliding), gear teeth, hydrodynamics, Winter (H.), Wilkesmann (H.), *2557*

Gebhart (B.), ice, icebergs, oceanography, surface flow, weather forecasting, Audunson (T.), *5953*
- see Sammakia (B.), *6763*
- buoyant flow, convection (free), hydrodynamic stability, thermal instability, transition flow, Mahajan (R.L.), *9701*

Gecim (B.), film thickness, lubrication (elastohydrodynamic), rolling contact, viscosity, Winer (W.O.), *1941*

Gecit (M.R.), interaction, multiple cracks, stress intensity factor, transforms, *9401*

Geer (J.P.), jets, orifices, perturbation methods, Strikwerda (J.C.), *3686*

Geering (H.P.), dynamic analysis, frequency response, structural response, *2359*

Geers (T.L.), see Underwood (P.), *3009*
- fluid-structure interaction, submerged bodies, underwater acoustics, *4791*
- acoustic waves, fluid-structure interaction, shells (cylindrical), submerged bodies, transient loading, Yen (C.-L.), *11660*

Geffen (N.), see Lustman (L.), *2892*

Gegel (E.I.), see Anvarov (R.), *2907*

Gehlen (P.C.), see Popelar (C.H.), *1383*

Geiger (G.), convection, hydrodynamic stability, rayleigh number, rotating fluids, shells (spherical), Busse (F.), *6787*

Geise (G.), design, linkages, mechanisms (planes), mechanisms (spatial), rotational capability, Modler (K.-H.), *9481*

Geisler (H.), dilute solutions, polymers, viscosity, viscous flow, Muller (H.G.), *6579*

Geissler (W.), ellipsoids, laplace equation, oscillating bodies, unsteady flow, viscous effects, Kienappel (K.), *8539*

Gelber (M.W.), see Chen (R.Y.), *6957*

Geldart (D.), see Abrahamsen (A.R.), *7014*

- fluidized beds, particles, separation, Baeyens (J.), (et al.), *7986*

Gelfand (B.E.), see Borisov (A.A.), *12024*

Gelfgat (Yu.M.), axisymmetric flow, magneto fluid dynamics, nonuniform flow, turbulent flow, velocity profiles, Gorbunov (L.A.), *5673*

Gelhar (L.W.), aquifers, mixing, particles, stochastics, stratification, Gutjahr (A.L.), (et al.), *4025*

Gelin (J.C.), axisymmetric loading, compression, plastic flow, stress strain relationships, upset forging, Oudin (J.), (et al.), *10326*

Gelman (B.D.), boundary value problems, mathematical methods, mechanics, Gliklikh (Iu.E.), *1075*

Gelos (R.), frequencies, plates (circular), vibration (free), Ficcadenti (G.M.), (et al.), *2331*

Gence (J.N.), see Fournier (J.L.), *6690*

Genchev (Zh.D.), particulate flow, suspensions, turbulence (transport), two phase flow, Karpuzov (D.S.), *657*

Gendugov (V.M.), combustion, detonation, reaction kinetics, shock waves, tubes, *5630*

- chemical kinetics, detonation, explosions, *9830*

generation, atmosphere, boundary layer (atmospheric), boundary layer (turbulent), Arie (M.), Kiya (M.), (et al.), *4600*

- earthquakes, faults, modeling, Bykovtsev (A.S.), Chernov (G.P.), *4851*
- turbulence, vorticity, Vishnyakov (A.A.), *6691*
- coordinate systems, curved surfaces, poisson equation, two dimensional flow, Visbal (M.), Knight (D.), *7683*
- acoustic emission, nondestructive tests, propagation, Kolerus (J.), *9424*
- fluid injection, jets, oscillations, Favre-Marinet (M.), Binder (G.), (et al.), *10456*

generators, hall effect, magneto fluid dynamics, nonhomogeneous media, nonlinear analysis, Kuo (S.), Cheo (B.), (et al.), *852*

- heat transfer, stability, two phase flow, Rakopoulos (C.D.), El-Shirbini (A.A.), (et al.), *1857*
- arcjets, gaseous fuels, plasma jets, Chan (A.K.F.), Hilliard (J.C.), (et al.), *2905*
- design (optimum), energy conservation, heat exchangers, power plants, Aminov (R.Z.), Radchenko (E.V.), *3837*
- machine design, retaining rings, rotors, steel, Viswanathan (R.), *5372*
- channels, design criteria, magneto plasma dynamics, open loop systems, Kessler (R.), *5681*
- arcjets, discharges, dynamic behavior, plasma jets, Sergienko (A.S.), *5695*
- mathematical models, nuclear power, steam, steam power plants, transient effects, Van Tuyle (G.J.), Lee (J.C.), *8759*
- boundary layer, insulation, magneto fluid dynamics, walls, Rankin (R.R.), Seif (S.A.), (et al.), *8815*
- equilibrium, hall effect, magneto fluid dynamics, nonuniform flow, Rosenbaum (M.), Shamma (S.E.), (et al.), *8830*
- alfven number, magneto fluid dynamics, pinch effect, pumps, Rutkowski (J.), *9799*
- liquid metals, magneto fluid dynamics, measurements, two phase flow, Dunn (P.F.), *10753*
- magnetic field, models, rotors, spherical bodies, Barash (Yu.S.), Kropachev (E.P.), *11830*

Generozov (V.L.), see Vereschagin (A.F.), *216*

geneva mechanisms, design (optimum), high speed, machine design, Lee (T.W.), *7633*

Geninson (B.A.), see Bronshtein (I.I.), *2150*

Genkin (M.D.), see Ryaboi (V.M.), *7244*

Gent (P.R.), ocean waves, oceanography, surface waves, *4858*

- ocean air interaction, oceanography, rotating fluids, Semtner (A.J.) Jr., *10861*

Genta (G.), plates (holed), plates (orthotropic), rotating disks, stress concentration, Gola (M.), *5167*

- anisotropic media, rotating disks, stress analysis, Gola (M.), (et al.), *8255*

geomechanics, axisymmetric loading, concrete, cracks, monotonic loading, Chen (E.Y.-T.), Schnobrich (W.C.), *2450*

- gravimetrics, green theorem, potential theory, Powell (C.), *2914*
- equipment, gravity, gravity variometers, measurements, Kiselyev (M.I.), Kuzivanov (V.A.), *5872*
- filters, Kats (A.), Shubik (B.M.), *5888*
- computing techniques, continuum mechanics, crack propagation, fracture, hydraulic fracturing, stress intensity factor, Hanson (M.E.), Shaffer (R.J.), *6434*
- spherical bodies, vibration (torsional), Kalachnikov (A.A.), *7022*
- cavities, elastic waves, explosions, Vasilyev (Yu.I.), Molotova (L.V.), (et al.), *8955*

geometric nonlinearities, finite element techniques, ocean, pipelines, submerged bodies, three dimensional formulation, Odorizzi (S.), Schrefler (B.A.), *93*

- stability, stability (numerical), stiffness matrix, subsonic flow, Hangai (Y.), *330*
- finite element techniques, material nonlinearities, stiffness matrix, structural analysis, Cook (R.D.), *1127, book*
- fibers, laminates, reinforced bodies, Hyer (M.W.), *2247*
- convergence, finite element techniques, flexible bodies, large displacement, Mohr (G.A.), Milner (H.R.), *3142*
- beams, dynamic response, vibration (forced), Masri (S.F.), Mariamy (Y.A.), (et al.), *3355*
- deformation (plastic), materials processing, metals, plastic behavior, Lysov (M.I.), Sosov (N.V.), *3421*
- elastoplasticity, frames, random loading, reliability analysis, Casciati (F.), Faravelli (L.), *3527*
- optimization, shells (orthotropic), shells (thin), Narusberg (V.L.), Rikards (R.B.), (et al.), *5348*
- cable stayed bridges, variational methods, Cafarella (F.), *6523*
- offshore structures, pipes, underwater structures, wave loads, Felippa (C.A.), Chung (J.S.), *6534*
- minimization, newton method, nonlinear analysis, structural analysis, Kamat (M.P.), Watson (L.T.), (et al.), *7188*
- iterative methods, nonlinear analysis, structural analysis, Webster (R.L.), *7198*
- matrix methods, space frames, structural analysis, textiles, Stubbs (N.), Fluss (H.), *7311*
- finite element techniques, shells (nonlinear), Hughes (T.J.R.), Liu (W.K.), *7337*
- material nonlinearities, plane stress, reinforced concrete, shells (thin), Arnesen (A.), Sorensen (S.I.), (et al.), *7603*
- beams (open section), beams (thin section), finite element techniques, space frames, three dimensional formulation, Minozzi (D.), Odorizzi (S.), (et al.), *8153*

geometric programming, computing techniques, nonlinear programming, surveys, Ecker (J.G.), *53*

- design (optimum), mechanisms, synthesis, Rao (A.C.), *2551*
- algorithms, mathematical programming, stochastic processes, stochastic systems, Scott (C.H.), Jefferson (T.R.), *6136*
- design (optimum), sensitivity, Dembo (R.S.), *10352*

geometrical properties, cratering, cutting, data analysis, electric spark discharge, stochastics, Pandit (S.M.), Rajurkar (K.P.), *1348*

- coordinate systems, magneto fluid dynamics, three dimensional formulation, vortex lines, Gangwar (S.S.), Babu (R.), *1775*
- airplane structures, design, forebodies, pressure distribution, Barger (R.L.), *2738*
- centrifugal pumps, experimental methods, rotors, thrust, Okamura (T.), *3743*
- axial compressors, blades, boundary layer, subsonic flow, viscid inviscid flow, Calvert (W.J.), Herbert (M.V.), *3745*
- annular flow, steam turbines, Zaryankin (A.E.), *3890*
- aerodynamic interference, airplane structures, fuselages, helicopters, rotors, Wilby (P.G.), Young (C.), (et al.), *4673*
- injectors, pumps, Parker (G.J.), *4678*
- calibration, electromagnetic loading, flow measurement, magnetic stabilization, Smigielski (J.), *4683*
- absorption, noise abatement, reverberation, Bartel (T.W.), *4800*
- cavitation, hydraulic turbines, surge, vortex tubes, Dorfler (P.), *5498*
- aerodynamic performance, centrifugal compressors, compressible flow, reynolds number, Wachter (J.), Wohrl (B.), *5499*
- calibration, hot wire, Van Thinh (N.), *5511*
- nozzles, reversers, thrust, Tsybizov (Yu.I.), Salmanova (N.G.), *5669*
- aerodynamic loads, buildings, pressure distribution, unsteady flow, Sockel (H.), Taucher (R.), *5698*
- kinematics, manipulators, robotics, Sugimoto (K.), Duffy (J.), *6048*
- aerodynamic performance, aerodynamics, axial turbines, optimization, Macchi (E.), Perdichizzi (A.), *6736*
- continuum mechanics, functional analyis, topological techniques, Banfi (C.), Fabrizio (M.), *7135*
- atmosphere, functional analyis, relativity, Defrise (P.), *7136*
- combustion, diesel engines, flow irregularities, Losonci (P.), *8902*
- combustion, design, scramjets, supersonic flow, Waltrup (P.J.), Billig (F.S.), (et al.), *8809*
- bones, rigid bodies, Charit (Y.), *9070*
- aerodynamic performance, airplanes, design, wings, Larson (E.S.), *9648*
- axial turbines, blades, optimization, Segadeev (R.G.), Strunkin (V.A.), *10355*
- automobiles, design (optimum), drag, fuel economy, Stapleford (W.R.), *10606*
- design (optimum), drag, trucks, Garry (K.P.), *10607*
- heat exchangers, heat exchangers (stream-symmetric), heat transfer, internal flow, Singh (K.P.), *10615*
- aerodynamic performance, axial compressors, cascades, three dimensional flow, Stark (U.), Hoheisel (H.), *11741*
- axial turbines, blades, cascades, swirl flow, Aronov (B.M.), Kerzhenkov (A.G.), *11747*
- axial turbines, internal flow, wind turbines, Igra (O.), *11754*
- compressible flow, diffusers, incompressible flow, mixing, pressure drop, Labendik (V.P.), Dantsyg (A.Ya.), (et al.), *11799*
- friction (solid fluid), lubrication (hydrodynamic), seals, Dhagat (S.K.), Sinhasan (R.), (et al.), *12091*

geomorphology, bayesian phenomena, classification, pattern recognition, Kuchay (V.K.), Chuchadeyev (D.N.), *154*

geophysics, kalman filters, linearization, navigation, Dmitriev (S.P.), Shimelevich (L.I.), *184*
- gravity, surveys, Balk (P.I.), *962*
- geopential fields, meteorology, Babaliev (A.M.), Kostyukov (V.V.), (et al.), *4088*
- granular media, rock mechanics, shear flow, Passman (S.L.), Nunziato (J.W.), (et al.), *4132*
- convection, geostrophic flow, geostrophic models, rotating fluids, thermal instability, Glukhovskiy (A.B.), Dolzhanskiy (F.V.), *5558*
- functional analyis, iterative methods, Oganesyan (S.M.), Starostenko (V.I.), *5881*
- constitutive equations, cyclic loading, strain rate, Hueckel (T.), *6180*
- baroclinic waves, convection, rotating fluids, Leach (H.), *6788*
- earth, energy conversion, magneto fluid dynamics, models, Olson (P.), *8821*
- porous media, tectonics, viscous flow, Karakin (A.V.), Lobkovskii (L.I.), *8931*
- magnetic field, numerical methods, Slutskin (M.A.), Tsirel (V.S.), *9916*

Georgantopoulos (G.A.), convection (free), laplace transform, magneto fluid dynamics, oscillatory flow, plates (perforated), viscous flow, Douskos (C.N.), (et al.), *2884*
- convection (free), laplace transform, magneto fluid dynamics, plates (vertical), stokes flow, Douskos (C.N.), (et al.), *5675*

George (A.), algorithms, finite element techniques, matrices (sparse), mesh generation, *2063*

George (M.F.), ducted propellers, elliptical bodies, velocity profiles, vortex sheets, *5400*

George (O.D.), approximation methods, elastic bodies, mathematical methods, singularities, vibration (forced), *7398*

Georges (J.-M.), see Martin (J.-M.), *9979*

Georgiades (G.), see Stevenson (D.G.), *2170*

Georgiev (K.G.), drops, experimental methods, particle size, steam, Savostyanov (V.A.), (et al.), *7000*
- fly-by, interplanetary probes, orbit mechanics, perturbation methods, Papkov (O.V.), *10778*

Georgiev (M.N.), brittle fracture, crack resistance, material testing, x ray techniques, Mezhova (N.Ya.), (et al.), *1415*
- crack growth, j-integral, reliability, Morozov (E.M.), *2462*
- crack control, crack initiation, cracking, ductile fracture, stress analysis, Morozov (E.M.), *5341*

geostrophic flow, convection (free), heat, magneto fluid dynamics, rotating fluids, Soward (A.M.), *1514*
- baroclinic instability, coriolis forces, currents, eddies, ocean air interaction, Mcwilliams (J.C.), Holland (W.R.), (et al.), *1890*
- atmospheric circulation, meteorology (physical), Kivganov (A.F.), Mokhanti (U.Ch.), *1904*
- hydrodynamic stability, stratified flow, Weber (J.E.), *2684*
- bottom irregularities, currents, oceanography, Kozlov (V.F.), Kropinova (N.A.), (et al.), *3016*
- convection, geophysics, geostrophic models, rotating fluids, thermal instability, Glukhovskiy (A.B.), Dolzhanskiy (F.V.), *5558*
- boundary layer (atmospheric), ekman layer, rotating fluids, James (I.N.), *8990*
- circulation, ekman layer, ocean air interaction, oceanography, rossby waves, Semtner (A.J.) Jr., Holland (W.R.), *10663*
- coriolis forces, hydrodynamic stability, Bubnov (B.M.), *11528*

geosynchronous orbits, attitude control, communication satellites, gyrodynamics, Hsing (J.C.), Ramos (A.), (et al.), *5703*
- collision models, mission analysis, probability, Hechler (M.), Van Der Ha (J.C.), *6882*
- artificial satellites, stability theory, Breakwell (J.V.), *9817*
- orbit mechanics, orbit transfer, Rosengren (M.), *10775*

geothermal energy, energy conversion, evaporation, heat exchangers, Kodres (C.A.), Jacobs (H.R.), (et al.), *3834*
- energy conversion, heat engines, thermodynamic functions, thermodynamic processes, Lamb (J.P.), Polansky (G.F.), (et al.), *4691*
- field tests, fluid injection, fracture, hydraulics, rocks, Solberg (P.), Lockner (D.), (et al.), *5884*
- Stone (A.M.), *5885*
- fluid injection, heat extraction, Bazant (Z.P.), Ohtsubo (H.), *5886*
- deformation, faults, fluid injection, rocks, Hayashi (K.), Abe (H.), *9373*

geothermal reservoirs, mathematical models, rock mechanics, Sowell (E.F.), Curry (R.L.), *956*
- transient effects, two phase flow, Garg (S.K.), *5840*
- storage, wells, Miller (C.W.), *7996*
- finite difference methods, two phase flow, Moench (A.F.), *8930*
- finite difference methods, two phase flow, Zyvoloski (G.A.), O'Sullivan (M.J.), *8932*
- aquifers, conduction (heat), convection (free), heat transfer (combined modes), thermosyphons, Torrance (K.E.), Chan (V.W.C.), *9724*
- nonlinear characteristics, two phase flow, wells, Sorey (M.L.), Grant (M.A.), (et al.), *9903*

Geradin (M.), computing techniques, iterative methods, large scale systems, newton method, nonlinear methods, Idelsohn (S.), (et al.), *64*

Gerasimov (Yu.I.), compressible flow, dimensional analysis, impingement, jets, plates, *11389*

Gerber (N.), see Kitchens (C.W.) Jr., *7711*

Gerbert (B.G.), belts, drives, *537*

Gerdzhikov (V.S.), differential equations (partial), eigenvalues, inverse problems, nonlinear systems, scattering, Ivanov (M.I.), (et al.), *2007*

Gerhardt (H.-D.), see Fischer (J.), *10058*

Gerkina (V.S.), see Artyukhin (Yu.P.), *6223*

Germain (P.), plasticity, relaxation methods, variational methods, *3272*
- energy methods, solid mechanics, strain energy, structures, *8035*

Gerold (V.), see Rosenkranz (G.), *9245*

Geromel (J.C.), lyapunov's functions, matrix methods, optimization, Bernussou (J.), *1147*

Geroyannis (V.S.), see Drymonitou (M.A.), *856*

Gerrard (C.M.), elastic behavior, joints, models, rocks, *9366*

Gerrard (J.H.), see Siaouti (A.), *7732*

Gerritsen (A.H.), compaction, crackling, materials properties, powder metallurgy, powders, Stemerding (S.), *7464*

Gershbein (E.A.), see Brykina (I.G.), *4606*
- see Brykina (I.G.), *6637*

Gershenfeld (N.), see Whitehead (J.A.) Jr., *10411*

Gershman (M.D.), damping, dynamic analysis, particle dynamics, vibration (nonlinear), *6273*

Gershuni (G.Z.), binary flow, cellular motions, plane flow, thermal instability, thermal waves, Zhukhovitskii (E.M.), (et al.), *5554*
- immiscible fluids, plates (parallel), thermal effects, thermal instability, Zhukhovitskii (E.M.), *6783*
- convection (forced), mixed flow, porous media, stability theory, Zhukhovitskii (E.M.), (et al.), *8942*

Gersten (K.), buoyancy, free jets, thermal plumes, Schilawa (S.), (et al.), *2661*

Gerstle (K.H.), concrete, strain measurement, strength, stress analysis, triaxial loading, Ashchi (H.), (et al.), *2486*

Geschwindner (L.F.) Jr., cables, dynamic response, vibration (forced), West (H.H.), *4409*

Gessner (F.B.), entrance region, noncircular pipes, numerical methods, turbulent flow, Emery (A.F.), *4623*

Gesund (H.), columns, flexure, punch problems, reinforced concrete, slabs, strength, Goli (H.B.), *3532*

Getling (A.V.), buoyant flow, convection (benard), convection (free), radiant interchange, thermal instability, *5555*

Getman (A.F.), deformation, elastoplasticity, micromechanics, stress strain relationships, *6189*
- cyclic loading, fatigue, fracture, inhomogeneities, microcracks, *7487*

Getselev (Z.N.), containment, liquid metals, magneto fluid dynamics, melting, vessels, Martinov (G.I.), *3894*

Getsov (L.B.), disks, endurance limit, thermal loading, turbines, Nigin (A.A.), (et al.), *516*
- blades, crack propagation, stress intensity factor, thermal fatigue, Kabelevskii (M.G.), *4817*

Getz (W.M.), discontinuities, jump conditions, maximum principle, optimal control, Martin (D.H.), *6139*
- differential games, evasion, pursuit, Pachter (M.), *8170*
- differential games, evasion, lyapunov's functions, pursuit, Pachter (M.), *11066*

Geway (R.P.), control, controllable pitch propeller, mathematical models, propellers (marine), De Mulder (E.P.H.M.), (et al.), *5966*

Geymonat (G.), acoustics, boundary value problems, mathematical methods, reynolds number (high), viscous flow, Sanchez-Palencia (E.), *3104*

Ghahremani (F.), creep, crystals, grain boundaries, metals, micromechanisms, *3255*

Ghajar (A.J.), convection (free), critical flow, grashof number, laminar flow, plates (vertical), temperature, variable thermal properties, Parker (J.D.), *9700*

Ghassemzadeh (M.R.), coal, particle fluid flow, rheology, Carmi (S.), *5385*

Ghelardoni (E.), see Mandorini (V.), *7528*

Gheorghiu (Z.), analytical methods, multiple degree of freedom, rocks, seismic loading, *9921*

Ghia (K.N.), see Ghia (U.), *1554*

Ghia (U.), channel flow, numerical analysis, pressure distribution, separation, Ghia (K.N.), (et al.), *1554*

Ghista (D.N.), biomechanics, constitutive equations, deformation, diagnostics, heart, Ray (G.), (et al.), *6013*
- biomechanics, constitutive equations, deformation, diagnostics, heart, pulsatile flow, Ray (G.), (et al.), *6014*
- see Radhakrishnan (S.), *9064*

Ghista (D.N.) ed., biological joints, injuries, prosthetic devices, spine, *8069, book*

Ghonem (H.), crack initiation, crack propagation, fatigue, micromechanics, stochastics, *7533*

Ghosh (A.), see Bhattacharyya (P.), *7704*
- see Bhattacharyya (P.), *7705*
- see Muju (M.K.), *8065*

Ghosh (A.K.), see Tibarewala (D.N.), *9055*

Ghosh (S.K.), drawing, flaws, forming, sheet metal, *2400*
- large displacement, plastic behavior, punch problems, rings, Johnson (W.), (et al.), *3296*

Ghosh (S.N.), see Chatterjee (S.S.), *2591*

Ghosh (S.P.), experimental methods, friction (solid solid), interference fits, photoelasticity, stress analysis, Dattaguru (B.), (et al.), *5316*

Ghosh (T.P.), cold working, extrusion, metals, rods, *1340*

Giambanco (F.), deformation (finite), large displacement, nonlinear structures, structural analysis, *6159*

Gianolio (E.), convection (forced), coolers, forced systems, heat exchangers, heat transfer, pressure drop, Cuti (F.), *6813*

Giaquinto (E.V.), see Mowbray (D.F.), *443*

Gibbon (J.D.), rotational flow, shear flow, solitary waves, stratified flow, James (I.N.), (et al.), *4653*

Gibbs (B.M.), see Zarek (J.H.B.), *3352*

- acoustic measurements, impulse, sound propagation, Davies (J.C.), *5778*
- see Craven (P.G.), *11947*

Gibert (P.), finite element techniques, stress concentration, thermoelasticity, Gorge (Y.), *7213*

- conduction (heat), differential equations (partial), elasticity, finite element techniques, Gorge (Y.), *9142*

Gibert (R.J.), see Combescure (A.), *6705*

Gibson (C.H.), buoyancy, ocean, stratification, turbulence (geophysical), turbulent mixing, *11548*

Gibson (J.A.), continuous systems, controllability, linear systems, sampled data systems, Ha (T.T.), *109*

Gibson (J.S.), modal control, optimal control, regulator problem, *11071*

Gibson (M.M.), closure, curvature, mixing layers, reynolds stresses, turbulence, turbulence model, Rodi (W.), *2691*

- boundary layer (atmospheric), ground effect, heat transfer (atmospheric), Launder (B.E.), *4886*

Giddens (D.P.), see Khalifa (A.M.A.), *9062*

Giedt (W.H.), see Farooq (M.M.), *2781*

- see Miyazaki (T.), *8735*

Gierlinski (J.), beams (sandwich), design (optimum), large displacement, plates (nonlinear), shear, Mroz (Z.), *1223*

Giezendanner (W.), cavitation flow, discharges, gates, hydroelectric power, tunnels, vibration (flow induced), Henry (P.), *2582*

Giger (G.K.), equilibrium, heat transfer, reactors, Mutharasan (R.), (et al.), *3001*

Gil (M.I.), distributed parameters, stability theory, time varying systems, *9172*

Gil (V.V.), see Vasilev (L.L.), *5599*

Gilbert (G.), see Huntington (S.W.), *11670*

Gilbert (J.A.), curved surfaces, deflections, holography, moire methods, Herrick (J.W.), *1394*

- analysis, displacement, fiber optics, holography, Herrick (J.W.), *1395*
- displacement, holography, lasers, modulated systems, optical techniques, waves, Herrick (J.W.), *8424*

Gilbert (N.E.), dynamic analysis, towing cables, *1217*

Gilbo (E.P.), algorithms, approximation methods, estimation, stability, Chelpanov (I.B.), (et al.), *2139*

Gildersleeve (C.P.), see Surtees (J.O.), *8482*

Gilkey (R.D.), airplanes, drag reduction, wind tunnels, winglets, wings, *3729*

Gill (A.E.), mass transfer, rotating fluids, stratification, vortex lines, vorticity, Smith (J.M.), (et al.), *8020*

Gill (K.F.), see Fenton (J.), *3921*

Gill (M.A.), blankets, dams, design, *9456*

- channels, erosion, river beds, variable area flow, *9507*

Gill (R.W.), blood flow, doppler effect, experimental mechanics, flow measurement, *1048*

- circulatory systems, doppler effect, experimental methods, flow measurement, *4920*

Gill (W.N.), see Atimtay (A.), *2849*

Gillespie (R.H.), see River (B.H.), *3586*

Gillett (P.E.), see Richard (R.M.), *525*

Gilliland (R.L.), gravity waves (shallow water), numerical methods, rotating bodies, spherical bodies, *10484*

Gilpin (R.R.), frost, heaving, modeling, soils, *1322*

- flow obstructions, freezing, ice, pipe flow, *10661*

Gilyazetdinov (B.N.), see Boshenyatov (B.V.), *7690*

Ginestra (J.C.), gases, mixtures, particles, pipe flow, Rangachari (S.), (et al.), *5833*

Ginevskii (A.S.), see Vlasov (E.V.), *2942*

- bodies of revolution, capsules, dynamic analysis, floating bodies, pipelines, rafts, rivers, Kolesnikov (A.V.), *11387*

Ginsberg (J.H.), acoustic waves, nonlinear waves, sound generation, vibration, *2938*

- acoustic waves, nonlinear waves, sound generation, vibration, *2940*
- interface phenomena, nonlinear waves, plates, sound fields, vibration, *5781*

Ginsberg (K.S.), algorithms, estimation, identification, state space techniques, *140*

Ginsztler (J.), boilers, steel, thermal fatigue, *3999*

Ginter (T.J.), see Mohamed (F.A.), *7274*

Gintsler (Ya.), see Ivanova (V.S.), *6415*

Ginzburg (A.I.), boundary layer, ocean air interaction, oceanography, *12079*

Gioda (G.), see Corradi (L.), *3260*

- elastoplasticity, inverse problems, rocks, tunnels, Maier (G.), *9369*
- earth pressure, numerical methods, soil structure interaction, Jurina (L.), *9918*

Gipson (G.S.), cavities, cylindrical bodies, diffusion, mass transportation, porous media, Thoms (R.L.), *1729*

girders, beams (continuous), design (minimum weight), Azad (A.K.), *1426*

- bending, prestressed concrete, shear, torsion, Taylor (G.), Warwaruk (J.), *2523*
- ship design, vibration (flow induced), Wereldsma (R.), *4097*
- beams (box), torsion, wood structures, Heimeshoff (B.), *7316*
- hulls, ships, torsion, Westin (H.), *10876*

girders (curved), dynamic analysis, frequencies, Yoo (C.H.), Fehrenbach (J.P.), *3295*

girders (plate), bending, ultimate strength, Shiomi (H.), *1256*

- plastic behavior, postbuckling behavior, shear loading, Niinobe (Y.), *6239*
- beams, columns, structural stability, Bjorhovde (R.), *6245*
- bending (plastic), cranes, elastoplasticity, Ballio (G.), Poggi (C.), (et al.), *7318*
- beams (box), bending, shear loading, Evans (H.R.), Shanmugam (N.E.), *7320*
- experimental results, postbuckling behavior, ultimate strength, Narayanan (R.), Rockey (K.C.), *7322*
- beams (box), shear lag, Kuzmanovic (B.O.), *11110*

Girl (J.), see Simitses (G.J.), *2534*

Girol (A.P.), see Mkhitaryan (A.M.), *4698*

- conduction (heat), drainage, porous surfaces, Mizyuk (V.G.), (et al.), *10688*

Girya (T.V.), cauchy problem, galerkin method, hyperbolic equations, kolmogorov equation, noise (random), *42*

Gisser (M.), groundwater, optimal control, pumps, Sanchez (D.A.), *172*

Gittus (J.) ed., cavities, cracks, creep, fatigue, metals, micromechanics, surveys, *9380, book*

Giuliani (S.), see Donea (J.), *10588*

Gjaevenes (K.), see Osmundsen (E.), *2958*

Gjoystdal (H.), ocean, reflection, seismic waves, Ursin (B.), *8953*

Gladfelter (R.E.), oil removal, separation, two phase flow, Gupta (S.P.), *9892*

Gladkov (A.A.), computing techniques, integro differential equations, wave equations, *9115*

Gladkov (S.M.), acoustic properties, liquids, optical techniques, relaxation, spectroscopy, Koroteev (N.I.), *919*

Gladshtein (V.I.), crack growth, creep rupture, fractographic tests, stress intensity factor, Semenova (T.N.), *441*

Gladwell (G.M.L.), contact problems, half space, inclusions, Hara (T.), *2222*

- elastic constants, elasticity (nonhomogeneous), torsion, Coen (S.), *6154*

Glagolev (Yu.A.), balloons, convection, *8995*

Glandus (J.C.), ceramics, scale effects, thermal shock, thermoelasticity (transient), Boch (P.), *5803*

Glaser (D.J.), control, design, drilling, hydraulic machinery, numerical control, Nachtigal (C.L.), *6148*

Glaser (F.W.), see Woodward (R.P.), *5782*

- see Shaw (L.M.), *7894*

Glasgow (E.R.), airplane performance, design, propulsion, stol, turbofan engines, vtol, Skarshaug (R.E.), *11742*

Glasko (V.B.), inverse problems, layered media, uniqueness, Khudak (Yu.I.), *4451*

- conduction (heat), cylindrical bodies, hardening, heat addition, inverse problems, mathematical models, Kulik (N.N.), (et al.), *8734*

glass, ceramics, fracture mechanics, life expectancy, random loading, Jakus (K.), Ritter (J.E.) Jr., *2458*

- elastic constants, fibers, thermal effects, Kobayashi (M.), Fujisawa (T.), (et al.), *2491*
- differential equations (ordinary), dynamics, materials processing, melting, Kobayashi (M.), Hujisawa (T.), (et al.), *3424*
- ceramics, creep, high temperature, mechanical properties, Northover (J.P.), Groves (G.W.), *4520*
- corrosion fatigue, elliptical cracks, failure, fatigue, Doremus (R.H.), *5286*
- ceramics, fracture, high temperature, notch tests, Northover (J.P.), Groves (G.W.), *6440*
- composite materials, fracture, glass fibers, strength, Roginskii (S.L.), Kanovich (M.Z.), *7307*
- cooling, critical flow, drawing, solidification, Kunitomo (T.), Ebisu (A.), *10696*

Glass (B.C.), see Kou (R.S.), *3176*

Glass (I.I.), see Miura (H.), *9874*

glass fibers, composite materials, high strength, Prewo (K.M.), Brennan (J.J.), *291*

- mechanical properties, polymers, West (J.M.), Majumdar (A.J.), (et al.), *291*
- bonding, delamination, holography, plates (sandwich), Erdmann-Jesnitzer (F.), Winkler (T.), *483*
- composite materials, fatigue, high cycle fatigue, life expectancy, Kim (H.C.), Ebert (L.J.), *1209*
- failure, fibers, hybrid construction, micromechanisms, stochastics, Manders (P.W.), Bader (M.G.), *3277*
- creep, dynamic stresses, laminates, Sarkisian (N.E.), Martirosian (M.M.), (et al.), *4359*
- coatings, dies, drawing, lubrication, Eichenbaum (B.R.), *4681*
- defects, stress concentration, Ermak (A.A.), Mikhailov (A.M.), *6192*
- dynamic loads, materials processing, textiles, Ko (F.), Bruner, (et al.), *6200*
- cutting, deformation, dynamic analysis, fracture mechanics, reinforced plastics, Inoue (H.), Ido (M.), *6449*
- composite materials, fracture, glass, strength, Roginskii (S.L.), Kanovich (M.Z.), *7307*

- flaw detection, laminates, liquid crystals (cholesteric), nondestructive tests, thermography, Williams (J.H.), Mansouri (S.H.), (et al.), *7574*
- composite materials, crystals, hardness, indentation, Miyata (N.), Jinno (H.), *8219*
- composite materials, elastic constants, laminates, materials properties, Wagner (H.D.), Fischer (S.), (et al.), *10128*
- composite materials, crack propagation, interlaminar stresses, low temperature, Han (K.S.), Koutsky (J.), *10309*

Glassman (I.), see Avedisian (C.T.), *1862*
- see Avedisian (C.T.), *6771*

Glaze (L.W.), see Kotansky (D.R.), *8599*
Glazkov (V.V.), cooling, plates (perforated), turbulent flow, Gusev (M.D.), (et al.), *817*
Glazov (O.A.), boundary layer (thermal), magneto fluid dynamics, rotating disks, similarity methods, *9710*
Gleason (S.), see Liu (T.C.), *7609*
Gleba (A.Yu.), see Peiekh (B.L.), *4390*
Gledzer (Ye.B.), cascades, spectra, turbulence, turbulence model, Makarov (A.L.), *6682*
- coriolis forces, hydrodynamic stability, rotating fluids, Makarov (A.L.), (et al.), *7743*

Glicksman (L.R.), see BarCohen (A.), *7965*
- see Valenzuela (J.A.), *8755*
- fluidized beds, heat transfer, mass transfer, Joos (F.M.), *10842*

gliders, airfoils, boundary layer, design, laminar flow, sailplanes, Ostrowski (J.), Skrzynski (S.), (et al.), *5492*
- balance system, flight, flying platforms, models, strain gages, wing body combinations, Ramachandra (S.M.), *8651*

Gliklikh (Iu.E.), see Gelman (B.D.), *1075*
Glikman (L.A.), deformation (plastic), fatigue, plastic behavior, strength, Gurevich (B.G.), *10274*
Glimm (J.), interfaces, numerical methods, porous media, two phase flow, Marchesin (D.), (et al.), *12026*
Glinka (G.), crack growth, experimental results, fatigue, steel, Molski (K.), *1354*
- see Molski (K.), *5300*

Glinski (J.), see Ernst (S.), *3968*
Glockner (G.), calibration, design, flow measurement, vortex shedding, Fock (K.), *9673*
Glockner (P.G.), see Chowdhury (K.L.), *7948*
- see Chowdhury (K.L.), *8085*

Glotz (G.), cavities, finite difference methods, internal flow, navier stokes equation, Schonauer (W.), (et al.), *570*
Glowinski (R.), computing techniques, inequalities, time dependence, variational methods, Lions (J.-L.), (et al.), *7176, book*
Glowinski (R.) eds., asymptotic behavior, computing techniques, fluid mechanics, nonlinear mechanics, perturbation methods, Lions (J.E.), *1111, book*
Gluck (D.), aerodynamic loads, lifting bodies, nonuniform flow, wakes, *2737*
Glukhovskiy (A.B.), convection, geophysics, geostrophic flow, geostrophic models, rotating fluids, thermal instability, Dolzhanskiy (F.V.), *5558*
Glynn (D.R.), annuli, cascades, numerical analysis, secondary flow, Marsh (H.), *9587*
Gnesin (V.I.), cascades, numerical methods, transonic flow, unsteady flow, *6663*
Gnielinski (V.), see Rao (S.P.), *4733*
Gnoenskii (L.S.), algorithms, hill climbing, optimization, Rafaelyan (R.S.), *2143*
Gnuchii (Yu.B.), finite element techniques, isoparametric elements, matrix methods, three dimensional formulation, Kvitka (A.L.), (et al.), *3136*
- see Kharchenko (V.K.), *7562*

Gobetti (A.), elastoplasticity, finite element techniques, nonlinear theory, plates (nonlinear), *6234*
- see Ballio (G.), *8321*

Gocevski (V.), see Pekau (O.A.), *3513*
Godara (L.C.), see Cantoni (A.), *3964*
Goddard (J.D.), constitutive equations, couette flow, shear flow, viscometry, *6693*
Godde (E.), gyrodynamics, measurements (dynamic), pumps, turbomachinery, *709*
Godecke (T.), see Rusovic (N.), *6757*
Godefroy (J.-C.), thermal measurements, thermocouples, thin films, transducers, *3809*
- heat transfer, thermal measurements, thermocouples, thin films, *6793*

Godet (M.), bearings, lubricants, machinery, prediction, wear, *9017*
Godwin (E.W.), bolted joints, composite materials, fibers, mechanical joints, plastics, Matthews (F.L.), *10381*
GodyckiCwirko (T.), concrete, plates, punch problems, reinforced bodies, shear, Kosinska (A.), *8379*
Goel (G.C.), cylindrical bodies, scattering, waves, Jain (D.L.), *4803*
Goel (M.C.), dams, design, membranes, Singhal (M.M.), *9457*
Goel (S.C.), see Jain (A.K.), *3339*
- see Jain (A.K.), *5891*

Gogna (M.L.), see Chander (S.), *7423*
- half space, hydroelasticity, layered media, surface waves, *11697*

Gogokhiya (V.Sh.), asymptotic methods, differential equations (ordinary), eigenvalue problems, iterative methods, *9095*
Gogol (W.), composite materials, conductivity, fibers, Furmanski (P.), *1208*
Gogolev (I.G.), conical flow, ducts (variable area), flow reversal, pressure gradient, swirl flow, Korolev (P.V.), *6654*
Gogonin (I.I.), see Kutateladze (S.S.), *10622*
Gogosov (V.V.), diffusion, electro fluid dynamics, mathematical models, theory, two phase flow, Naletova (V.A.), (et al.), *850*
- damping, films, liquid metals, magneto fluid dynamics, surfactants, Naletova (V.A.), (et al.), *9790*

Gogrichiani (G.V.), dynamics, machine elements, pneumatic components, *4549*
Gokalp (I.), flame propagation, spectral analysis, turbulent flow, Lasek (A.), *2864*
Gokhale (V.V.), aorta, blood flow, finite element methods, navier stokes equation, shear stress, Tanner (R.I.), (et al.), *3067*
Gola (M.), see Genta (G.), *5167*
- see Genta (G.), *8255*

Gola (M.M.), biomechanics, experimental mechanics, gait, transducers (load), *1047*
Golan (S.), cracks, diffraction, fatigue, nondestructive tests, ultrasonics, Adler (L.), (et al.), *7513*
Goldberg (E.N.), see Fokin (B.S.), *8694*
Goldberg (I.S.), absorption, concentration, deposition, particles, *6961*
Goldberg (Ye.N.), see Fokin (B.S.), *749*
- see Fokin (B.S.), *11495*

Golden (J.M.), filtration, mathematical models, porous media, *9688*
Goldenveizer (A.L.), frequencies, shells (of revolution), vibration (free), *2339*
Golderman (M.A.), experimental methods, impact, testing equipment, Kochetov (D.A.), (et al.), *4459*
Goldfain (I.I.), games, integration, monte carlo analysis, random search, *5011*
Goldfinger (A.D.), artificial satellites, drag coefficient, upper atmosphere, *5712*
Goldman (A.), bifurcation, duct flow, numerical analysis, two dimensional flow, *3676*
- conduction, coordinate systems, finite difference methods, Kao (Y.C.), *6794*

Goldman (Y.), see Shahaf (M.), *842*
- see Arbib (H.A.), *5645*

Goldner (G.), see Balazs (M.), *63*
Goldring (B.T.), models, scale effects, siphons, surface tension, weirs, *7542*
Goldschmidt (V.W.), jets, turbulence, turbulence (structure), turbulence model, Young (M.F.), (et al.), *2690*
Goldshtein (R.V.), see Vainshelbaum (V.M.), *3475*
Goldshtein (Yu.B.), framed structures, statics, variational methods, Solomeshch (M.A.), *1422, book*
Goldshtik (M.A.), see Vaisman (A.M.), *7270*
Goldsmith (W.), see Lubock (P.), *6007*
- drilling, dynamic loads, experimental results, impact, rocks, Wu (W.-Z.), *9370*
- see Barez (F.), *11157*

Goldstein (C.I.), elliptic equations, finite element methods, infinite medium, mesh generation, *9134*
Goldstein (R.J.), see Kuehn (T.H.), *5551*
- see Ito (S.), *6850*

Golecki (J.J.), buckling, faults, plates, rocks, tectonics, *2311*
- boundary value problems, cracks, elasticity, griffith cracks, *2429*

Golembo (B.Z.), see Emelyanov (S.V.), *2172*
Goli (H.B.), see Gesund (H.), *3532*
Goliger (J.), ballistics (interior), burning rate, deflagration, detonation, propellants, Lucotte (J.-P.), *2928*
Golik (A.Z.), elastic constants, polymers, thermal properties, Zabashta (Yu.F.), (et al.), *2978*
Golitsyn (G.S.), atmospheric circulation, climatology, heat transfer (atmospheric), Mokhov (I.I.), *4056*
- see Demchenko (P.F.), *4068*

Gollan (B.), constraints, maximum principle, optimal control, *10086*
Goller (B.), see Krieg (R.), *6549*
Gololobov (I.M.), combustion, flame propagation, flow measurement, premixed fuel air, Granovskii (E.A.), (et al.), *9749*
Gololobov (V.I.), ceramics, piezoelectric devices, shells (of revolution), vibration (forced), *7400*
Golosov (V.V.), bubble dynamics, gravity, magneto fluid dynamics, mixtures, models, Naletova (V.A.), (et al.), *11819*
Golovachov (Yu.P.), blunt bodies, dust, supersonic flow, Lunkin (Yu.P.), (et al.), *2982*
- blunt bodies, heat transfer, nonequilibrium flow, supersonic flow, *9552*

Golovanchikov (A.G.), capillary flow, viscometry, viscous flow, yield condition, Tyabin (N.V.), *6589*
Golovchan (V.T.), plates (annular), plates (orthotropic), structural optimization, Petasyuk (G.A.), *2274*
Golovelko (A.G.), pulsatile flow, thermal excitation, thermal loading, transient effects, Martynikhina (V.I.), *7851*
- metals, phase changes, shock waves, vaporization, waves, Martynikhina (V.I.), *8874*

Golovin (O.A.), finite element methods, stress analysis, turbines, wheels, Matveev (A.P.), (et al.), *4384*
Golovin (Yu.I.), elastodynamics, fracture, magnetic field, rods, Finkel (V.M.), (et al.), *5087*
Golovko (Yu.N.), analysis, containers, discharges, electrical conductivity, liquids, *10736*

Goltser (I.M.), bifurcation, circumnavigation, differential equations (ordinary), resonance, stability theory, *7917*

Golub (V.P.), see Ishchenko (I.I.), *6469*

Golub (V.V.), see Belavin (V.A.), *11515*

Golubev (A.S.), acoustic measurements, echos, flaw detection, nondestructive tests, plates, Verevkin (V.M.), (et al.), *8435*

Golubev (V.K.), dynamic fracture, fracture mechanics, material testing, micromechanics, spallation, Novikov (S.A.), (et al.), *5291*

Golubev (V.S.), dispersion, mass transfer, porous media, stagnation zones, *831*

Golubev (Yu.F.), see Bukharkina (A.P.), *2158*

Golubeva (N.V.), see Vvedenskaya (A.V.), *7027*

Golubinskiy (A.I.), delta wings, hypersonic flow, pressure distribution, Schchedrin (A.I.), *10503*

Golubitsky (M.), benard problem, bifurcation, convection (benard), singularities, Schaeffer (D.), *4983*

Golubkin (V.N.), hypersonic flow, pressure distribution, wings, *2728*

Golubovic (Z.), see Jaric (J.), *4000*

Gomes De Oliveira (J.), beams (plastic), dynamic behavior, rotary inertia, shear stress, Jones (N.), *407*

Gomez (C.), corners, elasticity (linear), inclusions, stress concentration, Dundurs (J.), *8186*

Gomez (M.A.), see Woo (S.L.-Y.), *1032*

- see Woo (S.L.-Y.), *9046*

Gomide (H.A.), friction (solid solid), photoplasticity, plasticity, strain measurement, Burger (C.P.), *3483*

Gonchar (A.I.), drainage, embankments, erosion, hydrology, Sribnyi (I.K.), *4046*

Goncharenko (V.I.), dynamic stability, rotating bodies, wheels, Lobas (L.G.), (et al.), *9088*

Goncharov (V.P.), hamilton principle, ocean air interaction, ocean waves, *8999*

Gonczi (R.), lyapunov's functions, restricted three body problem, stochastics, Froeschle (C.), *9810*

Gong (E.Y.), see Mcmaster (W.H.), *1605*

Gonopolskii (A.M.), arcs, experimental methods, performance, plasma jets, porous walls, Slobodkina (F.A.), *10761*

Gonor (A.L.), deceleration, deformation, drops, unsteady flow, Zolotova (N.V.), *12023*

Gonzalez (R.), bang-bang control, optimal control, suboptimal control, synthesis, *7241*

Gonzalez-Caballero (F.), electrical conductivity, sedimentation, Pardo (G.), (et al.), *1737*

Gonzalez-Gascon (F.), dynamic analysis, kinematics, lagrange equations, *4939*

Good (R.E.), see Brown (J.H.), *8662*

Gooding (R.H.), orbit mechanics, perturbation methods, planetary theory, satellites, second order analysis, *5700*

Goodman (A.M.), nuclear reactors, ratchetting, shells (cylindrical), thermal effects, thermoplasticity, *2970*

Goodman (R.E.), flaws, fracture, permeability, rocks, Sundaram (P.N.), *4834*

Goodsitt (M.M.), see Madsen (E.L.), *11970*

Goodstein (D.), see Taborek (P.), *3777*

Goodwin (G.C.), see Sin (K.S.), *4259*

- adaptive systems, algorithms, discrete systems, linear systems, multivariable systems, state space techniques, Ramadge (P.J.), (et al.), *7233*

Goodyer (M.J.), automatic control, flexible walls, transonic flow, two dimensional flow, wind tunnels, Wolf (S.W.D.), *8670*

Goodzeit (C.L.), see Gordon (J.J.), *9135*

Gopalakrishnan Nair (G.), nonlinear systems, suboptimal control, time delay systems, *2132*

Gopalan (N.P.), blood flow, lungs, porous surfaces, pulsatile flow, *8076*

Gopalsamy (K.), dynamic analysis, nonlinear systems, random loading, vibration, *1264*

Gopinathan (V.), see Doraivelu (S.M.), *5991*

Gopkalo (A.P.), experimental methods, metals, thermal fatigue, thermal stresses, Zasiotskaya (L.A.), (et al.), *6947*

Gopu (V.K.A.), beams (sandwich), laminated beams, laminates, tension, *302*

Gorbachev (L.P.), ellipsoids, perturbation methods, reflection, shock waves, Sokolov (V.B.), *8535*

Gorbachev (S.P.), channel flow, cooling, cryogenics, transient effects, Krikunov (A.A.), (et al.), *5571*

Gorbachevskii (I.Ya.), see Stadnik (M.M.), *8187*

Gorban (I.A.), emissivity, radiant interchange, scattering, schuster number, surface effect, *9719*

Gorbis (Z.R.), see Berman (M.I.), *10906*

Gorbunov (L.A.), see Gelfgat (Yu.M.), *5673*

Gorbunov (V.I.), see Vavilov (V.P.), *2504*

Gordienko (V.I.), acoustic loading, fluid-structure interaction, shells (cylindrical), wave equations, Kubenko (V.D.), (et al.), *9336*

Gordin (V.A.), boundary conditions, forecasting, meteorology (physical), weather forecasting, Dolnatov (B.K.), *5957*

Gordon (D.F.), modes, sound propagation, underwater acoustics, *6914*

Gordon (J.J.), coding, computer graphics, finite element techniques, Goodzeit (C.L.), *9135*

Gordon (J.T.) Jr., blades, impact, strain rate, turbines, Reaugh (J.E.), *10244*

Gordon (P.), atmospheric circulation, boundary conditions, meteorology (physical), *8966*

Goree (J.G.), composite materials, fibers, fracture criteria, shear lag, Gross (R.S.), *5130*

Gorelik (A.V.), edge cracks, laminates, plates (weakened), viscoelastic materials, *7506*

Gorelov (D.N.), approximation methods, fredholm equations, vortex sheets, vortices, *4580*

Gorelov (G.M.), axial turbines, cascades, cooling, gas turbines, heat transfer, Fishbein (V.D.), (et al.), *11748*

Gorelov (I.N.), see Minashin (V.E.), *3886*

Gorelov (S.L.), aerodynamic coefficients, plates, rarefied gases, Erofeev (A.I.), *11447*

Gorev (B.V.), composite materials, compression, creep, failure, tension, Rubanov (V.V.), (et al.), *5103*

- creep, material testing, materials processing, pressure, Klopotov (I.D.), (et al.), *7457*

Gorge (Y.), see Gibert (P.), *7213*

- see Gibert (P.), *9142*

Gori (F.), see Bertels (M.), *10404*

Goring (W.H.), coatings, eddy currents, nondestructive tests, radiography, thickness, thin films, *7577*

Gorla (R.S.R.), boundary layer (thermal), non newtonian flow, unsteady flow, *547*

- heat transfer, non newtonian flow, power law fluids, stagnation point, transient effects, *759*
- bearings (porous metal), bearings (thrust), lubrication (hydrodynamic), non newtonian flow, temperature, *5982*
- convection (forced), laminar flow, non newtonian flow, unsteady flow, wedges, *9706*

Gorlei (V.V.), convection, heat sources, thermal instability, viscous effects, Shenderovskii (V.A.), *8707*

Gorlenko (O.A.), see Ryzhov (E.V.), *1932*

Gorlyshkin (V.T.), blades, composite structures, laminates, turbomachinery, *6199*

Gorman (D.J.), frequency response, plates (rectangular), vibration (free), *7390*

Gorodetskii (A.V.), combined loading, plastic behavior, plasticity, *3261*

- convergence, iterative methods, loads, radial loading, *3273*

Gorodetskii (S.M.), solar engines, thermal effects, thermoelectric phenomena, Iordanishvili (E.K.), (et al.), *722*

Gorodetskiy (V.I.), monte carlo analysis, optimal control, stochastic control, Yusupov (R.M.), *4316*

Gorodtsov (V.A.), gravity waves (internal), nonhomogeneous media, radial waves, singularities, wavemaking resistance, *11390*

- gravity waves (internal), moving source, submerged bodies, wave generation, Teodorovich (E.V.), *11620*

Gorodyskii (N.I.), see Novikov (N.V.), *5118*

- see Novogrudskii (L.S.), *5530*
- see Novikov (N.V.), *7575*

Gorogush (V.M.), see Bukhtilova (M.A.), *10654*

Goroshin (S.V.), see Shevchuk (V.G.), *836*

Gorozhanin (V.S.), biocontrol, biomathematics, mathematical models, nervous system, *1172*

Gorshkov (A.G.), analysis, diffraction, shock waves, submerged bodies, *2715*

- hulls, hydroelasticity, penetration, ship slamming, wedges, Vakalov (G.N.), *8628*

Gorshkov (M.I.), see Bespalov (A.M.), *3773*

Gorskii (V.B.), integral methods, magneto plasma dynamics, transforms, two dimensional flow, viscid inviscid flow, *5676*

Gortemaker (F.H.), see Van Aken (J.A.), *8498*

Gortyshov (Yu.F.), see Shchukin (V.K.), *11401*

Goryacheva (I.G.), see Galin (L.A.), *3246*

Goryainov (V.A.), see Urbanovich (L.I.), *1663*

Goryunov (L.V.), see Belousov (A.I.), *9960*

Gosi (P.), cooling towers, evaporation, *10656*

Gosiewski (A.), feedback, linear systems, multivariable systems, stability theory, time lag, Olbrot (A.W.), *4231*

Gosling (A.J.), see Fussey (D.E.), *839*

Goss (L.P.), see Switzer (G.L.), *10720*

Gosse (J.), boundary layer (thermal), heat transfer (combined modes), laminar flow, nusselt number, plane flow, *1710*

- see Duhamel (P.), *8732*

Gossmann (E.), fast fourier transform, spectral analysis, vibration, vibration (random), Waller (H.), *7377*

- computing techniques, fast fourier transform, vibration (forced), Waller (H.), *9330*

Gostintsev (Yu.A.), convection (free), turbulence (geophysical), Sukhanov (L.A.), (et al.), *8992*

Goswami (B.C.), see Calil (S.F.), *2255*

Goto (Y.), beams (flexural), bending, low temperature, reinforced concrete, Miura (T.), *6955*

Gotoh (S.), see Katayama (T.), *4603*

Gotovskii (M.A.), see Borishanskii (V.M.), *7866*

Gotsulyak (E.A.), see Vashakmadze (T.S.), *8184*

Gottesdiener (L.), calibration, heat transfer, hot wire, rarefied gases, *711*

Gottlieb (D.), see Abarbanel (S.), *1526*
Gottlieb (H.P.W.), frequencies, plates (rectangular), vibration (free), *2332*
- mathematical methods, nonlinear analysis, vibration (nonlinear), *8280*
- elastic bodies, frequencies, parallelepipeds, vibration (free), *8294*

Gottwald (B.A.), computer programming, differential equations (ordinary), initial value problems, Wanner (G.), *8141*
Gotwols (B.L.), ocean waves, optical analysis, phase velocity, Irani (G.B.), *5485*
Gotz (H.), aerodynamic performance, automobiles, controllability, crossflow, drag reduction, lift, *6725*
Gouesbet (G.), flames, models, radiation, soot, *6842*
Gould (P.L.), see Brebbia (C.A.) eds., *4536, book*
Gourishankar (V.), digital control, rivers, water pollution, Lawal (M.A.), *2174*
Gourlay (A.R.), conduction (unsteady), extrapolation, parabolic equations, stability (numerical), Morris (J.L.), *6080*
Govardhan Reddy (K.), disks, electro fluid dynamics, oscillatory flow, plates (parallel), theory, Seshagiri Rao (S.V.), *9783*
Govil (A.K.), design (optimum), frames, substructuring, Arora (J.S.), (et al.), *5347*
Govindan (T.R.), see Lakshminarayana (B.), *8653*
- see Lakshminarayana (B.), *10449*

Govindaraj (K.S.), design, flight control, optimal control, Rynaski (E.G.), *193*
Govindaraju (K.), navier stokes equation, two dimensional flow, viscous flow, *3617*
Govindarao (V.M.H.), convection (free), mass transfer, particles, spectroscopy, Lekshminarayanan (H.), *826*
Gowd (T.N.), acoustic emission, rocks, triaxial tests, yield condition, *433*
- fracture, porous media, pressure, rocks, Rummel (F.), *1336*

Gozu (K.), see Hayashi (K.), *1412*
Graber (H.C.), see Ruescher (E.H.), *3507*
Grabitz (G.), axisymmetric flow, compressible flow, jets, mathematical models, supersonic flow, *5414*
Graboski (M.S.), see Mohammadi (S.S.), *3808*
Grabovskii (V.I.), see Vatazhin (A.B.), *1774*
Grabski (J.), analogies, deformable bodies, finite element techniques, rigid bodies, structural analysis, *7215*
Grace (R.A.), experimental results, ocean waves, pipelines, submerged bodies, wave loads, Zee (G.T.Y.), *7769*
Gracewski (S.), see Bathe (K.-J.), *5228*
Grachev (I.I.), algorithms, nonlinear programming, optimal control, Evtushenko (Yu.G.), *10091*
Gracheva (S.M.), aerodynamic performance, centripetal flow, radial turbines, rotors, Tikhonov (A.N.), (et al.), *11745*
gradient techniques, generalized functions, mathematical methods, Norkin (V.I.), *52*
- iterative methods, matrices (sparse), newton method, Gambolati (G.), *1116*
- algorithms, convex programming, iterative methods, Ilioi (G.), *1118*
- conduction (heat), inverse problems, Artyukhin (E.A.), Rumyantsev (S.V.), *1701*
- algorithms, optimal control, tracking, Rybashov (M.V.), *2151*
- algorithms, optimal control, vibration, vibration isolation, Poterasu (V-F.), Popescu (D.), *3209*
- iterative methods, matrices (sparse), Hageman (L.A.), Young (D.M.), *4177, book*
- adaptive systems, algorithms, optimization, Polyak (B.T.), Tsypkin (Ya.Z.), *4325*
- multivariable systems, nonlinear characteristics, optimization, scale effects, Bruat (B.), *4944*
- algorithms, computing techniques, minimization, ridge-path method, El-zoughby (A.A.), Metwalli (S.M.), (et al.), *4995*
- newton method, nonlinear analysis, nonlinear programming, optimization, Tanabe (K.), *4996*
- boundary value problems, conduction (heat), inverse problems, numerical methods, Artyukhin (E.A.), Rumyantsev (S.V.), *5581*
- computing techniques, fatigue, Brand (A.), *8380*

Gradin (P.A.), composite materials, debonding, delamination, fatigue, fibers, Backlunk (J.), *1478*
Grady (D.E.), blast effects, experimental results, fracture mechanics, modeling, oil shale, Kipp (M.E.), (et al.), *6399*
- continuum mechanics, explosions, fracture, modeling, oil shale, rock mechanics, Kipp (M.E.), *7551*
- see Kipp (M.E.), *9382*

Graebel (W.P.), cavities, closed conduit flow, convection (free), oseen technique, prandtl number, *5550*
- boundary layer (thermal), convection (forced), cylindrical bodies, galerkin method, laminar flow, mathematical models, Hsu (C.C.), *9711*

graetz problem, axial flow, conduction (heat), mathematical models, Bayazitoglu (Y.), Ozisik (M.N.), *9725*
Graf (B.), see Vardoulakis (I.), *6380*
Graf (W.H.), see Boillat (J.L.), *9541*
Grafov (V.M.), see Vorotyntsev (M.A.), *4730*
Graham (A.), see Burghes (D.N.), *6124, book*
Graham (A.D.), see Mallinson (G.D.), *8702*
Graham (D.A.), see Daidola (J.C.), *5368*
Graham (J.M.R.), blunt bodies, cylindrical bodies, oscillations, vortex shedding, *576*
Graham (R.W.), blades, convection (forced), gas turbines, heat transfer, thermal loading, *10567*
Grahl (K.), axial compressors, inlet flow, rotating stall, velocity profiles, Neuhoff (H.G.), *10529*
grain boundaries, brittle fracture, fracture, metallurgy, molybdenum, Kumar (A.), Eyre (B.L.), *1355*
- cavities, creep, fracture mechanics, metals, Greenwood (G.W.), *3253*
- creep, crystals, metals, micromechanisms, Ghahremani (F.), *3255*
- alloys, deformation, plasticity, superplastics, Kaibyshev (O.A.), Valiev (R.Z.), *4515*
- fatigue, microcracks, thresholds, Tanaka (K.), Nakai (Y.), (et al.), *5281*
- creep, dislocations, hardening, stainless steels, stress analysis, Harris (M.), Davies (T.J.), *5332*
- brittle fracture, steel, Baranov (S.M.), Sarrak (V.I.), (et al.), *6425*
- brittle fracture, crystals, ductile fracture, metallurgy, molybdenum alloys, Denisyuk (V.A.), Drachinskii (A.S.), (et al.), *6432*
- corrosion, stainless steels, ultrasonics, Prikhodko (V.N.), *6493*
- deformation (plastic), fuel elements, thin walled structures, Wire (G.L.), Duncan (D.R.), (et al.), *6550*
- cavities, creep rupture, fracture mechanics, Beere (W.), *7496*
- creep, dislocations, microstructures, steel, Williams (K.R.), *8430*

Grammatikopoulos (M.K.), inequalities, mathematical methods, oscillations, *3101*
Gran (C.S.), cooling towers, finite element methods, seismic loading, Yang (T.Y.), *4039*
Gran (R.), digital control, optimal control, space vehicle structures, structural response, Rossi (M.), (et al.), *4297*
Gran (S.), impact, pressure distribution, ships, sloshing, tanks, *11667*
Granacher (J.), see Kloos (K.H.), *5282*
Granat (J.), see Elek (K.), *6298*
Granberg (I.G.), flow obstructions, numerical methods, stratified flow, two dimensional flow, *1519*
Grandt (A.F.) Jr., corners, fasteners, finite element methods, holes, stress intensity factor, Kullgren (T.E.), *480*
- see Bar-Tikva (D.), *3478*
- elliptical cracks, finite element techniques, plates (holed), stress intensity factor, *6445*

Granhall (A.), impedance methods, mechanical systems, vibration isolation, Kihlman (T.), *6282*
Granik (A.T.), hall effect, korteweg de vries equation, plasma, turbulence (transport), waves, *10758*
Granik (I.S.), absorption, conduction (heat), nonlinear materials, thermal waves, Martinson (L.K.), *3814*
Granju (J.L.), cements, compression, strength, Maso (J.C.), *4532*
- cements, compression, strength, Maso (J.C.), *6520*

Granovskii (E.A.), see Gololobov (I.M.), *9749*
Grant (I.D.R.), mixtures, pressure drop, tube sheets, two phase flow, Chisholm (D.), *4021*
Grant (M.A.), see Sorey (M.L.), *9903*
Grantham (W.D.), airplanes, noise (traffic), noise abatement, simulation, supersonic flow, Smith (P.M.), (et al.), *2960*
granular media, failure, strength, Davis (R.O.), Mullenger (G.), *417*
- compaction, field tests, soils, Leonards (G.A.), Cutter (W.A.), (et al.), *418*
- fluidized beds, jets, two phase flow, Buevich (Yu.A.), Kolesnikova (N.A.), (et al.), *935*
- groundwater, infiltration, porous media, river beds, Van'T Woudt (B.D.), Nicolle (K.), *976*
- dilatancy, waves, Cowin (S.C.), Nunziato (J.W.), *1304*
- mining, modeling, subsidence, Gustkiewicz (J.), Rogowska (J.), *1320*
- mass transfer, spherical bodies, Badatov (E.V.), Matros (Yu.Sh.), (et al.), *1732*
- fluidized beds, thermal diffusion, Hirama (T.), Adachi (T.), (et al.), *1872*
- constitutive equations, micromechanics, Phan-Thien (N.), *1970*
- dams, embankments, mine tailings, mining, Highter (W.H.), Tobin (R.F.), *2387*
- elastic waves, porous media, saturation, Berryman (J.G.), *3000*
- particles, particulate flow, pressure drop, surfaces, Mulhaupt (B.), Kampfen (Y.), *3772*
- continuum theory, thermoelasticity, Jaric (J.), Golubovic (Z.), *4000*
- geophysics, rock mechanics, shear flow, Passman (S.L.), Nunziato (J.W.), (et al.), *4132*
- particle fluid flow, pipelines, pressure drop, Ochi (M.), Nakajima (H.), (et al.), *4619*
- constitutive equations, continuum theory, micromechanics, Firoozbakhsh (K.), Ahmadi (G.), *5097*
- acceleration waves, constitutive equations, Jaric (J.), Rankovic (S.), *5098*
- anisotropic media, plastic flow, slip line methods, Lippmann (H.), *5107, book*
- continuum mechanics, mass transfer, Kanatani (K.-I.), *5823*
- continuum mechanics, mass transfer, Kanatani (K.-I.), *5825*
- expansion, fluidized beds, Ngian (K.-F.), Martin (W.R.B.), *5843*
- earth pressure, retaining walls, Misra (B.), *6395*
- filtration, hoppers, powders, Murfitt (P.G.), Bransby (P.L.), *6959*
- discharges, hoppers, Dryabin (V.A.), Galershtein (D.M.), (et al.), *6997*
- deformation, strain analysis, Roj (J.), *7134*
- deformation, micromechanics, spherical bodies, statistical continuum mechanics, Vaisman (A.M.), Goldshtik (M.A.), *7270*
- constitutive equations, continuum theory, yield criteria, Mullenger (G.), Davis (R.O.), *7291*

- gravity, hoppers, transport mechanisms, Savage (S.B.), Sayed (M.), *8915*
- conveyors, rotating disks, screws, Rademacher (F.J.C.), *8916*
- packed beds, statistical theory, Shahinpoor (M.), *8918*
- collapse, infiltration, packed beds, Buevich (Yu.A.), Ellengorn (S.M.), *8923*
- contact points, particle dynamics, soils, structure, Athanasiou-Grivas (D.), Harr (M.E.), *9359*
- catalyzed ignition, combustion, combustion (catalytic), mathematical models, packed beds, reactive systems, Kiselev (O.V.), Matros (Yu.Sh.), *9753*
- gravitational stabilization, nonlinear theory, soils, Shahinpoor (M.), *10249*
- fracture, stochastics, Shimbo (M.), *10307*
- channel flow, heat transfer, nusselt number, peclet number, Spelt (J.K.), Brennen (C.E.), (et al.), *10570*
- composite materials, optimization, Banichuk (N.V.), Kobelev (V.V.), *11322*
- discontinuities, discrete systems, wedges, Trollope (D.H.), Burman (B.C.), *11330*
- filtration, heat transfer, mass transfer, Ganzha (V.L.), Zhuravskii (G.I.), *12050*
- hoppers, unsteady flow, Wol-Gajewska (B.), Zawidzki (J.), *12060*
- shear flow, stresses, Savage (S.B.), Jeffrey (D.J.), *12062*
- continuum mechanics, incompressible flow, Nunziato (J.W.), Passman (S.L.), (et al.), *12063*

graph theory, large scale systems, nonlinear systems, stability theory, Vidyasagar (M.), *123*
- design, networks, optimization, piping systems, Bhaskaran (S.), Salzborn (F.J.M.), *1165*
- constraints, functional analyis, networks, optimization, Burdyuk (V.Ya.), Reva (V.N.), *2032*
- algorithms, extremal trees, Kletin (V.A.), *2108*
- optimization, transport, Korchemkin (M.), *2167*
- design, integer programming, networks, optimization, pipelines, Grosz (M.), *3193*
- controllability, frequency domain techniques, interconnected systems, multivariable systems, observability, Fessas (P.), *4234*
- computing techniques, discrete systems, electrical analogies, mathematical models, Savage (G.J.), Kesavan (H.K.), *8137*
- dynamic analysis, mathematical models, Tenenbaum (L.A.), *10078*

graphical methods, computer aided design, ship design, Kupras (L.K.), De Zwaan (A.P.), *995*
- algorithms, empirical methods, probability theory, stochastics, Borodkin (L.I.), *1099*
- gear teeth, hobbing, surface profiles, Terashima (K.), Ueno (T.), (et al.), *2564*
- kinematics, linkages, mechanisms (spatial), Nitescu (P.N.), *3580*
- computer programming, finite element techniques, mathematical methods, mesh generation, Haber (R.), Shephard (M.S.), (et al.), *6106*

graphite, additives, bearings (journal), polymers, wear, Korshak (V.V.), Gribova (I.A.), (et al.), *1023*
- elastic constants, fibers, tubes, Bauchau (O.A.), *1402*
- brittle fracture, brittle materials, crack growth, fracture energy, Barinov (S.M.), Grevtsev (S.N.), (et al.), *2497*
- composite materials, fatigue, life expectancy, resins, weibull statistics, Shimokawa (T.), Hamaguchi (Y.), *6203*

Grasar (A.), algorithms, analytical methods, design, multivariable systems, synthesis, *9164*

grashof number, convection, eckert number, heat transfer, incompressible flow, plane flow, Gupta (A.S.), Popp (I.), (et al.), *1667*
- convection (free), differential equations (ordinary), shells (spherical), Singh (S.N.), Chen (J.), *1689*
- annular flow, convection (free), spherical bodies, stratified flow, Singh (S.N.), Elliott (J.M.), *3801*
- convection, extended surfaces, fins, laminar flow, Acharya (S.), Patankar (S.V.), *8684*
- convection (free), critical flow, laminar flow, plates (vertical), temperature, variable thermal properties, Ghajar (A.J.), Parker (J.D.), *9700*

Grasman (J.), asymptotic methods, differential equations (ordinary), limit cycles, nonlinear mechanics, oscillators, van der pol equation, *4152*
- asymptotic behavior, dynamics, matched asymptotic expansions, nonconservative systems, oscillations, relaxation, van der pol equation, *8106*

Grasselli (O.M.), bilinear systems, control, dead-beat control, discrete systems, regulator problem, Isidori (A.), (et al.), *11059*

Grathwohl (G.), see Cohrt (H.), *6175*

Gratieux (E.), see Dahan (C.), *11994*

Graves (R.A.) Jr., see Weilmuenster (K.J.), *4594*

Graves Smith (T.R.), beam columns, beams (thin section), collapse, tubes, Sridharan (S.), *1248*
- see Sridharan (S.), *6271*

gravimetrics, geomechanics, green theorem, potential theory, Powell (C.), *2914*
- attitude control, control, Debra (D.B.), *2925*
- mars, planetary theory, potential theory, Christensen (E.J.), Williams (B.G.), *6887*
- approximation methods, earth, Strakhov (V.N.), *8009*
- bodies of revolution, circumnavigation, potential theory, Fomin (V.N.), *9807*

gravitational stabilization, hydrodynamic stability, thin films, viscous effects, Hasegawa (E.), *3703*
- artificial satellites, damping, flexible bodies, lyapunov's functions, Hablani (H.B.), Shrivastava (S.K.), *6886*
- granular media, nonlinear theory, soils, Shahinpoor (M.), *10249*

gravity, astrodynamical constants, circumnavigation, solar system, Moyer (T.D.), *869*
- geophysics, surveys, Balk (P.I.), *962*
- choked flow, free boundary, water, waterfall, Simpson (H.C.), Rooney (D.H.), (et al.), *1517*
- ear, membranes, otolith membrane, Twizell (E.H.), *1950*
- magneto fluid dynamics, stability theory, theory, waves, Kochar (G.T.), Jain (R.K.), *2891*
- liquid gas mixture, magneto fluid dynamics, separation, Kirko (G.E.), *2895*
- earth, error, gravity anomalies, Tarakanov (Yu.A.), Cherevko (T.N.), *3006*
- axisymmetric flow, equilibrium, rotating fluids, Friedman (A.), Turkington (B.), *3627*
- computing techniques, earth, gravity anomalies, three dimensional formulation, Kudrya (A.V.), *4033*
- orbits, restricted three body problem, solar system, swing-by, Farquhar (R.W.), Dunham (D.W.), *5706*
- drainage, oil removal, Hagoort (J.), *5859*
- earth, magnetic field, processing, Antonov (Yu.), *5871*
- equipment, geomechanics, gravity variometers, measurements, Kiselyev (M.I.), Kuzivanov (V.A.), *5872*
- earth, magnetic field, Strakhov (V.N.), *5878*
- earth, gravimagnetic anomalies, inverse problems, magnetic field, Nikonova (F.I.), Tsurilskiy (A.V.), *5879*
- earth, gravity anomalies, optimization, Kobrunov (A.I.), *5887*
- bones, demineralization, strain measurement, zero g phenomena, Hinsenkamp (M.), Burny (F.), (et al.), *6002*
- galactic system, waves, Lau (Y.Y.), Lin (C.C.), *6044*
- dynamics, relativity, Anderson (I.M.), *6046*
- earth, mathematical models, Kozenko (A.V.), Maslov (I.A.), *7023*
- atmosphere, atmospheric circulation, convection, currents, Hagiwara (Y.), *7064*
- half space, holes, stress analysis, tunnels, Spencer (S.E.), Sinclair (G.B.), *7264*
- columns, harmonic waves, hydrodynamic stability, liquids, Malik (S.K.), Singh (M.), *7740*
- drawing, hydrodynamic stability, inertia, surface tension, Chang (J.C.), Denn (M.M.), (et al.), *7741*
- earth, heat transfer, transformation, Hagiwara (Y.), *8012*
- earth, geoid anomalies, ocean, Mcadoo (D.C.), *8013*
- membranes, wrinkling, Mansfield (E.H.), *8245*
- granular media, hoppers, transport mechanisms, Savage (S.B.), Sayed (M.), *8915*
- compressible flow, containers (partially filled), cylindrical bodies, laminar flow, Greenwell (R.N.), Wang (C.Y.), *9677*
- convection (forced), currents, environmental control, heat transfer, Sturm (T.W.), *10406*
- ducts (curved), hodograph methods, irrotational flow, Chow (W.L.), Chan (P.C.T.), *10438*
- compressible flow, numerical methods, one dimensional flow, Kosovichev (A.G.), Popov (Yu.P.), *11418*
- annular flow, exit, jets, nozzles, Tuck (E.O.), *11484*
- bubble dynamics, magneto fluid dynamics, mixtures, models, Golosov (V.V.), Naletova (V.A.), (et al.), *11819*
- drops, magneto fluid dynamics, stability theory, theory, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *11821*

gravity waves, bandwidth, experimental results, finite amplitude, ocean waves, Larsen (L.H.), *661*
- diffraction, sloping bottom, surface waves, Lozano (C.), Liu (P.L.-F.), *665*
- cylindrical bodies, diffraction, flow irregularities, nonlinear waves, Miloh (T.), *667*
- permanent form, three dimensional flow, Saffman (P.G.), Yuen (H.C.), *671*
- oscillations, pressure distribution, wave generation, Chee-Seng (L.), *672*
- experimental results, gravity waves (cnoidal), nonlinear waves, wave generation, Chakrabarti (S.K.), *678*
- nonlinear waves, stability theory, thermal waves, three dimensional formulation, Shrira (V.I.), *1083*
- capillary waves, evolution equations, nonlinear analysis, plasma, soliton solutions, Ma (Y.-C.), *1094*
- diffraction, flow irregularities, travelling waves, Hunt (J.N.), Baddour (R.E.), *1590*
- internal waves, ocean air interaction, ocean waves, surface waves, thermocline, turbulence, turbulence (geophysical), Phillips (O.M.), *1888, book*
- currents, cylindrical bodies, hydrodynamic pressure, Vinje (T.), *3719*
- boussinesq equation, dispersion relation, magneto fluid dynamics, propagation, El Sawi (M.), Eltayeb (I.A.), *3892*
- surface waves, swell, Larsen (L.H.), *4052*
- caustics, currents, nonlinear analysis, Chin (W.C.), *4656*
- atmospheric circulation, waveguides, Dvoryakovskiy (V.P.), Petrukhin (N.S.), (et al.), *4865*
- capillary waves, interface waves, liquid gas mixture, Pramanik (A.K.), *7763*
- channel flow, eigenvalue problems, Ivashchenko (B.P.), Nikitin (S.K.), *7765*
- circumnavigation, fluid mechanics, planetary theory, potential theory, Demin (V.G.), Barkin (Yu.V.), *7913*

- gravity waves (surface), ocean waves, spectra, surface waves, wind-wave interaction, Naeser (H.), *8018*
- floating structures, icebreakers, Bates (H.F.), Shapiro (L.H.), *8631*
- magneto fluid dynamics, planetary atmospheres, shear flow, wind, El Mekki (O.M.), *8822*
- rossby waves, rotating fluids, Bridger (A.F.C.), Stevens (D.E.), *8989*
- discretization, finite element methods, fredholm equations, free boundary, matrices, variational methods, Berhault (C.), *9546*
- nonlinear waves, schrodinger equation, wave interactions, Malik (S.K.), Singh (M.), *9621*
- fredholm equations, green function, hulls, potential flow, wave trains, Noblesse (F.), *9944*
- aeration, free boundary, jets, weirs, Rogala (R.), *10392*
- cylindrical bodies, diffraction, fluid-structure interaction, Alliney (S.), *10476*
- ferrous metals, liquid metals, magneto fluid dynamics, theory, Shishkin (L.A.), Slatinskii (N.D.), *10748*
- bifurcation, finite amplitude, three dimensional formulation, Ma (Y.-C.), *11561*
- nonlinear analysis, shear flow, stratified flow, wave trains, Liu (A.K.), *11562*
- nonlinear analysis, swell, wave generation, wave interactions, Foda (M.A.), Mei (C.C.), *11577*
- breakwater, floating bodies, transmission, Stiassnie (M.), *11673*

gravity waves (breaking), experimental results, nonlinear waves, sloping bottom, Flick (R.E.), Guza (R.T.), (et al.), *1611*
- gravity waves (surface), turbulent mixing, wave energy, Thompson (R.O.R.Y.), *2708*
- nonlinear waves, surface tension, surveys, Schwartz (L.W.), Fenton (J.D.), *7759*
- finite amplitude, nonlinear analysis, Longuet-Higgins (M.S.), *11581*
- velocity profiles, visualization, wakes, Battjes (J.A.), Sakai (T.), *11586*
- beaches, nonlinear analysis, Kirkgoz (M.S.), *11591*
- buoys, dynamic stability, scale models, Nath (J.H.), Chester (S.T.), (et al.), *11695*

gravity waves (cnoidal), experimental results, gravity waves, nonlinear waves, wave generation, Chakrabarti (S.K.), *678*

gravity waves (finite depth), integral methods, transformation, two dimensional waves, Nakamura (A.), Matsuno (Y.), *668*
- breakwater, gravity waves (surface), scattering, Lozano (C.J.), *2705*
- fluid-structure interaction, half space, propagation, unsteady flow, Tkachenko (V.A.), *4663*
- korteweg de vries equation, nonlinear analysis, sloping bottom, Lugovtsov (A.A.), *6695*
- currents, nonlinear analysis, sloping bottom, Christoffersen (J.B.), Jonsson (I.G.), *6697*
- capillary waves, propagation, Scott (J.C.), *6698*
- elastic bodies, floating bodies, fluid-structure interaction, plates, Bukatov (A.E.), *7770*
- channel flow, existence theorems, unsteady flow, Forste (J.), *8623*
- gravity waves (solitary), nonlinear waves, unsteady flow, wave interactions, Fenton (J.D.), Rienecker (M.M.), *11560*
- gravity waves (solitary), korteweg de vries equation, radial waves, solitary waves, Djordjevic (V.D.), *11568*
- korteweg de vries equation, radial waves, rotational flow, similarity methods, Djordjevic (V.D.), Pavlovic (M.), *11569*
- diffraction, flow irregularities, reefs, scattering, Miles (J.W.), *11578*
- bottom irregularities, dispersion relation, edges, Miles (J.W.), *11584*
- boundary value problems, existence theorems, rotational flow, Yolkin (N.N.), *11615*
- cylindrical bodies, floating bodies, virtual mass, waves (long), Sayer (P.), *11681*
- floating bodies, heaving, integral methods, oscillating bodies, Sayer (P.), *11682*

gravity waves (internal), gravity waves (surface), ocean waves, wave interactions, Dysthe (K.B.), Das (K.P.), *1589*
- channels, shear flow, stratified flow, wave interactions, Grimshaw (R.), *1601*
- fluid boundaries, froude number, hydrofoils, wave generation, Bukreev (V.I.), *4659*
- breakers, currents, internal waves, oceanography, spectra, thermocline, Eriksen (C.C.), *4871*
- gravity waves (shallow water), liquid liquid interface, nonlinear waves, Helal (M.A.), Molines (J.M.), *5471*
- atmospheric circulation, eddies, kelvin-helmholtz instability, Klostermeyer (J.), *5934*
- atmospheric circulation, Eltayeb (I.A.), Kandaswamy (P.), *5935*
- hydrodynamic stability, shear layer, vortex sheets, Grimshaw (R.H.J.), *7745*
- nonlinear analysis, rossby waves, wave interactions, Ripa (P.), *7761*
- hydrodynamic stability, stratified flow, wave interactions, Koop (C.G.), Redekopp (L.G.), *10483*
- nonhomogeneous media, radial waves, singularities, wavemaking resistance, Gorodtsov (V.A.), *11380*
- nonlinear analysis, resonance, wave interactions, Liu (A.K.), Kubota (T.), (et al.), *11566*
- gravity waves (surface), wave interactions, wind-wave interaction, Segur (H.), *11570*
- finite amplitude, gravity waves (solitary), liquid liquid interface, Koop (C.G.), Butler (G.), *11575*
- ocean waves, wave energy, wave interactions, Orlanski (I.), Cerasoli (C.P.), *11588*
- ocean waves, rotational flow, stratified flow, Friedlander (S.), Siegmann (W.L.), *11619*
- moving source, submerged bodies, wave generation, Gorodtsov (V.A.), Teodorovich (E.V.), *11620*
- ocean waves, rotational flow, Bunimovich (L.A.), *11622*
- eigenvalue problems, frequencies, stratified flow, Tam (K.K.), *11623*

gravity waves (shallow water), gravity waves (internal), liquid liquid interface, nonlinear waves, Helal (M.A.), Molines (J.M.), *5471*
- finite element methods, numerical methods, Williams (R.T.), Zienkiewicz (O.C.), *6707*
- bottom irregularities, currents, energy dissipation, Christoffersen (J.B.), Jonsson (I.G.), *9626*
- numerical methods, rotating bodies, spherical bodies, Gilliland (R.L.), *10484*
- dam-failure, dams, failure, wave interactions, Marshall (G.), Menendez (A.N.), *11564*
- finite difference methods, tides, Henry (R.F.), *11579*
- boundary conditions, estuaries, finite element techniques, Walters (R.A.), Cheng (R.T.), *11611*
- finite element techniques, integration (semi-implicit), Malone (F.D.), Kuo (J.T.), *11693*
- experimental results, ocean waves, spectra, Thompson (E.F.), *11696*

gravity waves (solitary), existence theorems, finite amplitude, wave height (greatest), Amick (C.J.), Toland (J.F.), *2702*
- approximations (higher order), stratified flow, Grimshaw (R.), *4654*
- gravity waves (surface), korteweg de vries equation, velocity profiles, Longuet-Higgins (M.S.), *9619*
- surveys, Miles (J.W.), *9622*
- gravity waves (finite depth), nonlinear waves, unsteady flow, wave interactions, Fenton (J.D.), Rienecker (M.M.), *11560*
- dispersion, ocean waves, Boyd (J.P.), *11563*
- damping, viscous effects, Segur (H.), *11567*
- gravity waves (finite depth), korteweg de vries equation, radial waves, solitary waves, Djordjevic (V.D.), *11568*
- finite amplitude, gravity waves (internal), liquid liquid interface, Koop (C.G.), Butler (G.), *11575*
- boussinesq equation, channels, finite amplitude, Toland (J.F.), *11587*

gravity waves (stratified), bottom irregularities, nonlinear waves, steepness, Sidorchuk (V.N.), *1592*
- liquid liquid interface, propagation, Gabov (S.A.), Castro (R.), *3712*

gravity waves (surface), laplace transform, propagation, viscous flow, waves, Tkachenko (V.A.), *670*
- gravity waves (trochoidal), phase velocity, wave trains, Shuleykin (V.V.), *1588*
- gravity waves (internal), ocean waves, wave interactions, Dysthe (K.B.), Das (K.P.), *1589*
- boundary layer, free boundary, surface tension, viscosity, Trad (A.), *1593*
- cylindrical bodies, drag coefficient, submerged bodies, virtual mass, wave loads, Koterayama (W.), *1594*
- bottom irregularities, existence theorems, nonlinear waves, Potapkin (V.S.), *2703*
- breakwater, gravity waves (finite depth), scattering, Lozano (C.J.), *2705*
- channel flow, propagation, rivers, saint venants equation, tides, Chatterjee (A.K.), *2707*
- gravity waves (breaking), turbulent mixing, wave energy, Thompson (R.O.R.Y.), *2708*
- cylindrical bodies, free boundary, two dimensional flow, walls, Boucher (G.), *3631*
- cylindrical bodies, scattering, submerged bodies, Leppington (F.G.), Siew (P.F.), *3717*
- finite amplitude, wave interactions, Demchenko (R.I.), Yakovlev (V.V.), *4655*
- channel flow, numerical methods, unsteady flow, Edenhofer (J.), Schmitz (G.), *4668*
- flow irregularities, propagation, trenches, Lee (J.-J.), Ayer (R.M.), *5472*
- dispersion, oscillatory flow, reynolds number (small), ripples, viscous flow, Kamachi (M.), Honji (H.), *5473*
- diffraction, submerged bodies, wave interactions, Belyaev (V.A.), *5475*
- caustics, diffraction, refraction, Williams (R.G.), Darbyshire (J.), (et al.), *5481*
- design, theory, wave generation, wavemakers, Hudspeth (R.T.), Chen (M.-C.), *7653*
- hydrodynamic stability, mathematical models, Laedke (E.W.), Spatschek (K.H.), *7744*
- hydrodynamic stability, nonlinear theory, three dimensional flow, Crawford (D.R.), Lake (B.M.), (et al.), *7746*
- gravity waves, ocean waves, spectra, surface waves, wind-wave interaction, Naeser (H.), *8018*
- currents, finite amplitude, floating bodies, Flierl (G.R.), *8620*
- potential flow, separation, ships, stern waves, Vanden-Broeck (J.-M.), *8622*
- cylindrical bodies, diffraction, elastic bodies, floating bodies, Kudryavtsev (E.P.), *8625*
- cylindrical bodies, damping, submerged bodies, virtual mass, Sabuncu (T.), Calisal (S.), *8630*

- cylindrical bodies, submerged bodies, wave loads, Koterayama (W.), *8632*
- ocean waves, oceanography, spectra, surface waves, wind-wave interaction, Komen (G.J.), *8998*
- approximations (higher order), finite amplitude, highest wave, velocity profiles, Srokosz (M.A.), *9618*
- gravity waves (solitary), korteweg de vries equation, velocity profiles, Longuet-Higgins (M.S.), *9619*
- eigenvalue problems, harbors, wind-wave interaction, Papa (L.), *9620*
- capillary waves, harmonic waves, phase velocity, wilton ripples, Reeder (J.), Shinbrot (M.), *9623*
- dispersion, floating bodies, oscillatory flow, visualization, Ergin (A.), *9633*
- gravity waves (internal), wave interactions, wind-wave interaction, Segur (H.), *11570*
- sloping bottom, theorems, uniqueness, Wen (S.-L.), Sastry (M.S.K.), *11571*
- cylindrical bodies, diffraction, flow irregularities, Miles (J.W.), *11572*
- approximations (higher order), lakes, ocean, rotational flow, Bennett (J.R.), Schwab (D.J.), *11573*
- dispersion relation, nonlinear analysis, spectra, Crawford (D.R.), Lake (B.M.), *11574*
- diffraction, refraction, sloping bottom, Houston (J.R.), *11576*
- floating bodies, oscillating bodies, wave generation, Martin (P.A.), *11585*
- bottom irregularities, numerical methods, rays, refraction, Selezov (I.T.), Sorokina (V.V.), *11589*
- capillary waves, currents, hydrodynamic stability, Voronovich (A.G.), Lobanov (E.V.), (et al.), *11590*
- capillary waves, finite amplitude, surface tension, Hogan (S.J.), *11593*
- bifurcation, capillary waves, finite amplitude, Chen (B.), Saffman (P.G.), *11595*
- acceleration, pressure distribution, wave generation, Pramanik (A.K.), *11599*
- cylindrical bodies, irrotational flow, submerged bodies, unsteady flow, Chaplin (J.R.), *11633*
- floating bodies, oscillating bodies, ships, Kyozuka (Y.), Yoshida (K.), *11644*
- damping, floating bodies, virtual mass, Faines (J.), *11675*
- channels, flow irregularities, submerged bodies, Jeffrey (A.), Mvungi (J.), *11676*
- finite element techniques, integral methods, Mattioli (F.), *11692*
- integral methods, numerical methods, Salmon (J.R.), Liu (P.L.-F.), (et al.), *11698*
- ocean air interaction, pressure, surface waves, turbulence (geophysical), Snyder (R.L.), Dobson (F.W.), (et al.), *12060*

Gray (D.F.), algorithms, linear programming, optimization, Sutherland (W.R.S.), *11065*

Gray (J.D.), boundary layer, integral methods, interaction, suction, Maus (J.R.), *1551*

Gray (S.H.), inhomogeneities, phase velocity, propagation, scattering, second order analysis, *1085*

- inverse method, ocean, sound speed, stratification, underwater acoustics, *5721*

Gray (T.G.F.), crack opening displacement, cylindrical bodies, dugdale model, edge cracks, *8403*

grease, lubrication (elastohydrodynamic), squeeze films, Wada (S.), Tsukijihara (M.), *3045*

- lubricants, threaded joints, Gansheimer (J.), *9038*

Grebennik (V.S.), flaw detection, inspection, nondestructive tests, ultrasonics, Taits (M.Z.), *5336*

Green (A.E.S.), see Makarewicz (R.), *1815*

- plumes, turbulence model, wind, Singhal (R.P.), (et al.), *10875*

Green (G.), acoustic emission, aluminum alloys, deformation, nondestructive tests, Clark (G.), *2482*

Green (I.), see Etsion (I.), *1024*

Green (R.K.), see Tassou (S.A.), *5592*

Green (W.L.), automatic control, electrical instruments, hydraulics, pumps, servomechanisms, valves, Sanger (D.J.), (et al.), *6734*

green function, differential equations (ordinary), linear equations, Pan (H.H.), Hohenstein (R.M.), *23*

- linear systems, stochastic systems, Szopa (J.), *142*
- bodies of revolution, impact jets, separated flow, Shimkovich (D.G.), *1518*
- approximations, boltzmann equation, scattering, Coppa (G.), Ravetto (P.), *1529*
- heat addition, nonuniform flow, slabs, Dudukovic (M.P.), *1699*
- conduction (heat), floors, heat sources, heating, De Mey (G.), *1700*
- approximations, stress concentration, stress intensity factor, strips, Rooke (D.P.), Baratta (F.I.), (et al.), *2431*
- boundary integral method, conduction (heat), conduction (steady), integral methods, variable thermal properties, Khader (M.S.), Hanna (M.C.), *2818*
- attenuation, bends, ducts (curved), sound propagation, El-Raheb (M.), Wagner (P.), *2936*
- anisotropic media, materials possessing memory, Osokin (A.E.), Suvorova (Iu.V.), *3077*
- elastic bodies, sound fields, sound generation, Kouzov (D.P.), *3939*
- boundary value problems, initial value problems, soil consolidation, Bowen (R.M.), *4160*
- anisotropic media, boundary integral methods, elasticity (linear), half space, Kobayashi (S.), Nishimura (N.), *4344*
- boundary value problems, green theorem, helmholtz equation, stability (numerical), Mattioli (F.), *4982*
- layered media, sound propagation, underwater acoustics, wave equations, Dinapoli (F.R.), Deavenport (R.L.), *5767*
- conduction (heat), contact problems, thermoelasticity, Comninou (M.), Dundurs (J.), (et al.), *5793*
- eigenvalue problems, image methods, potential theory, Terras (R.), Swanson (R.), *6077*
- cylindrical bodies, elasticity (linear), stress concentration, Hasegawa (H.), *6162*
- contact problems, elasticity (three dimensional), half space, Jentsch (L.), *7261*
- boundary value problems, elliptic equations, layered media, sturm-liouville problem, Popov (G.Ya.), Gribnyak (S.T.), *7303*
- boundary elements, plates, Irschik (H.), Ziegler (F.), *7347*
- deformation, dislocations, Kossecka (E.), *8180*
- infinite medium, plates (holed), stress intensity factor, Shivakumar (V.), Forman (R.G.), *8397*
- corrections, inviscid fluid, potential flow, wall effects, walls, Barche (J.), *8523*
- composite materials, conduction (heat), laminates, layered media, unsteady flow, Huang (S.C.), Chang (Y.P.), *8733*
- boundary value problems, integral methods, ship resistance, wavemaking resistance, Noblesse (F.), *9008*
- radiant interchange, reflection, scattering, Rogovtsov (N.N.), *9720*
- cylindrical waves, moving media, sound generation, Tanaka (K.), Ishii (S.), *9847*
- fredholm equations, gravity waves, hulls, potential flow, wave trains, Noblesse (F.), *9944*
- half space, layered media, Eatwell (G.P.), Simmons (J.A.), (et al.), *10239*
- conduction (heat), fourier problem, Baranski (F.), Musialek (J.), *10600*
- boundary value problems, integral methods, magneto fluid dynamics, waves, Aleksandrova (A.A.), Khiznyak (N.A.), *10749*

green theorem, geomechanics, gravimetrics, potential theory, Powell (C.), *2914*

- boundary value problems, green function, helmholtz equation, stability (numerical), Mattioli (F.), *4982*
- linear theory, ship resistance, wavemaking resistance, Odabasi (A.Y.), *5961*

Greenberg (J.B.), dynamic analysis, shells (cylindrical), vibration (free), wire-wound vessels, Stavsky (Y.), *3374*

- chemical kinetics, chemically reactive flow, combustion, elliptic equations, numerical methods, Presser (C.), *3874*

Greenblatt (P.), acoustic waves, scattering, *4795*

Greene (C.R.), arrays, sound fields, Wood (R.C.), *4793*

Greenhut (G.K.), boundary layer (atmospheric), drag coefficient, heat transfer (atmospheric), mass transfer, Bean (B.R.), *981*

Greenspan (D.), free boundary, laminar flow, modeling, n body problems, nonlinear theory, turbulent flow, *2720*

Greenspan (H.P.), containers, flow irregularities, rotating fluids, spin-up, stratified flow, vortices, *7674*

- dikes, hazardous liquids, impoundments, rupture, tanks, unsteady flow, Johansson (A.V.), *10450*

Greenspan (M.), see Breckenridge (F.R.), *9340*

Greenstein (T.), cylindrical bodies, friction, rotating bodies, spherical bodies, viscous flow, Zocco (J.G.), *6623*

Greenway (M.E.), cladding, gust loads, panels, wind loads, *3551*

Greenwell (R.N.), compressible flow, containers (partially filled), cylindrical bodies, gravity, laminar flow, Wang (C.Y.), *9577*

Greenwood (G.W.), cavities, creep, fracture mechanics, grain boundaries, metals, *3253*

Greenwood (J.A.), see Calladine (C.R.), *257*

- adhesion, roughness, viscoelastic materials, Johnson (K.L.), *10886*

Greeves (G.), combustion, diesel engines, fuel jets, injectors, *1765*

Gregg (M.C.), microstructures, oceanography, thermocline, turbulence (geophysical), *7057*

Greif (R.), see Mertol (A.), *5598*

- see Nansteel (M.W.), *8701*

Greitzer (E.M.), compressors, pumps, stability, systems engineering, *4674*

Grellier (J.P.), impact, lasers, photoelasticity (dynamic), stress analysis, Lagarde (A.), *10311*

Grenier (M.), see Boileau (P.E.), *2489*

Gresho (P.M.), see Leone (J.M.) Jr., *7713*

- see Chan (S.T.), *8902*
- see Sani (R.L.), *10072*

Grevtsev (S.N.), see Barinov (S.M.), *2497*

Grewal (B.S.), ballistics (interior), heat transfer, projectiles, thermal explosions, *5716*

Grewal (N.S.), fluidized beds, particle fluid flow, velocity profiles, Saxena (S.C.), *7013*

Gribkov (A.M.), see Volkov (E.P.), *11518*

Gribnyak (S.T.), see Popov (G.Ya.), *7303*

Gribova (I.A.), see Korshak (V.), *275*

- see Korshak (V.V.), *1023*

Grichuk (V.V.), see Polesskaya (L.M.), *6487*

grids, decay, mixing, temperature, turbulence, Sreenivasan (K.R.), Tavoularis (S.), (et al.), *654*

- moire methods, optical techniques, Murakami (K.), Murakami (Y.), (et al.), *2474*

- cylindrical bodies, drag, piers, piles, reynolds stresses, submerged bodies, Ball (D.J.), Hall (C.D.), *2585*
- compressible flow, numerical methods, two dimensional flow, viscous effects, Kovenya (V.M.), Yanenko (N.N.), *2625*
- curvature, interferometry, twisting, Subramanian (G.), Arunagiri (R.), *3486*
- laser doppler velocimeters, turbulence, turbulence (structure), Cenedese (A.), Iannetta (S.), (et al.), *8619*
- asymptotic methods, boundary layer, finite difference methods, supersonic flow, Rai (M.M.), Anderson (D.A.), *10414*
- mixing layers, thermal diffusion, turbulence, turbulent mixing, Larue (J.C.), Libby (P.A.), (et al.), *10474*

Grierson (D.E.), combined loading, design (optimum), plasticity, space frames, structural analysis, Aly (A.A.), *11319*

Grieve (R.J.), forming, impact, sheet metal, Wambugu (N.W.), *2398*

Griffin (J.N.), design, high speed, linkages, mechanisms (planes), springs, synthesis, Matthew (G.K.), *9477*

Griffin (M.J.), biodynamics, human body, vibration, *8080*

Griffin (O.M.), blunt bodies, oscillations, similarity methods, wakes, *629*

- cables, offshore structures, vibration (flow induced), vortex shedding, Pattison (J.H.), (et al.), *11628*

Griffith (O.F.) III, experimental methods, turbulence, waterways, Grimwood (C.), *8618*

Griffith (W.C.), reflection, refraction, shock waves, surveys, *7776*

Griffith (W.I.), see Brinson (H.F.), *1356*

griffith cracks, crack growth, interaction, stress intensity factor, thermoelasticity (transient), Hata (T.), *460*

- crack growth, infinite medium, Yatomi (C.), *462*
- bifurcation, cracks, pressure, Aoki (S.), Sakata (M.), *464*
- boundary value problems, cracks, elasticity, Golecki (J.J.), *2429*
- aluminum alloys, crack propagation, thermodynamics, Izumi (Y.), Fine (M.E.), (et al.), *3441*
- crack growth, dugdale model, fracture mechanics, survey, viscoelastic materials, Kaminskii (A.A.), *5301*
- crack opening displacement, orthotropic materials, Misra (J.C.), Mishra (M.), (et al.), *7515*
- elasticity, energy release rate, fourier transform, stress intensity factor, strips, Dhaliwal (R.S.), Singh (B.M.), *8390*
- ceramics, fracture criteria, fracture mechanics, Nobile (L.), *8392*
- cracking, failure, random loading, stochastic systems, Smolskii (V.M.), *8411*
- crack opening displacement, stress intensity factor, transforms, Tang (R.J.), Wang (K.), *9398*
- fracture mechanics, micromechanics, nucleation, Bamiro (O.A.), Provan (J.W.), *10299*
- crack initiation, dynamic fracture, finite difference methods, plates (rectangular), Perl (M.), Shmuely (M.), (et al.), *10304*

Griffiths (D.F.), conduction, convection, finite difference methods, heat transfer (combined modes), Christie (I.), (et al.), *8750*

- computing techniques, finite element techniques, incompressible flow, numerical analysis, *10070*

Griffiths (R.W.), convection (free), diffusion, layered media, porous media, *7991*

- buoyancy, density, diffusion, interface phenomena, mass transfer, Ruddick (B.R.), *8781*

Griffiths (S.K.), see Morrison (F.A.) Jr., *6766*

Grigolyuk (E.I.), elasticity (nonlinear), nonlinear analysis, nonlinear methods, Shalashilin (V.I.), *5082*

- layered media, plates (circular), plates (sandwich), stability theory, Magerramova (L.A.), *6251*

Grigorenko (P.P.), aerodynamics, combustion chambers, combustors, jets, mixing, Spiridonov (Yu.A.), (et al.), *6844*

Grigorenko (Ya.M.), centrifugal compressors, plates (circular), Mitlin (B.I.), (et al.), *4382*

Grigorescu (S.), see Beresnu (B.) eds., *7226, book*

Grigorev (F.N.), filters, interpolation, observers, stochastic processes, Kurdoya (E.A.), *5057*

Grigorev (O.A.), crystals, scattering, sound propagation, ultrasonics, Shermergor (T.D.), *2930*

Grigorev (V.G.), agglomeration, aluminum, combustion, particles, Zarko (V.E.), (et al.), *10713*

Grigorev (V.P.), see Ekilik (V.V.), *6427*

Grigorev (V.V.), see Bogachev (A.V.), *4276*

Grigorev (Yu.M.), films, ignition, kinetics, metals, particles, Safaneev (D.Z.), *9748*

Grigorian (F.P.), pole placement, synthesis, time varying systems, *5043*

Grigoriu (M.), convolution integrals, estimation, optimization, probability theory, reliability analysis, Lind (N.C.), *48*

- seismic loading, structural response, *5893*

Grigoryan (S.S.), collision models, dynamic effects, impact, *4458*

- acoustics (physiological), arteries, blood flow, muscles, sound generation, Saakyan (Yu.Z.), (et al.), *8077*

Grigoryeva (N.I.), see Nakoryakov (V.Ye.), *798*

Grilitskii (D.V.), elastic bodies, scattering, spherical bodies, torsional waves, Poddubnyak (A.P.), *6352*

grillages, bending, cellular structures, nonlinear characteristics, structural analysis, ultimate strength, Shanmugam (N.E.), Evans (H.R.), *8263*

Grimshaw (R.), channels, gravity waves (internal), shear flow, stratified flow, wave interactions, *1601*

- approximations (higher order), gravity waves (solitary), stratified flow, *4654*
- korteweg de vries equation, perturbation methods, solitary waves, *8621*
- see Collings (I.L.), *10856*

Grimshaw (R.H.J.), gravity waves (internal), hydrodynamic stability, shear layer, vortex sheets, *7745*

Grimwood (C.), see Griffith (O.F.) III, *8618*

Grinberg (N.M.), crack propagation, environmental tests, fatigue, fractography, Ostapenko (I.L.), (et al.), *7488*

Grinchenko (S.T.), see Batkov (A.M.), *6145*

Grinchenko (V.T.), edge effects, harmonic waves, propagation, waveguides, wedges, Meleshko (V.V.), *10226*

grinding, adhesion, force, mechanisms, Yossifon (S.), Rubenstein (C.), *438*

- fuzzy control, optimization, stochastics, Sakai (Y.), Tanaka (Y.), (et al.), *439*
- forging, gear teeth, gears (spur), mechanical properties, metallurgy, Abdel-Rahman (A.R.O.), Dean (T.A.), *5274*
- abrasion, finishing, materials processing, tribology, Kunz (P.), *6411*
- abrasion, design (optimum), grinding wheels, optimization, Prasad (B.), Haftka (R.T.), (et al.), *6552*
- ceramics, crystals, flaws, polycrystalline materials, strength, Rice (R.W.), Mecholsky (J.J.), (et al.), *7469*
- stochastics, tools, Matsui (S.), *8366*
- abrasion, chip formation, cutting, tool wear, Kita (Y.), Ido (M.), (et al.), *9377*
- cutting, forming, metrology, optimization, *10268*
- design (optimum), gyroscopes, surface profiles, synthesis, tools, Osman (M.O.M.), Sankar (S.), (et al.), *10370*
- aggregates, comminution, equipment, Krycer (I.), Hersey (J.A.), *12055*
- contact stresses, fatigue, microstructures, rolling contact, Dudragne (G.), Fougeres (R.), (et al.), *12096*

grinding wheels, abrasion, design (optimum), grinding, optimization, Prasad (B.), Haftka (R.T.), (et al.), *6552*

Grinfeld (M.A.), elasticity (nonlinear), reflection, refraction, Movchan (A.A.), *2371*

- elasticity (nonlinear), seismic waves, *8008*
- elastic waves, phase changes, seismic waves, Movchan (A.A.), *8957*
- barotropic fluids, hydrodynamic stability, perturbations, two dimensional flow, *9600*

Gripenberg (G.), biomathematics, dynamic analysis, epidemics, mathematical models, *6151*

Grishin (A.M.), dispersions, heat transfer, models, Loskutov (G.S.), (et al.), *2853*

- buoyancy, convection, injection, plane flow, Gruzin (A.D.), (et al.), *8685*

Grishin (S.A.), bifurcation, differential equations (ordinary), sliding, trajectories, Utkin (V.I.), *1143*

Grishin (Yu.M.), channel flow, laminar flow, particle dynamics, sublayers, turbulent flow, Mosin (A.A.), *11489*

Grishina (V.M.), see Zavyalova (N.S.), *501*

Grissom (W.M.), impingement cooling, leidenfrost phenomenon, liquids, sprays, Wierum (F.A.), *2839*

Grisval (J.-P.), heat pumps, high temperature, thermodynamics, *9732*

Gritsev (V.M.), concrete, convection (forced), drying, thermal effects, Bykov (S.I.), *5573*

Grivas (S.B.), see Loukakis (T.A.), *994*

Groenendaal (A.W.M.), see Van De Ven (H.H.), *4255*

Groh (G.), fredholm equations, potential flow, three dimensional flow, *4166*

Groisman (P.Ya.), see Vinnikov (K.Ya.), *4076*

Gromov (A.I.), see Basharin (G.P.), *151*

Gronowicz (A.), see Miller (S.), *7625*

Groom (N.J.), see Anderson (W.W.), *2927*

- see Joshi (S.M.), *7415*
- see Joshi (S.M.), *8850*

Grootenhuis (P.), see Hamidzadeh-Eraghi (H.R.), *7037*

Gros (K.S.), see Hammarstrom (L.G.), *1148*

Grosch (C.E.), see Salwen (H.), *4639*

Groshkov (A.N.), see Yurachkovskiy (Yu.P.), *169*

Gross (B.), biaxial loading, crack opening displacement, elasticity (linear), stress intensity factor, *461*

Gross (D.R.), aorta, elastic constants, flexible walls, heart, pressure measurement, pulsatile flow, Hunter (J.F.), (et al.), *4916*

Gross (M.J.), see Turner (C.H.), *1959*

Gross (R.J.), energy storage, numerical methods, packed beds, variable thermal properties, Hickox (C.E.), (et al.), *10635*

Gross (R.S.), see Goree (J.G.), *5130*

Gross (U.), radiant interchange, shape factors, Spindler (K.), (et al.), *775*

Gross (W.A.), bearings, bearings (hydrodynamic), bearings (hydrostatic), lubricants, lubrication, Matsch (L.A.), (et al.), *4110, book*

Grosse (S.), hardness, machinery, particles, wear, *8053*

Grosel (R.O.), buoys, dynamic analysis, finite difference methods, force, sudden stop, Ercoli (L.), *5480*

- see Laura (P.A.A.), *7392*

Grossman (A.G.), dispersions, models, particle dynamics, transport phenomena, *2850*

Grossman (B.), delta wings, potential flow, supersonic flow, Siclari (M.J.), *8638*

Grossman (G.), absorption, coolers, solar energy, Bourne (J.R.), (et al.), *7869*

Grossmayer (R.L.), dissipation, hysteresis, linearization, random excitation, structural optimization, Iwan (W.D.), *2318*

Grosz (M.), design, graph theory, integer programming, networks, optimization, pipelines, *3193*

Grotberg (J.B.), biomaterials, lungs, tissues, viscoelastic materials, Davis (S.H.), (et al.), *3060*

Grotzbach (G.), heat transfer, liquid metals, turbulence, turbulence model, *6688*

ground effect, airplanes, simulation, vortices, wakes, Wickens (R.H.), *1619*

- impedance, reflection, sound propagation, Durnin (J.), Bertoni (H.L.), *4794*
- boundary layer (atmospheric), heat transfer (atmospheric), Gibson (M.M.), Launder (B.E.), *4886*
- aerodynamic coefficients, airfoils, lift, potential flow, two dimensional flow, Plotkin (A.), Kennell (C.G.), *5490*
- acoustic waves, impedance, reflection, sound propagation, surface waves, Habault (D.), Filippi (P.J.T.), *8865*
- aerodynamic interference, flight (unsteady), jets, moving surfaces, vtol, Kaman (J.H.), Hall (C.L.), (et al.), *9668*

groundwater, optimal control, pumps, Gisser (M.), Sanchez (D.A.), *172*

- granular media, infiltration, porous media, river beds, Van'T Woudt (B.D.), Nicolle (K.), *976*
- free boundary, simulation, Korolev (A.V.), Shvidler (M.I.), *2998*
- drainage, infiltration, reservoirs, Guzova (A.M.), *4842*
- porous media, soils, Kalyuzhnyi (I.L.), Pavlova (K.K.), *5899*
- aquifers, porous media, Gupta (S.K.), Lal (D.), (et al.), *5902*
- numerical methods, similarity methods, Ramm (D.), Chazan (D.), *7005*
- drainage, hydraulics, wells, Ollos (G.), *7975*
- boundary elements, transient effects, two dimensional flow, Banerjee (P.K.), Butterfield (R.), (et al.), *8948*
- infiltration, porous media, Batu (V.), *8970*
- dispersion, mass transportation, models, stochastics, Smith (L.), Schwartz (F.W.), *10671*
- aquifers, transport phenomena, Sauty (J.-P.), *10675*
- infiltration, leaks, tunnels, unsteady flow, Bouvard (M.), Niquet (J.-J.), *10838*

group theory, bifurcation, functional analyis, hamiltonian equations, marsden (j.e.), *2001, book*

- backlund transformation, conduction (unsteady), nonlinear characteristics, transformation, Munier (A.), Burgan (J.R.), (et al.), *2004*
- contact transformation, dynamics, hamiltonian equations, n body problems, Bryant (J.), *6873*
- constitutive equations, dielectrics, functional analyis, Chowdhury (K.L.), Glockner (P.G.), *8085*
- helmholtz equation, klein-gordon equation, mathematical methods, similarity methods, Steinberg (S.), Wolf (K.B.), *8113*
- hilbert space, integro differential equations, mathematical methods, transport phenomena, wiener-hopf technique, Van Der Mee (C.V.M.), *8118*
- compressible flow, shock waves, similarity methods, Logan (J.D.), Perez (J. De J.), *9640*
- differential equations (partial), hyperbolic equations, mass transfer, Berman (V.S.), *10020*
- burgers equation, korteweg de vries equation, nonlinear analysis, Zakharov (N.S.), Korobeinikov (V.P.), *10021*
- eigenvalue problems, mathematical methods, operators, transforms, Knight (B.W.), Sirovich (L.), *10035*

group velocity, eigenvalues, pulsatile flow, ray theory, shallow water, Tindle (C.T.), Bold (G.E.J.), *6612*

Grover (A.S.), plates (sandwich), rotary inertia, vibration (forced), vibration (free), Kapur (A.D.), *4434*

Groves (D.), computer analysis, holography, roughness, surface profiles, wear, Lalor (M.J.), (et al.), *10897*

Groves (G.W.), see Northover (J.P.), *4520*

- see Northover (J.P.), *6440*

Groves (J.N.), see Sears (A.R.), *553*

Groves (M.J.), see Lee (G.W.J.), *7002*

Groze (S.), convergence, frechet derivative, iterative methods, newton method, *5010*

Gruat (J.), see Alquier (M.), *5811*

Grubert (J.P.), estuaries, stratified flow, wedges, *5382*

Grudskaya (E.G.), bearings (gas lubricated), bearings (journal), deformation, lubricants (gas), lubrication (hydrodynamic), Zablotskii (N.D.), *9971*

Gruel (R.L.), bubbly flow, impulse, steam, water hammer, Huber (P.W.), (et al.), *1596*

Grujic (I.T.), design, discrete systems, lur'e plants, nonlinear systems, tracking, Porter (B.), *3159*

Grujic (L.T.), asymptotic behavior, differential equations (ordinary), large scale systems, singular perturbations, stability theory, *8105*

Gruodis (R.I.), axial loading, caissons, foundations, piers, strength, *11329*

Gruza (G.V.), data analysis, meteorology, Kachurina (L.R.), (et al.), *4085*

Gruzin (A.D.), see Grishin (A.M.), *9685*

Gryglaszewski (P.), see Nowak (Z.), *3903*

- laminar flow, pipe flow, power law fluids, pressure drop, thermal effects, viscous effects, Nowak (Z.), (et al.), *3904*

Gryzagorides (J.), see Miskioglu (I.), *7957*

Gu (R.-R.), see Soom (A.), *6934*

Gu (W.-M.), error, sensitivity, strain gages, *4509*

Gu (Z.-M.), earth, error, magnetic field, magnetometers, measurements, Huang (H.-I.), *5868*

Gubanova (I.I.), see Panovko (Ya.G.), *8257, book*

Gubanova (S.I.), forecasting, meteorology (physical), weather forecasting, weather satellites, Mashkovich (S.A.), (et al.), *4078*

Gubarev (V.F.), automatic control, plasma (toroidal), stability, thermonuclear energy, tokamak, Krivonos (Yu.G.), (et al.), *3218*

Gubbins (D.), earth, magneto fluid dynamics, modes, rotating bodies, spherical bodies, *8816*

Gublin (F.), see Arques (P.), *3887*

Guceri (S.I.), see Farouk (B.), *5565*

Gudehus (G.), foundations, sand, stress strain relationships, *2383*

Gudramovich (V.S), buckling (experimental), reinforced openings, shells (spherical), Diskovskii (I.A.), *351*

Gudskaya (E.G.), bearings (gas lubricated), bearings (journal), dynamic stability, lubrication (hydrostatic), rotors, *7101*

Guelin (P.), finite element techniques, large displacement, viscoelastic materials, Nowacki (W.K.), (et al.), *6337*

- deformation (plastic), dislocations, hysteresis, imperfections, *8092*
- impulsive loading, radial loading, shells (spherical), viscoelasticity (dynamic), Nowacki (W.K.), (et al.), *8345*

Guernigou (J.), radiant interchange, surfaces, thermal measurements, thin films, Indrigo (C.), (et al.), *6809*

Guerra (F.M.), see Hoffman (R.E.), *6111*

Guerrero (M.I.), equations of state, molecular theory, surface tension, water, Davis (H.T.), *10553*

Guesdon (M.), see Aubourg (M.), *6321*

Guglielmini (G.), approximations, boiling, convection (forced), heat transfer, nucleate boiling, Nannei (E.), (et al.), *2793*

guidance, algorithms, control, orbit determination, orbit mechanics, planetary entry, Bukharkina (A.P.), Golubev (Yu.F.), *2158*

- differential games, interception, Lutmanov (S.V.), *3201*
- feedback, navigation, stability theory, time varying systems, Dorrscheidt (F.), Leuer (A.), *9169*
- algorithms, linear systems, pole placement, pursuit, time varying systems, Solenski (N.), *10092*

guidance optimization, optimal control, rockets, steering, Dvornychenko (V.N.), *7928*

- computing techniques, optimal control, Demidovich (O.B.), *8845*

guidance systems, design, missiles, simulation, Zarchan (P.), *1162*

- design, lasers, Nulk (R.A.), Pastrick (H.L.), (et al.), *2163*
- control, design, space shuttle, Anderson (W.W.), Groom (N.J.), (et al.), *2927*
- attitude control, rockets, vibration, Cochran (J.E.) Jr., Christensen (D.E.), *7921*
- artificial satellites, control, maneuverability, tethered satellites, Bschorr (O.), *7930*
- attitude control, control, space vehicle structures, vibration, Anderson (R.H.), Haung (C.-C.), (et al.), *10774*

guidance theory, algorithms, control, filters, terminal control, Zavadskii (V.K.), *2111*

- design, missiles, Nesline (F.W.), *2926*
- attitude control, data acquisition, spinning bodies, tumbling bodies, Hubert (C.), *7920*

Guidugli (P.P.), see Davini (C.), *2287*

Guiffant (G.), see Antonini (G.), *2855*

Guillaneux (P.), absorption, collision models, energy conversion, laser plasma interaction, resonance, *8832*

Guin (M.S.), pipe flow, pipelines, vibration, viscoelastic materials, *11691*

Guiraud (J.P.), hydrodynamic stability, nonlinear theory, stability theory, *640*

- atmospheric circulation, internal waves, Zeytounian (R.K.), *5938*

Guitton (J.), experimental results, power plants, thermal shock, thermal stresses, *7955*

Guk (K.N.), computing techniques, corrections, design, programming, *68*

Gularte (R.C.), see Kelly (W.E.), *9353*

Gulelmi (A.V.), alfven number, dispersion relation, earth, magneto plasma dynamics, solar wind, *2899, book*

Gulic (M.G.), boilers, combustion chambers, heat transfer, mathematical models, Gvozdenac (D.D.), *7886*

Gulyaev (V.I.), shells (nonlinear), shells (thick), Bazhenov (V.A.), (et al.), *311, book*

- see Bryukalo (L.A.), *4399*
- dissipation, elastodynamics, nonlinear waves, *6336*

Gulyaev (V.V.), see Volmir (A.S.), *2718*

- see Akentev (V.G.), *10513*

Gulyaev (Yu.V.), excitation, experimental methods, love waves, transducers (ultrasonic), Kurach (T.N.), (et al.), *6332*

Gulyar (A.I.), see Isakhanov (G.V.), *3312*

Gumenyuk (B.P.), see Senchenkov (I.K.), *927*

- cyclic loading, nonlinear mechanics, thermoviscoelasticity, viscoelasticity (dynamic), Kamaukhov (V.G.), *1188*
- thermal effects, vibration (forced), viscoelasticity (dynamic), Kamaukhov (V.G.), (et al.), *5802*

Gunn (M.J.), see Davis (E.H.), *6526*

guns, airplanes, identification, least squares, mathematical models, Kou (R.S.), Glass (B.C.), (et al.), *3176*

Gunther (R.), see Hellat (J.), *6836*

- see Yoshida (A.), *6837*
- see Ahlheim (M.), *10718*

Guntur (R.), friction (rolling), simulation, tires, Sankar (S.), *1456*

Gunzburger (M.D.), see Fix (G.J.), *5038*

Guo (Z.-H.), mathematical methods, tensor methods, three dimensional formulation, *7152*

Gupal (A.M.), lipschitz condition, mathematical programming, minimization, *10054*

Gupalo (I.P.), chemical reactors, chemically reactive flow, unsteady flow, Novikov (V.A.), (et al.), *7720*

- axial flow, chemically reactive flow, dispersed flow, Novikov (V.A.), (et al.), *11500*

Gupalo (Yu.P.), nonlinear systems, particle fluid flow, thermal diffusion, Polyanin (A.D.), (et al.), *816*

- absorption, boundary layer, diffusion, drops, Polyanin (A.D.), (et al.), *8896*

Guppy (J.G.), see Agrawal (A.K.) eds., *2797, book*

Gupta (A.K.), reinforced concrete, shells (stiffened), thin walled structures, *10150*

- see Sinha (S.N.), *10431*
- see Sinha (S.N.), *10434*

Gupta (A.S.), convection, eckert number, grashof number, heat transfer, incompressible flow, plane flow, Popp (I.), (et al.), *1667*

- see Rajagopal (K.R.), *1968*
- see Annapurna (N.), *2882*
- see Chakrabarti (A.), *4840*
- see Rajagopal (K.R.), *9603*

Gupta (D.C.), see Tomar (J.S.), *9318*

- see Tomar (J.S.), *11129*

Gupta (G.D.), elliptical bodies, magneto fluid dynamics, porous media, pressure gradient, tubes, *1773*

Gupta (J.L.), electro fluid dynamics, film thickness, magneto fluid dynamics, squeeze films, Vora (K.H.), *7094*

- bearings (porous metal), electro fluid dynamics, film thickness, magneto fluid dynamics, squeeze films, Patel (K.C.), (et al.), *7095*

Gupta (K.K.), numerical methods, structural response, vibration (free), *6317*

Gupta (M.), dust, laminar flow, noncircular pipes, particle fluid flow, unsteady flow, *8575*

Gupta (M.C.), thermal diffusion, thermal measurements, Hong (S.-D.), (et al.), *5618*

Gupta (M.K.), liquefaction, sand, Prakash (S.), *9923*

Gupta (M.M.), cavities, finite difference methods, navier stokes equation, reynolds number (small), two dimensional flow, *8543*

Gupta (N.K.), design, frequency response, optimal control, *9156*

Gupta (R.), see Charrier (J.M.), *262*

- aerodynamics, fluidized beds, vibration (forced), Mujumdar (A.S.), *1871*
- drilling, elastic waves, optimization, rocks, rods, *9335*

Gupta (R.C.), inlet flow, laminar flow, non newtonian flow, power law fluids, *5441*

Gupta (R.K.), frequency response, plates (rectangular), plates (simply supported), vibration (free), *1277*

- bridges (highway), dynamic analysis, vehicles, Traill-Nash (R.W.), *2349*
- bridges (highway), dynamic loads, vehicles, *4438*

Gupta (R.N.), see Rodkiewicz (C.M.), *599*

- boundary layer, hypersonic flow, supersonic flow, unsteady state, Mukherjee (S.), (et al.), *10427*

Gupta (R.S.), see Banerjee (M.B.), *1012*

Gupta (S.), hybrid simulation, numerical methods, soil structure interaction, Penzien (J.), (et al.), *10848*

- see Chopra (A.K.), *10849*

Gupta (S.C.), channel flow, developing flow, hydrodynamic stability, orr sommerfeld equation, perturbations, two dimensional flow, Garg (V.K.), *3696*

- channel flow, developing flow, hydrodynamic stability, reynolds number (critical), stability theory, Garg (V.K.), *3700*
- see Garg (V.K.), *6676*
- cylindrical bodies, magneto fluid dynamics, pressure gradient, suspensions, transforms, Agarwal (M.C.), *7896*
- annular flow, developing flow, hydrodynamic stability, perturbations, Garg (V.K.), *10464*

Gupta (S.K.), anisotropic media, creep, cylindrical bodies, torsion, Rana (V.D.), *1194*

- aquifers, groundwater, porous media, Lal (D.), (et al.), *5902*

Gupta (S.P.), see Pandit (G.S.), *6519*

- see Gladfelter (R.E.), *9892*

Gur (M.), buckling (local), buckling (plastic), plastic flow, shear spinning, spinning bodies, tubes, Tirosh (J.), *9295*

Gur (Y.), colloids, liquid solid interface, numerical methods, surfactants, Ravina (I.), Babchin (A.J.), *6585*

- dielectrics, electro fluid dynamics, statistical continuum mechanics, Ravina (I.), (et al.), *7643*

Gura (N.M.), design (optimum), shells (of revolution), structural optimization, torsion, *11115*

Guram (G.S.), see Anwar (M.), *61*

- polar fluids, rheology, stagnation point, Smith (A.C.), *4136*

Gurbatov (S.N.), dynamic properties, nonlinear analysis, vibration (random), wave interactions, *5193*

Gurdal (U.), see Sparrow (E.M.), *1691*

Gurev (A.V.), deformation (plastic), low temperature, steel, work hardening, Alkhimenkov (T.B.), *4352*

Gurev (Yu.L.), see Dulnev (G.N.), *5540*

Gurevich (A.V.), compressible flow, planetary atmospheres, plasma, rarefied gases, shock waves, supersonic flow, Paschenko (N.T.), *11406*

Gurevich (B.G.), see Glikman (L.A.), *10274*

Gurevich (M.I.), cavitation flow, jets, separated flow, *2657, book*

Gurkok (A.), see Ertepinar (A.), *1259*

- beams (flexural), beams (plastic), deformation (finite), Hopkins (H.G.), *7323*
- shells (spherical), shells (thick), transient loading, vibration (free), Ertepinar (A.), *11132*

Gurtin (M.E.), continuum mechanics, elasticity (nonlinear), fluid mechanics, rheology, solid mechanics, *4924, book*

- constitutive equations, continuum mechanics, deformation (finite), elasticity (nonlinear), solid mechanics, *5080, book*
- buckling, rods, viscoelastic materials, Mizel (V.J.), (et al.), *10182*

Gururaja (J.), see Srinivas (K.), *7682*

Guruz (K.), coaxial jets, confined jets, furnaces, Ilcali (C.), *2863*

Gurvich (A.S.), inhomogeneities, spectra, turbulence, turbulence (correlations), turbulence model, *2689*

Gusev (M.D.), see Glazkov (V.V.), *817*

Gusev (V.E.), acoustic streaming, acoustics, hydrodynamics, nonlinear characteristics, Rudenko (O.V.), *6915*

- shock waves, sound generation, supersonic flow, transonic flow, Karabutov (A.A.), *11964*

Guseva (E.K.), acoustic measurements, ferrites, nondestructive tests, polycrystalline materials, ultrasonics, void fraction, Kovarskaya (E.Z.), (et al.), *6481*

Gusiatnikov (P.B.), optimization, pursuit, *4285*

Gusinskii (G.M.), capillary flow, filters, stokes flow, Kremer (E.B.), (et al.), *1868*

Gust (G.), anemometers, hot wire, oceanography, velocity measurement, *8984*

gust loads, aeroelasticity, pressure distribution, separated flow, structural response, Forsching (H.), *2912*

- cladding, panels, wind loads, Greenway (M.E.), *3551*
- aerodynamics, bridges (suspension), stochastics, wind loads, Sigbjornsson (R.), Hjorth-Hansen (E.), *3911*
- aerodynamic loads, nonlinear analysis, tails, Stapleford (R.L.), Dimarco (R.J.), *3912*
- aerodynamic loads, crossflow, cylindrical bodies, So (R.M.C.), Savkar (S.D.), *4755*
- chimneys, resonance, vortex shedding, wind loads, Richardson (J.R.), *8835*
- rockets, stochastics, Smith (O.E.), Adelfang (S.I.), *9619*
- dynamic response, magnetic levitation, modeling, suspension systems, vehicles, wind loads, Garg (D.P.), Barrows (T.M.), *10768*
- airplanes, computer aided design, damping, power spectral density, yawing, Noback (R.), Blaauboer (C.), *11843*

Gustafsson (B.), blunt bodies, finite difference methods, shock waves, supersonic flow, Wahlund (P.), *4593*

- asymptotic behavior, hyperbolic equations, magneto fluid dynamics, wave equations, *6080*

Gustavsson (L.H.), see Hultgren (L.S.), *2631*

Gustkiewicz (J.), granular media, mining, modeling, subsidence, Rogowska (J.), *1320*

Gusyatnikov (N.B.), avoidance, differential games, nonlinear theory, synthesis, *2130*

Gutierrez (R.H.), see Laura (P.A.A.), *2330*

- see Laura (P.A.A.), *6097*
- see Laura (P.A.A.), *8729*

Gutjahr (A.L.), see Gelhar (L.W.), *4025*

Gutkowski (W.), see Bauer (J.), *4522*

Gutman (G.N.), see Kravchenko (B.A.), *7953*

Gutsunaev (T.I.), see Borzov (V.B.), *6632*

Guttmann (V.) ed., alloys, high temperature, materials properties, phase changes, *2962, book*

Guvanasen (V.), aquifers, finite difference methods, finite element methods (hybrid), unsteady flow, Volker (R.E.), *1874*

Guy (C.R.), flight control, landing devices, state space techniques, vtol, *1627*

Guy (R.W.), acoustic waves, acoustics (architectural), cavities, modes, panels, transmission, *5774*

Guymon (G.L.), see Hromadka (T.V.) II, *6388*

- see Hromadka (T.V.) II, *8779*

Guz (A.N.), composite materials, composite structures, stability, Babic (I.U.), *354*

- complex variables, contact problems, elasticity (linear), potential theory, *1175*
- elasticity (three dimensional), fluid-structure interaction, hydroelasticity, *2947*
- elastic waves, residual stresses, stonely waves, Zhuk (A.P.), *6329*
- cracks, elastic bodies, residual stresses, *8387*

- deformable bodies, hydroelasticity, stresses, viscous flow, *9010*
- elastic waves, propagation, shells (cylindrical), vibration, *11138*
- fluid-structure interaction, oscillating bodies, reynolds number (small), viscous flow, *11677*
- compressible flow, hydroelasticity, oscillating bodies, spherical bodies, *11686*
- cylindrical bodies, sound generation, transducers, Ryabukha (Yu.N.), (et al.), *11914*

Guza (R.T.), beaches, ocean waves, shallow water, Thorton (E.B.), *977*
- see Flick (R.E.), *1611*

Guzelsu (N.), biomechanics, bones, elastic waves, electroelasticity, piezoelectrics, Saha (S.), *6026*

Guzev (V.V.), beams, dynamic stability, vibration (forced), Nagaev (R.F.), *4419*

Guzova (A.M.), drainage, groundwater, infiltration, reservoirs, *4842*

Gvozdenac (D.D.), see Baclic (B.S.), *5572*
- see Gulic (M.G.), *7886*

Gvozdeva (L.G.), boundary layer, cylindrical bodies, interaction, shock waves, Bazhenova (T.V.), (et al.), *9641*

Gvozdkov (Yu.V.), estimation, frequency response, mathematical models, plasma, *138*

Gwinner (J.U.), aerodynamic interference, combustion chambers, computer programming, diesel engines, thermal measurements, *8803*

Gyarmathy (K.), beams (flexural), bending (elastic), elasticity (linear), shear, shear centre, *2221*

gyrodynamics, measurements (dynamic), pumps, turbomachinery, Godde (E.), *709*
- gyroscopes, optimal control, space vehicles, Oz (H.), Meirovitch (L.), *881*
- dynamic stability, spinning bodies, Singh (S.N.), *1988*
- dynamic analysis, satellites, Hiller (M.), Lehrle (T.), *3082*
- dynamic analysis, hamiltonian equations, kinematics, Tsopa (M.P.), *3096*
- airplanes, spin recovery, Mccormick (B.W.), *3734*
- dynamic analysis, maneuverability, rotating bodies, Chen (J.), Kane (T.R.), *3823*
- dynamic analysis, satellites, Rath (P.C.), Pal (J.), *4142*
- attitude control, communication satellites, geosynchronous orbits, Hsing (J.C.), Ramos (A.), (et al.), *5703*
- attitude control, interferometry, Ellis (J.F.), Creswell (G.A.), *5704*
- dynamic analysis, rotating bodies, Galiullin (I.A.), *6054*
- dynamic stability, rotating bodies, Kovalev (A.M.), *6057*
- dynamic analysis, dynamic response, Liu (Y.-Z.), *6058*
- rotating shafts, vibration (forced), Yanabe (S.), *6304*
- dynamic analysis, gyrocompasses, gyrotheodolites, Voronkov (N.N.), Kutyrev (V.V.), (et al.), *7148*
- dynamic response, rotating bodies, Bogaevskii (V.N.), Ostrer (L.A.), *7149*
- dynamic analysis, rotating bodies, Zakrzhevskii (A.E.), *7150*
- rings, rotating bodies, structural response, vibration (nonlinear), Maewal (A.), *7368*
- control, damping, gyroscopic stabilization, space vehicle structures, stabilization, Joshi (S.M.), Groom (N.J.), *7415*
- cavities, dynamic analysis, spherical bodies, spinning bodies, Nunn (R.H.), Bloomer (J.W.) II, *8098*
- connected bodies, dynamic analysis, energy dissipation, rigid bodies, Rimrott (F.P.J.), *8099*
- dynamic analysis, gyroinertial systems, measurements (dynamic), Zakharin (F.M.), Kharitonov (M.A.), *8101*
- algorithms, attitude control, Mckern (R.), Musoff (H.), *8846*

gyroscopes, gyrodynamics, optimal control, space vehicles, Oz (H.), Meirovitch (L.), *881*
- dynamic analysis, error, gyrocompasses, identification, mathematical models, Potemkin (A.E.), *1989*
- detection, failure, reliability analysis, Kerr (T.H.), *2096*
- calibration, electrostatic gyro, estimation, kalman filters, mathematical models, navigation, strapdown systems, Blanchard (R.L.), *2162*
- alignment, inertial guidance, Bar-Itzhack (I.Y.), Porat (B.), *2165*
- control, fiber optics, polarization, Kintner (E.C.), *3223*
- design (optimum), grinding, surface profiles, synthesis, tools, Osman (M.O.M.), Sankar (S.), (et al.), *10370*

gyroscopes (rotary), modes, vibration (random), Kuzman (V.M.), *1069*

gyroscopic stabilization, dynamic stability, perturbation methods, Kuzmina (L.K.), *15*
- perturbation methods, stability theory, Vozlinskii (V.I.), *1074*
- control, damping, gyrodynamics, space vehicle structures, stabilization, Joshi (S.M.), Groom (N.J.), *7415*

H

Ha (T.T.), see Gibson (J.A.), *109*
Haas (C.J.), bolts, rocks, roof bolts, strain gages, triaxial tests, *6405*
Haas (D.B.), see Shook (C.A.), *11498*
Haas (W.), finite element techniques, three dimensional flow, turbomachinery, Keck (H.), *7801*
Haasz (A.A.), gages, particle fluid flow, precipitation, snow, wind tunnels (environmental), Raimondo (S.), *9002*
Habault (D.), acoustic waves, ground effect, impedance, reflection, sound propagation, surface waves, Filippi (P.J.T.), *8965*
Haber (R.), identification, linearization, nonlinear systems, time varying systems, Kmetty (P.), (et al.), *118*
- see Keviczky (L.), *206*
- computer programming, finite element techniques, graphical methods, mathematical methods, mesh generation, Shephard (M.S.), (et al.), *6106*

Haber (S.), boundary conditions, drops, interface phenomena, stokes flow, Hetsroni (G.), *1860*
Habermann (H.), bearings (magnetic), control, servomechanisms, Liard (G.), *4903*
Habig (K.-H.), bearings (liquid lubricated), friction, lubrication (boundary), wear, Broszeit (E.), (et al.), *7084*
Hablani (H.B.), artificial satellites, damping, flexible bodies, gravitational stabilization, lyapunov's functions, Shrivastava (S.K.), *6886*
- dynamic behavior, flexible bodies, modes, space vehicle structures, vibration, *9309*

Hack (J.J.), see Schubert (W.H.), *5932*
Haddad (A.H.), see Sebald (A.V.), *4284*
- see Tugnait (J.K.), *4320*

Haddara (M.R.), nonlinear analysis, ocean waves, rolling motion, ship motion, *8038*
- control stability, control surfaces, ocean waves, ship motion, surge, unsteady flow, *8042*

Haddow (J.B.), see Moodie (T.B.), *6330*
- see Moodie (T.B.), *6339*
- see Moodie (T.B.), *6913*

Hadid (H.A.), see Lynn (P.P.), *3132*
- bending, shells, shells (parabolic velaroidal), Lynn (P.P.), *3300*

Hadjidimos (A.), iterative methods, linear equations, matrices, relaxation methods, *5009*
Hadley (G.R.), see Hohlfelder (J.J.), *4030*
Haferkorn (P.), design, digital control, robotics, Schwarz (W.), *9187*
Hafez (M.M.), see Wellford (L.C.) Jr., *6629*
Haftka (R.T.), bending elements, design (optimum), finite element techniques, optimization, plates, Prasad (B.), *3516*
- design (optimum), modeling, railroad cars, railroads, vehicles, Prasad (B.), *6544*
- see Prasad (B.), *6552*
- insulation, sensitivity, structural analysis, thermal effects, *7606*

Hagan (T.O.), fracture, joints, mining, photography, rocks, *426*
Hagedorn (P.), dynamic properties, nonlinear mechanics, vibration (nonlinear), *2314, book*
Hagele (J.), aerosols, experimental results, jets, nozzles, *7728*
Hageman (L.A.), gradient techniques, iterative methods, matrices (sparse), Young (D.M.), *4177, book*
Hagen (K.), gas turbines, rotors, thermoelasticity (nonlinear), thermoelasticity (transient), Sandsmark (N.), *8872*
Hager (R.W.), design, dynamic analysis, *392*
Haggstrom (R.P.), beams (cantilever), measurements (dynamic), strain gages, tension, transducers (load), *10314*
Hagio (T.), see Hyakutake (H.), *3442*
Hagiwara (Y.), atmosphere, atmospheric circulation, convection, currents, gravity, *7064*
- earth, gravity, heat transfer, transformation, *8012*

Hagoort (J.), drainage, gravity, oil removal, *5859*
Hah (C.), rotors, turbulence (freestream), wakes, Lakshminarayana (B.), *2663*
- trailing edge, turbulence (structure), velocity profiles, wakes, Lakshminarayana (B.), *9596*

Hahn (E.J.), see Simandiri (S.), *3576*
Hahn (G.T.) eds., crack arrest, fracture criteria, fracture toughness, material testing, pipelines, pressure vessels, Kanninen (M.F.), *8415, book*
Haidar (N.H.S.), experimental methods, mathematical methods, rethermalization, singular integral equations, *4164*
Haidvogel (D.B.), circulation, currents, eddies, hydrodynamic stability, oceanography, Holland (W.R.), *4875*
- see Holland (W.R.), *5920*
- eddy diffusivity, rotating fluids, turbulence (geophysical), vorticity, Held (I.M.), *9004*

Haimes (Y.Y.), see Chankong (V.), *11083*
Hain (E.), see Seyfarth (K.), *7252*
Hain (K.), design, four bar linkage, kinematics, linkages, mechanisms, *4560*
- design, four bar linkage, kinematics, mechanisms (planes), *5376*

Haines (C.R.), asymptotic methods, flow irregularities, kelvin waves, ocean waves, reflection, wave generation, *1603*
Haines (J.L.), see Bailey (C.D.), *355*
Haines (N.F.), acoustic properties, flaw detection, reflection, ultrasonics, Langston (D.B.), *3940*
Haines (P.A.), see Keller (J.L.), *10478*
Haisler (W.E.), see Allen (D.H.), *2973*
Hajela (P.), see Pierson (B.L.), *7907*
Hajji (A.), see Beavers (G.S.), *8938*
Hajnal (M.), man machine systems, mathematical models, process control, simulation, stochastic systems, Revesz (G.), *8172*
Hakala (M.K.), collapse, finite element techniques, icebreakers, nonlinear analysis, ship structures, *9005*
Hald (O.H.), convergence, euler equations, mathematical methods, reynolds number (high), vorticity, *1121*
Haldar (K.), aerodynamics, airfoils, compressible flow, numerical methods, transonic flow, *3537*
Hale (A.L.), see Meirovitch (L.), *2528*
Hale (D.A.), fatigue, pressurized pipes, steel, Wilson (S.A.), (et al.), *535*
half space, anisotropic media, axisymmetric loading, boundary value problems, punch problems, Dhawan (G.K.), *247*
- adhesion, anisotropic media, contact stresses, indentation, Dhawan (G.K.), *250*
- elasticity (nonhomogeneous), stress concentration, winkler foundation, Calladine (C.R.), Greenwood (J.A.), *257*
- discontinuities, elastic waves, scattering, Neerhoff (F.L.), *404*
- elasticity (nonhomogeneous), inhomogeneities, stress concentration, Fujita (T.), Tsuchida (E.), *1177*
- elastic foundations, elasticity (linear), layered media, Teshigawara (S.), *1178*
- contact problems, stamping, Aleksandrov (V.M.), Filippova (L.M.), *1183*
- boundary elements, punch problems, semi infinite media, Telles (J.C.F.), Brebbia (C.A.), *1185*
- elastic waves, internal sources, Brock (L.M.), *1293*
- dynamic behavior, elastic waves, Bedding (R.J.), Willis (J.R.), *1295*
- impact, similarity methods, Burenin (A.A.), Lapygin (V.V.), *1310*
- elasticity (linear), inclusions, interference fits, Stagni (L.), *2211*
- contact problems, inclusions, Gladwell (G.M.L.), Hara (T.), *2222*
- cavities, elastic waves, scattering, Bostrom (A.), Kristensson (G.), *2368*
- cracks, elasticity (linear), punch problems, Stallybrass (M.P.), *3232*
- contact problems, elasticity (nonhomogeneous), Singh (B.M.), Rokne (J.G.), (et al.), *3243*
- indentation, punch problems, Shibuya (T.), *3244*
- boundary value problems, punch problems, shear loading, Hara (T.), Shibuya (T.), (et al.), *3245*
- elastoplasticity, indentation, residual stresses, shakedown structures, Hills (D.A.), Ashelby (D.W.), *3263*
- elastic waves, elasticity (three dimensional), Payton (R.G.), *3390*
- reservoirs, singularities, streamlines, viscous flow, Hasegawa (E.), Fukuda (H.), *3618*
- plane surfaces, stokes flow, viscous flow, Mukherjee (S.), Bhattacharyya (P.), *3619*
- bgk model, evaporation, Siewert (C.E.), Thomas (J.R.) Jr., *3644*
- deformation (plastic), plastic waves, thermoplasticity, Nagrelli (V.E.), *3996*
- anisotropic media, boundary integral methods, elasticity (linear), green function, Kobayashi (S.), Nishimura (N.), *4344*
- bonded joints, contact problems, diffusion bonding, elastoplasticity, Kharitonova (A.N.), Sergeev (A.V.), (et al.), *4565*
- fluid-structure interaction, gravity waves (finite depth), propagation, unsteady flow, Tkachenko (V.A.), *4663*
- acoustic waves, moving surfaces, reflection, sound fields, spectra, Hwang (Y.F.), Tichy (J.), *4763*
- acoustic waves, reflection, sound propagation, Nusayr (A.-M.), *4781*
- elastic foundations, elasticity (linear), Kaviakan (M.V.), Mikhailov (A.M.), *5075*
- elasticity (linear), layered media, Amenzade (Yu.A.), *5078*
- elastodynamics, seismic waves, Koshman (V.P.), *5079*
- inclusions, spherical bodies, torsion, Dhaliwal (R.S.), Singh (B.M.), (et al.), *5090*
- membranes, reinforced bodies, thermoelasticity (steady), Tamate (O.), Sekine (H.), (et al.), *5796*
- anisotropic media, displacement, free boundary, seismic waves, Koseryev (G.L.), Makeyeva (L.K.), (et al.), *5869*
- elastic bodies, rayleigh waves, seismic waves, Yakovenko (M.G.), *5870*
- cylindrical bodies, interface phenomena, sh waves, Gamer (U.), *6331*
- rayleigh waves, sand, submerged bodies, Vardoulakis (I.), *6334*
- bonding, interface cracks, sh waves, Srivastava (K.N.), Palaiya (R.M.), (et al.), *6343*
- cylindrical bodies, reflection, torsional waves, Wada (H.), *6353*
- nondestructive tests, piezoelectric devices, transducers, ultrasonics, Kasatkin (B.A.), Pavin (N.Ya.), *6485*
- interface phenomena, layered media, liquids, sound propagation, Bucker (H.P.), *6918*
- layered media, porous media, sound propagation, Attenborough (K.), Hayek (S.I.), (et al.), *6919*
- acoustic waves, impulse, reflection, Chambers (L.G.), *6930*
- boundary conditions, thermoelasticity, Wilms (E.V.), Cohen (H.), *6939*

- analysis, layered media, rayleigh waves, seismic waves, Cara (M.), Minster (J.B.), (et al.), *7020*
- foundations, seismic loading, soil structure interaction, Hamidzadeh-Eraghi (H.R.), Grootenhuis (P.), *7037*
- contact problems, elasticity (three dimensional), green function, Jentsch (L.), *7261*
- gravity, holes, stress analysis, tunnels, Spencer (S.E.), Sinclair (G.B.), *7264*
- boundary value problems, cavities, creep, inclusions, Anderson (C.A.), *7276*
- cylindrical bodies, elastoplasticity, rolling, Zarka (J.), Frelat (J.), *7295*
- elastic waves, impact, lamb problem, Koshman (V.P.), *7421*
- heat sources, semi infinite media, thermal stresses, thermoelasticity (steady), Chowdhury (K.L.), Glockner (P.G.), *7948*
- porous media, vortex flow, Vaisman (A.M.), *7980*
- inclusions, seismic waves, sh waves, stress analysis, Gamer (U.), *8004*
- boundary elements, elastoplasticity, Telles (J.C.F.), Brebbia (C.A.), *8216*
- moving loads, transient effects, Watanabe (K.), *8331*
- dislocations, elastic waves, Brock (L.M.), *8335*
- screw dislocations, viscoelastic materials, Brock (L.M.), *8338*
- contact stresses, deflections, elasticity, gear teeth, Terauchi (Y.), Nagamura (K.), *8472*
- conduction (unsteady), darcy flow, diffusion, mass transfer, Nilson (R.H.), *8778*
- contact problems, punch problems, thermoelasticity, Comninou (M.), Barber (J.R.), (et al.), *8870*
- elastoplasticity, thermal shock, thermal waves, Nagrelli (V.E.), *8882*
- couplings, rayleigh waves, scattering, viscoelastic fluids, Angel (Y.C.), Bogy (D.B.), *9338*
- interface phenomena, love waves, prestressed structures, viscoelastic materials, Chattopadhyay (A.), De (R.K.), *9342*
- anisotropic media, punch problems, Dhawan (G.K.), *10142*
- buckling, elastoviscoplasticity, surface effect, Horii (H.), Nemat-Nasser (S.), *10184*
- rayleigh waves, scattering, surface flaws, wave generation, Witos (F.), *10229*
- nonhomogeneous media, propagation, sh waves, Kielczynski (P.), *10230*
- galerkin method, layered media, surface waves, viscoelasticity, Chiroiu (V.), Nicolae (V.), *10234*
- elastic waves, layered media, reflection, scattering, Coen (S.), *10236*
- layered media, torsional waves, vibration, viscoelastic materials, Martincek (G.), *10238*
- green function, layered media, Eatwell (G.P.), Simmons (J.A.), (et al.), *10239*
- anisotropic media, elastic waves, propagation, Musgrave (M.J.P.), Payton (R.G.), *11164*
- anisotropic media, elastic waves, propagation, vibration, Osipov (I.O.), *11166*
- hydroelasticity, layered media, surface waves, Gogna (M.L.), *11697*

Hall (A.J.), see Thorpe (S.A.), *11521*
Hall (C.A.), see Amit (R.), *3636*
Hall (C.D.), see Ball (D.J.), *2585*
Hall (C.L.), see Kamman (J.H.), *9668*
Hall (F.L.), see Taylor (S.M.), *913*
Hall (P.), annuli, hydrodynamic stability, laminar flow, rotating cylinders, *11496*
Hall (R.E.), currents, hydrodynamic stability, rossby waves, *10857*
Hall (W.E.) Jr., see Dehoff (R.L.), *2186*
hall effect, generators, magneto fluid dynamics, nonhomogeneous media, nonlinear analysis, Kuo (S.), Cheo (B.), (et al.), *852*

- boundary layer, disks, magneto fluid dynamics, torsional waves, Krishna (D.V.), Prasada Rao (D.R.V.), *2883*
- bearings (ball), design, experimental methods, Kawakita (K.), Halling (J.), *4113*
- couette flow, heat transfer, magneto fluid dynamics, rotating disks, Vidyanidhi (V.), Krishnam Raju (G.), (et al.), *4745*
- magneto plasma dynamics, models, plates (perforated), rotating fluids, Shivamoggi (B.K.), *8817*
- acceleration, laplace transform, magneto fluid dynamics, porous surfaces, Kant (R.), *8819*
- equilibrium, generators, magneto fluid dynamics, nonuniform flow, Rosenbaum (M.), Shamma (S.E.), (et al.), *8830*
- korteweg de vries equation, plasma, turbulence (transport), waves, Granik (A.T.), *10758*
- acceleration, magneto plasma dynamics, panels (flat), unsteady flow, Borkakati (A.K.), Pop (I.), *11815*

Hallauer (W.L.) Jr., control, modal control, sensitivity, space vehicle structures, structural response, vibration, Barthelemy (J.-F.M.), *7257*
Halling (J.), see Kawakita (K.), *4113*
Halliwell (A.R.), froude number, hydraulics, models, particle size, sewerage, Saul (A.J.), *7544*

- beaches, breakers, surface waves, Machen (P.C.), *12072*

Haloulakos (V.E.), characteristic methods, coding, fluidics, networks, unsteady flow, *5487*
Hamabata (H.), see Namikawa (T.), *8828*
Hamada (M.), plates (perforated), stress concentration, strips, Mizushima (I.), (et al.), *3234*

- beams (cantilever), beams (variable cross section), design (optimum), dynamic programming, Seguchi (Y.), (et al.), *8444*

Hamaguchi (Y.), see Shimokawa (T.), *6203*
Haman (K.E.), clouds, convection (free), heat transfer (atmospheric), Niewiadomski (M.), *9931*
Hamblin (P.F.), see Imberger (J.), *8519*
Hamel (F.), acoustic emission, cyclic loading, high cycle fatigue, steel, Bailon (J.P.), (et al.), *10318*
Hamidzadeh-Eraghi (H.R.), foundations, half space, seismic loading, soil structure interaction, Grootenhuis (P.), *7037*
Hamill (T.A.), see Dunwoody (N.T.), *6789*
Hamilton (E.L.), modeling, ocean bed, underwater acoustics, *5748*
Hamilton (J.), drag, harmonic analysis, ocean waves, offshore structures, *7676*
Hamilton (J.F.), see Crocker (M.J.), *5651*
hamilton principle, equilibrium, inhomogeneities, linear theory, plasma, Lewis (H.R.), Symon (K.R.), *1780*

- dynamic analysis, stability theory, Bailey (C.D.), *2329*
- internal waves, stratified flow, Voronovich (A.G.), *4049*
- composite materials, dynamic analysis, elasticity (nonhomogeneous), variational methods, Willis (J.R.), *4174*
- shells (sandwich), vibration (forced), Dubenets (V.G.), *4436*
- eulerian approach, lagrangian approach, variational methods, viscous flow, Ecer (A.), *5012*
- ocean air interaction, ocean waves, Goncharov (V.P.), *8999*
- dynamic analysis, linear systems, variational methods, Sarlet (W.), Engels (E.), (et al.), *9086*
- functional analyis, tensor methods, variational methods, vector methods, Reddy (J.N.), Rasmussen (M.L.), *9090*
- periodic orbits, restricted three body problem, series expansion, Hitzl (D.L.), Levinson (D.A.), *9812*
- beams (sandwich), vibration (forced), Simkova (O.), Markus (S.), *10222*

hamiltonian equations, integration, mathematical methods, Kozlov (V.V.), Kolesnikov (N.N.), *29*

- dynamic analysis, mathematical methods, Churchill (R.C.), Rod (D.L.), *1078*
- adiabatic processes, particle dynamics, plasma, theory, Ott (E.), *1777*
- kepler orbits, n body problems, periodic orbits, restricted three body problem, Meyer (K.R.), *1786*
- dynamic stability, stability theory, Leipholz (H.H.E.), *1987*
- bifurcation, periodic orbits, restricted three body problem, Bottkol (M.), *1997*
- bifurcation, functional analyis, group theory, marsden (j.e.), *2001, book*
- eigenvalue problems, korteweg de vries equation, mathematical methods, Alber (S.I.), *2005*
- artificial satellites, averaging, oblateness, Claes (H.), *2920*
- dynamic analysis, gyrodynamics, kinematics, Tsopa (M.P.), *3086*
- differential geometry, dynamics, mathematical methods, *3095, book*
- canonical elements, mathematical methods, orbit mechanics, Bond (V.R.), Janin (G.), *3919*
- perturbation theory, planetary satellites, von zeipel method, Marchal (C.), *4761*
- resonance, second order analysis, stability theory, Ivanov (A.P.), Sokolskii (A.G.), *4947*
- dynamics, lyapunov's functions, stochastic systems, Benettin (G.), Galgani (L.), (et al.), *4954*
- bars, dynamic analysis, elastic bodies, Buculei (M.), Bagnaru (D.), *6052*
- equations of motion, kepler orbits, mathematical methods, transformation, Leach (P.G.L.), *6064*
- contact transformation, dynamics, group theory, n body problems, Bryant (J.), *6873*
- collision models, periodic orbits, three body problem, Losco (L.), Marchal (C.), *7914*
- attitude control, resonance, space vehicles, spinning bodies, Cochran (J.E.), Holloway (H.E.), *7923*
- dynamic analysis, nonlinear analysis, Vujanovic (B.), *8095*
- chaos, computing techniques, spectra, Blacher (S.), Perdang (J.), *8107*
- dynamic analysis, mathematical methods, Baruch (M.), Riff (R.), *10007*
- collision models, oscillators, perturbation theory, two body problem, Terry (P.W.), *10772*

Hamm (C.W.), see Cook (R.O.), *6320*
Hamm (J.R.), combustion, combustion chambers, energy conservation, fluidized beds, solid wastes, Keairns (D.L.), *10623*
Hammarstrom (L.G.), digital control, optimal control, time delay systems, Gros (K.S.), *1148*
Hammel (J.W.), computing techniques, elastoplasticity, finite element techniques, fracture, hardening, Bodisco (U.V.), (et al.), *4502*
Hammitt (F.G.), cavitation, damage (cumulative), erosion, prediction, De (M.K.), *5978*

- see He (J.-G.), *9516*
- condensation (dropwise), condensation (filmwise), erosion, steam, steam turbines, Krzeczkowski (S.), (et al.), *9780*

Hammond (J.K.), dynamic response, oscillations, roughness, vehicles, Harrison (R.F.), *6543*
Hammond (R.N.), see Ellis (R.A.), *6851*
Hammons (M.A.), see Reeves (W.A.), *6834*
Hampton (L.D.), see Mitchell (S.K.), *5763*

- see Anderson (A.L.), *6899*

Hamrock (B.J.), bearings (ball), fatigue, lubrication (elastohydrodynamic), lubrication (hydrodynamic), rolling contact, Dowson (D.), *9032, book*

Hamza (E.A.), lubricants (liquid), lubrication (hydrodynamic), reynolds number, squeeze films, Macdonald (D.A.), *5980*

Han (C.D.), see Chin (H.B.), *8492*

- birefringence, polymers, secondary flow, Yoo (H.J.), *8493*

Han (J.-C.), bubble dynamics, immiscible fluids, nucleation, two phase flow, Yang (W.-J.), *9883*

Han (K.S.), composite materials, crack propagation, glass fibers, interlaminar stresses, low temperature, Koutsky (J.), *10309*

Han (K.W.), see Ling (Y.L.), *693*

Han (T.), elliptic equations, finite difference methods, interpolation, reynolds number (high), Humphrey (J.A.C.), (et al.), *6625*

Han (T.Y.), gates, hodograph methods, weirs, Chow (W.L.), *3600*

Hanaki (K.), deformation, dies, drawing, stress strain relationships, Kato (K.), *1344*

Hanamura (Y.), aerodynamic coefficients, aerodynamic loads, blades, cascades, oscillating bodies, Tanaka (H.), (et al.), *2909*

Hanaoka (M.), columns, design (optimum), dynamic stability, Washizu (K.), *9441*

Hanaor (A.), buckling, ductility, force limiting devices, trusses, Schmidt (L.C.), *1448*

Hanawa (J.), convection (forced), heat transfer, laminar flow, plane flow, transient effects, *2788*

- boundary layer (thermal), boundary layer (turbulent), convection, heat transfer, plane flow, transient effects, turbulent flow, *3781*

Hancock (G.J.), see Javed (M.A.), *2727*

- beam columns, buckling (torsional), lateral stability, Bradford (M.A.), (et al.), *3331*
- beams (thin section), buckling, columns, *10171*

Hancox (W.T.), ducts, liquid gas mixture, one dimensional flow, transient, two phase flow, Ferch (R.L.), (et al.), *1848*

Hancy (J.P.), see Schaffar (M.), *7934*

Handelman (G.H.), see Mclaughlin (J.R.), *1999*

Hane (C.E.), convection (forced), cooling towers, evaporation, waste heat, *1906*

Hangai (Y.), geometric nonlinearities, stability, stability (numerical), stiffness matrix, subsonic flow, *330*

Hanin (M.), see Ronen (T.), *7789*

Hankey (W.L.), see Mikhail (A.G.), *7688*

- see Shang (J.S.), *7794*

Hanna (M.C.), see Khader (M.S.), *2818*

Hansen (H.-J.), impact, ocean waves, pitching, ship slamming, vibration, *5962*

Hansen (J.C.), see Byskov (E.), *3323*

Hansen (J.S.), see Hui (D.), *329*

- see Etkin (B.), *11842*

Hansen (S.B.), cylindrical bodies, elliptical bodies, oscillating bodies, unsteady flow, visualization, Taneda (S.), *4684*

Hansen (S.O.), chimneys, vibration (flow induced), vortex shedding, wind loads, *3905*

Hanson (J.N.), boundary value problems, computer algebra, differential equations, newton method, *6098*

Hanson (M.E.), crack propagation, fracture mechanics, gas wells, hydraulics, interface cracks, reservoir engineering, Shaffer (R.J.), (et al.), *5311*

- computing techniques, continuum mechanics, crack propagation, fracture, geomechanics, hydraulic fracturing, stress intensity factor, Shaffer (R.J.), *8434*

Hanstead (P.D.), digital simulation, microprocessors, nondestructive tests, synthesis, ultrasonics, *9423*

Hanus (J.B.), elliptical holes, holes, photoelasticity, stress concentration, Burger (C.P.), *1389*

Hanzawa (H.), quicksand, stability, strength, *6378*

- bimodulus materials, elastodynamics, interface cracks, stress intensity factor, waves, Kishida (M.), (et al.), *6451*

Haque (M.I.), see Lipson (S.L.), *1424*

Hara (T.), see Gladwell (G.M.L.), *2222*

- boundary value problems, half space, punch problems, shear loading, Shibuya (T.), (et al.), *3245*
- edge cracks, infinite medium, shear loading, stress intensity factor, *9404*

Harada (M.), bearings (thrust), lubrication (hydrostatic), shear flow, turbulent flow, Aoki (H.), (et al.), *3043*

Harada (T.), dynamic response, soil structure interaction, structural response, Kubo (K.), (et al.), *2345*

Harakawa (K.), see Takahashi (K.), *7297*

harbors, hydraulics, models, sedimentation, Letter (J.V.) Jr., Mcanally (W.H.) Jr., *1500*

- finite element techniques, nonlinear waves, shallow water, tsunami, Lepelletier (T.G.), *6609*
- berthing, docks, jetties, mathematical models, ship maneuvers, ships, Fontijn (H.L.), *7074*
- eigenvalue problems, gravity waves (surface), wind-wave interaction, Papa (L.), *9620*

Hardcastle (K.), see Alben (R.), *3829*

hardening, abrasion, tillage implements, wear, Wingate-Hill (R.), *1934*

- differentiation, hardening (kinematic), incremental analysis, plasticity, Kaneko (K.), *3267*
- cracks, penalty function, Yagawa (G.), Aizawa (T.), (et al.), *3459*
- computing techniques, elastoplasticity, finite element techniques, fracture, Hammel (J.W.), Bodisco (U.V.), (et al.), *4502*
- anisotropy, porous media, rocks, Celle (C.C.), Cheatham (J.B.), *5265*
- creep, cyclic loading, strain, stress ratio, stresses, Yoshida (F.), Ohta (I.), (et al.), *5329*
- creep, dislocations, grain boundaries, stainless steels, stress analysis, Harris (M.), Davies (T.J.), *5332*
- blades, cavities, turbines, Kravchenko (B.A.), Trofimov (N.G.), (et al.), *5801*
- damage, fatigue, interaction, steel, Chaboche (J.-L.), Kaczmarek (H.), (et al.), *7482*
- conduction (heat), cylindrical bodies, heat addition, inverse problems, mathematical models, Glasko (V.B.), Kulik (N.N.), (et al.), *8734*

Harding (C.F.), see Simmons (H.C.), *5655*

Harding (J.E.), axial loading, pressure, shells (cylindrical), shells (stiffened), *9294*

hardness, flexure, gears, strength, Bazhenov (V.G.), Kravchenko (A.A.), (et al.), *1471*

- abrasion, erosion, particle size, wear, Misra (A.), Finnie (I.), *1928*
- roughness, surfaces, wear, Ryzhov (E.V.), Gorlenko (O.A.), *1932*
- contact stresses, fatigue, gears (spur), surfaces, Flamand (L.), Berthe (D.), (et al.), *2562*
- abrasion, brittle materials, ductility, friction (sliding), wear, Beckmann (G.), Westermier (G.), *4106*
- ductility, steel, wear, Sorokin (G.M.), Oleinikov (N.E.), (et al.), *4516*
- fretting, oxidation, steel, wear, Kayaba (T.), Iwabuchi (A.), *4894*
- abrasion, heat treatment, mechanical properties, steel, wear, Sorokin (G.M.), Milancheva (N.V.), *5334*
- indentation, plastic flow, residual stresses, Rubenstein (C.), *6480*
- bearings (ball), eddy currents, heat treatment, inspection, transducers, Melnikov (I.V.), Savikovskii (L.A.), (et al.), *6491*
- machinery, particles, wear, Grosse (S.), *8053*
- composite materials, crystals, glass fibers, indentation, Miyata (N.), Jinno (H.), *8219*
- elastic constants, elastoplasticity, indentation, Lawn (B.R.), Howes (V.R.), *8433*
- failure, rolling contact, thermal effects, wear, Rozeanu (L.), Pnueli (D.), *9022*
- contact stresses, friction (sliding), lubrication (hydrodynamic), scoring, viscosity, Drozdov (Yu.N.), Archegov (V.G.), *10888*

Hardt (D.E.), gait, human body, locomotion, rigid bodies, Mann (R.W.), *9056*

Hardt (S.L.), brownian motion, diffusion, mass transfer, *1953*

Hardy (G.H.), see Hindson (W.S.), *3735*

Haren (P.), diffraction, energy conversion, floating bodies, ocean waves, Mei (C.C.), *9013*

Hariharan (S.), non newtonian flow, stresses (normal), thin films, *6573*

Harinath (K.S.), shells (conical), thermal stresses, thermoelasticity (steady), *8873*

Harker (K.J.), electric effects, ocean, sound generation, wave generation, Fraser-Smith (A.C.), *5720*

Harley (P.J.), see Fletcher (R.), *9100*

Harloff (G.J.), crossflow, fans, modeling, propulsion, Wilson (D.R.), *1634*

Harlow (D.G.), computing techniques, convergence, fibers, probability, Phoenix (S.L.), *5138*

Harman (R.T.C.), cycles, design, gas turbines, heat engines, thermodynamic processes, *2870, book*

Harmens (A.), equations of state, thermodynamic properties, vapor pressure, Knapp (H.), *717*

harmonic analysis, sampling, special functions, walsh functions, Kawamura (M.), Tanaka (S.), *2022*

- design (optimum), elasticity, inclusions, Richards (R.) Jr., Bjorkman (G.S.) Jr., *2510*
- flaw detection, nondestructive tests, transducers (ultrasonic), Pokrovskii (A.D.), *7581*
- drag, ocean waves, offshore structures, Hamilton (J.), *7676*
- interaction, nonlinear analysis, resonance, wave interactions, Verheest (F.), *8114*

harmonic balance, describing function, nonlinear systems, nonlinear theory, oscillations, Obabkov (V.K.), *120*

- analytical methods, estimation, harmonic linearization, oscillations, Volovodov (S.K.), Rozenvasser (E.N.), *4240*
- frequency domain techniques, harmonic linearization, nonlinear systems, oscillations, Pismennyy (I.L.), *4243*
- dynamic response, stability theory, Takahashi (K.), *8288*

harmonic waves, aerodynamic loads, airfoils, incompressible flow, oscillating bodies, Filipkowski (S.), Nowak (M.), *3904*

- acoustics, estimation, Eddy (T.W.), *3960*
- layered media, viscoelastic waves, Tanaka (K.), Kon-No (A.), *4448*
- layered media, viscoelastic waves, Tanaka (K.), Kon-No (A.), *4449*
- anisotropic media, waveguides, Fraser (W.B.), *4450*
- acoustics, boundary value problems, elliptic equations, time dependence, Neittaanmaki (P.), Picard (R.), *5026*
- love waves, nonhomogeneous media, Bukchin (B.G.), Levshin (A.L.), *6342*
- anisotropy, composite materials, dynamic behavior, fibers, orthotropic materials, Nemat-Nasser (S.), Yamada (M.), *7408*
- columns, gravity, hydrodynamic stability, liquids, Malik (S.K.), Singh (M.I., *7740*

- composite materials, finite element techniques, layered media, variational methods, Minagawa (S.), Nemat-Nasser (S.), (et al.), *8148*
- dynamic analysis, plates (sandwich), shells (sandwich), Khoroshun (L.P.), Ivanov (Yu.A.), *9327*
- composite materials, elastic waves, fibers, Hlavacek (M.), *9344*
- elastic waves, laminates, Shah (A.H.), Datta (S.K.), *9345*
- capillary waves, gravity waves (surface), phase velocity, wilton ripples, Reeder (J.), Shinbrot (M.), *9623*
- edge effects, propagation, waveguides, wedges, Grinchenko (V.T.), Meleshko (V.V.), *10228*
- composite materials, layered media, NematNasser (S.), Yamada (M.), *11169*
- elastodynamics, finite element techniques, Murakami (H.), Shioya (S.), (et al.), *11173*

Harnach (R.), cooling towers, shells, wind loads, Niemann (H.-J.), *1450*

Harper (E.Y.), acoustic measurements, arrays, ocean, underwater acoustics, *5754*
- ocean waves, singularities, spectra, *6696*

Harper (R.A.), see Frasca (P.), *3073*

Harpole (G.M.), drops, evaporation, flames (laminar), *3848*
- absorption, drops, evaporation, radiant interchange, *8741*

Harr (M.E.), see Athanasiou-Grivas (D.), *9359*

Harriott (P.), see Simone (S.), *7012*

Harris (D.L.), see Margules (G.S.), *1963*

Harris (G.R.), piston driven flow, sound generation, vibration (flow induced), *5776*

Harris (J.G.), cracks, diffraction, elastic waves, *402*

Harris (J.K.), biomechanics, birefringent materials, photoelasticity (dynamic), *481*

Harris (M.), creep, dislocations, grain boundaries, hardening, stainless steels, stress analysis, Davies (T.J.), *5332*

Harris (M.J.), see Wittenberg (L.J.), *6819*

Harris (N.S.), diffusion pumps, pumps, vacuum, *1531*

Harris (S.D.), flow measurement, shear flow, turbulence, turbulent flow, velocity profiles, Williamson (J.W.), (et al.), *660*

Harrison (A.W.), see Mathai (C.V.), *5960*

Harrison (B.K.), catalyzed ignition, combustion, reactors, tubes, Ernst (W.R.), *1743*

Harrison (C.H.), ocean bed, reflection, sound propagation, underwater acoustics, *4790*

Harrison (D.), see King (D.F.), *5847*

Harrison (D.E.), dissipation, eddies, oceanography, *8022*
- circulation, eddy diffusivity, oceanography, vorticity, *8977*

Harrison (H.D.), see Ahlbeck (D.R.), *16*

Harrison (J.V.), inertial guidance, mission analysis, navigation, Adams (M.G.), (et al.), *5710*

Harrison (R.), see Malkin (F.), *487*
- ocean waves, power generation, tides, Smith (K.G.), (et al.), *8021*

Harrison (R.F.), see Hammond (J.K.), *6543*

Harrison (R.M.), air pollution, concentration, dispersion, plumes, prediction, Mccartney (H.A.), *11523*

Harrop (L.P.), crack growth, crack initiation, crack opening displacement, finite element techniques, *4503*

Hart (R.W.), linear theory, potential flow, three dimensional flow, vorticity, *5402*

Harten (A.), conservation laws, dynamic analysis, finite difference methods, hyperbolic equations, Tal-Ezer (H.), *6086*
- burgers equation, conservation laws, hyperbolic equations, random search, Lax (P.D.), *8132*

Hartje (J.), see Baumer (K.), *8804*

Hartl (H.), see Pittr (J.), *2076*

Hartley (J.G.), heat transfer, mass transfer, moisture, soils, thermal instability, transient, Black (W.Z.), *830*

Hartley (P.), deformation (plastic), elastoplasticity, finite element techniques, forging, materials properties, Sturgess (C.E.N.), (et al.), *2394*
- finite element techniques, friction, mechanical properties, upset forging, Sturgess (C.E.N.), (et al.), *5275*
- axial loading, cylindrical bodies, forging, friction (solid solid), Sturgess (C.E.N.), (et al.), *6254*

Hartmann (F.), boundary integral methods, discontinuities, elasticity (three dimensional), *8185*

Hartmann (W.), see Franz (G.), *9421*

Hartnett (J.P.), see Cho (Y.I.), *617*
- see Cho (Y.I.), *2645*
- see Kwack (E.Y.), *7640*
- see Kwack (E.Y.), *8722*

Hartranft (R.J.), diffusion, holes, hygrothermal effects, thermal stresses, thermoelasticity, Sih (G.C.), *1832*
- see Sih (G.C.), *9381*

Harvey (H.S.), see Wolfson (R.L.T.), *2832*

Hasan (M.A.Z.), axisymmetric flow, jets, self excitation, Hussain (A.K.M.F.), *9595*

Hasan (M.M.), see Eichhorn (R.), *4707*

Hasebe (N.), edge cracks, plates, semi infinite media, stress analysis, Inohara (S.), *7331*
- complex variables, corners, crack initiation, holes, stress intensity factor, Ueda (M.), *9403*
- bending, complex variables, plates (weakened), Ueda (M.), *10146*

Hasegawa (E.), channel flow, leaks, two dimensional flow, wavy walls, Fukuoka (N.), *609*
- see Matsufuji (H.), *936*
- half space, reservoirs, singularities, streamlines, viscous flow, Fukuda (H.), *3616*
- elastic bodies, heat exchangers, hydrodynamic stability, multifluid flow, separating wall, *3697*
- gravitational stabilization, hydrodynamic stability, thin films, viscous effects, *3703*
- hydrodynamic stability, thin films, wind-wave interaction, Taniyama (N.), *5458*
- see Iwasaki (Y.), *5462*
- see Matsufuji (H.), *6047*
- see Matsufuji (H.), *6960*
- plates, singularities, stokes flow, two dimensional flow, velocity profiles, viscous flow, *9532*
- hydrodynamic stability, nonlinear theory, oscillations, thin films, *11538*
- finite amplitude, fluid-structure interaction, plates, waves, *11646*

Hasegawa (H.), cylindrical bodies, elasticity (linear), green function, stress concentration, *6162*

Hasegawa (J.), see Fujii (N.), *6847*

Hasegawa (N.), curve fitting, fatigue, high temperature, life expectancy, weibull statistics, Hirose (M.), (et al.), *5283*

Hasegawa (S.), see Ichimiya (K.), *3788*

Hasegawa (T.), acoustic waves, elastic bodies, sound generation, spherical bodies, Ochi (M.), (et al.), *2939*

Hashem (A.A.F.), airfoils, interaction, perturbations, shear flow, Peacock (R.E.), *2610*
- see Peacock (R.E.), *6720*

Hashemi (J.), see Paul (B.), *7268*

Hashimoto (F.), see Kume (Y.), *7375*

Hashimoto (H.), see Wada (S.), *4109*
- beaches, bottom irregularities, coastal engineering, piers, sediment transport, Uda (T.-A.), *5393*

Hashin (Z.), cyclic loading, failure, fatigue, *2240*
- composite materials, cyclic loading, fatigue, fibers, fracture criteria, *8369*

Hashish (M.A.), see El-Refaie (M.F.), *9739*

Hasimoto (H.), axisymmetric flow, plates (holed), stokes flow, *9529*

Haslebacher (C.A.), see Gangarao (H.V.S.), *3383*

Hassab (M.A.), channel flow, conduction (heat), hydrodynamic stability, thermal instability, transition flow, Ozisik (M.N.), *9702*

Hassan (K.), see Bernadou (M.), *2060*

Hassan (S.D.), buckling, rings, El-Ghabaty (S.S.), *340*

Hassard (B.D.), bifurcation, codes, differential equations (ordinary), differential equations (partial), mathematical methods, Kazarinoff (N.D.), (et al.), *21, book*

Hasselman (D.P.H.), see Venkateswaran (A.), *7277*

Hastings (W.F.), chip formation, cutting, materials properties, Mathew (P.), (et al.), *2401*

Hata (S.), see Tanimoto (C.), *10366*

Hata (T.), crack growth, griffith cracks, interaction, stress intensity factor, thermoelasticity (transient), *460*

Hatada (T.), see Senshu (T.), *763*

Hatakeyama (R.), alfven number, plasma, stability theory, tokamak, turbulence (mechanisms), Inutake (M.), (et al.), *4749*

Hatami (R.), flames (diffusion), natural gas, recirculation, *1749*

Hatanaka (K.), low cycle fatigue, material testing, metals, plastic flow, Yamada (T.), (et al.), *1406*

Hatano (H.), see Ishida (M.), *4006*

Hatfield (D.W.), convection (free), edge effects, heat transfer, plane flow, Edwards (D.K.), *5549*

Hati (S.K.), see Rao (S.S.), *9302*

Hatlestad (B.), data analysis, design, offshore structures, structural analysis, substructuring, Mellingen (K.), *8461*

Hatton (A.P.), fire control, jets, trajectories, Osborne (M.J.), *2670*

Hatton (T.A.), conduction (heat), diffusion, heat transfer, mass transfer, mathematical models, Chiang (A.S.), (et al.), *7875*

Hattori (N.), annular flow, convection, heat transfer (combined modes), laminar flow, *6776*

Hattori (S.), see Fujita (T.), *2320*
- see Fujita (T.), *3346*

Hau (K.-F.F.-L.), mass transfer, measurements, pitot tube, two phase flow, Banerjee (S.), *7970*

Haug (E.J.), eigenvalue problems, eigenvalues, mathematical methods, sensitivity, structural analysis, Rousselet (B.), *1070*
- see Arora (J.S.), *4521*
- see Sohoni (V.), *10006*
- see Ehle (P.E.), *10008*
- see Wehage (R.A.), *10197*

Haug (E.J.) eds., boundary value problems, design (optimum), distributed parameters, optimization, structural optimization, Cea (J.), *8440, book*

Haugset (K.), control, nuclear power, optimal control, Leikkonen (I.), *170*
Haung (C.-C.), see Anderson (R.H.), *10774*
Haung (K.Z.), adsorption, immiscible fluids, liquid vapor interface, surface tension, Chai (C.P.), (et al.), *1657*
Hause (A.), see Dunn (M.G.), *11798*
Hauser (G.M.), see Epstein (M.), *8687*
Havas (I.), crack opening displacement, elastoplasticity, fracture criteria, j-integral, material testing, Czoboly (E.), *7526*
Havner (K.S.), compression, crystals, kinematics, metals, *1204*
Hawker (K.E.), attenuation, interface waves, reflection, solid-fluid interaction, stonely waves, *4788*
• see Rutherford (S.R.), *5759*
Hawlader (M.N.A.), solar collectors, solar ponds, stratified flow, thermal loading, Brinkworth (B.J.), *3943*
Hawley (B.W.), earthquakes, inverse problems, iterative methods, layered media, Zandt (G.), (et al.), *3392*
Hayashi (I.), see Murata (H.), *8480*
Hayashi (K.), creep, material testing, polymers, relaxation, Gozu (K.), (et al.), *1412*
• deformation, faults, fluid injection, geothermal energy, rocks, Abe (H.), *9373*
• boundary value problems, complex variables, cracks, dislocations, energy release rate, kinking, Nemat-Nasser (S.), *10289*
Hayashi (M.), see Ohsawa (Y.), *3170*
Hayashi (S.), amplification, fluidic amplifiers, fluidics, mathematical models, Matsui (T.), (et al.), *3222*
• flapper valves, piping systems, valves, vibration (flow induced), Matsui (T.), (et al.), *11606*
Hayashikawa (T.), beams (continuous), dynamic behavior, moving loads, Watanabe (N.), *3358*
Haycock (D.), see Mcbean (E.A.), *5606*
Hayduk (R.J.), see Kamat (M.P.), *1181*
• see Kamat (M.P.), *10362*
Hayek (S.I.), see Mackertich (S.S.), *4766*
• see Attenborough (K.), *6919*
Hayes (L.J.), boundary value problems, collocation, finite element techniques, parabolic equations, *82*
Haynes (B.S.), combustion, soot formation, Wagner (H.G.), *9744*
Haynes (R.), see Szilard (J.), *7561*
Hays (C.O.), see Lachance (L.), *2518*
Hazebrouck (R.), see Deprez (G.), *7941*
Hazell (C.R.), dynamic testing, experimental mechanics, holography, interferometry, vibration, *4437*
Hazelwood (R.A.), roofs, wind loads, *5363*
Hazony (D.), impulse, piezoelectric devices, transducers, *12009*
He (G.-Q.), numerical analysis, plates, shells, Zhang (W.-Y.), *9264*
He (J.-G.), cavitation, channel flow, erosion, variable area flow, venturi tubes, vibration, Hammitt (F.G.), *9516*
head, canals, discharges, flumes, weirs, Bos (M.G.), Reinink (Y.), *3601*
• culverts, discharges, pipe flow, scale models, Sassy (L.), *5387*
• brain, cavitation, impact, injuries, Lubock (P.), Goldsmith (W.), *6007*
• diagnostics, human body, pressure measurement, Viernstein (L.J.), *6028*
• frequency response, impact, injuries, Hu (A.S.), *6031*
• channels, discharges, shallow water, spillways, Sivakumaran (N.S.), Hosking (R.J.), (et al.), *9505*
Heard (W.L.) Jr., see Bush (H.G.), *1461*
• aerospace vehicles, optimization, space platforms, space vehicle structures, Bush (H.G.), (et al.), *6546*
hearing, acoustic measurements, acoustics (psychological), noise, Indlin (Yu.A.), *2204*
Hearle (J.W.S.), adhesives, bonding, stress analysis, textiles, Ozsanlav (V.), *5135*
• adhesives, bonding, fibers, textiles, Ozsanlav (V.), *6202*
Hearle (J.W.S.) eds., fibers, flexible bodies, surveys, textiles, tires, yarn, Thwaites (J.J.), (et al.), *1214, book*
heart, biomechanics, kinematics, strain analysis, Meier (G.D.), Ziskin (M.C.), (et al.), *1037*
• aortic valve, materials properties, viscoelastic materials, Dorogin (A.D.), Maltsev (L.E.), (et al.), *1040*
• biocontrol, organ replacement, organs, Bellovskii (M.A.), Super (N.A.), (et al.), *3226*
• contraction, modeling, muscles, Shoucri (R.M.), *4909*
• aorta, elastic constants, flexible walls, pressure measurement, pulsatile flow, Gross (D.R.), Hunter (J.F.), (et al.), *4916*
• blood flow, valves, Reul (H.), Talukder (N.), (et al.), *4917*
• biomechanics, constitutive equations, deformation, diagnostics, Ghista (D.N.), Ray (G.), (et al.), *6013*
• biomechanics, constitutive equations, deformation, diagnostics, pulsatile flow, Ghista (D.N.), Ray (G.), (et al.), *6014*
• biomechanics, blood flow, muscles, Arts (T.), Reneman (R.S.), (et al.), *7109*
• blood flow, circulation, Kogan (V.A.), *7116*
• muscles, stress strain relationships, tissues, Capelo (A.), Comincioli (V.), (et al.), *8070*
• biomechanics, modeling, muscles, Panerai (R.B.), *9064*
• aneurysms, biomechanics, shells (spherical), stress analysis, Radhakrishnan (S.), Ghista (D.N.), (et al.), *9084*
• airfoil theory, flow reversal, moment coefficient, optimization, valves, Tuck (E.O.), *9513*
heat, convection (free), cylindrical bodies, stratified flow, Chashechkin (Yu.D.), Popov (V.A.), *577*
• convection (free), geostrophic flow, magneto fluid dynamics, rotating fluids, Soward (A.M.), *1514*
• convection (free), rayleigh number, shear flow, temperature profile, Yoshizaki (M.), *1515*
• deformation, polymers, thermoelasticity, Persoz (B.), Rosso (J.C.), *1837*
• convection, internal flow, space vehicles, vibration, Kamotani (Y.), Prasad (A.), (et al.), *2606*
• digital control, heat storage, heat transfer, heating, identification, Kulakowski (B.T.), Schmidt (F.W.), *3211*
heat addition, cavities, convection (benard), rayleigh benard instability, rayleigh number, Olson (J.M.), Rosenberger (F.), *578*
• channel flow, laminar flow, Bar-Cohen (A.), *737*
• conduction (heat), slabs, transient loading, Fhts (P.B.) Jr., De Witt (K.J.), *773*
• green function, nonuniform flow, slabs, Dudukovic (M.P.), *1699*
• cooling towers, energy conservation, heat exchangers, heat transfer, Cavaseno (V.) eds., Staff Of Chemical Engineering, *1712, book*
• closed conduit flow, convection (free), Flack (R.D.), *2798*
• convection (free), cylindrical bodies, empirical methods, Parsons (J.R.) Jr., Mulligan (J.C.), *2802*
• conical bodies, convection (free), laminar flow, Chiou (J.P.), Na (T.Y.), *3799*
• channel flow, conduction (heat), heat exchangers, rockets, Sultanian (B.K.), Sastri (V.M.K.), *3813*
• conduction (heat), numerical methods, series expansion, Beck (J.V.), *3816*
• analog simulation, thermoelasticity (steady), Matsumoto (E.), Sekiya (T.), *3986*
▪ cooling, extended surfaces, fins, Toth (K.), *4720*
▪ heat transfer, peclet number, plates (parallel), power law fluids, Dang (V.-D.), *5563*
• conduction (heat), heat transfer, numerical methods, Dean (D.J.), *5579*
• cylindrical bodies, heat transfer, injection, porous walls, suction, Patnaik (A.), *6760*
• chemical reactions, coal, liquefaction, rheology, Khandhadia (P.S.), Forsyth (T.H.), (et al.), *6769*
• fluid boundaries, layered media, rayleigh number, thermal instability, Dowden (J.), *6782*
• convection, dissipation, laminar flow, velocity profiles, Jaluria (Y.), *8681*
• convection, surface tension, variational methods, Lebon (G.), Perez-Garcia (C.), *8714*
• conduction (heat), cylindrical bodies, hardening, inverse problems, mathematical models, Glasko (V.B.), Kulik (N.N.), (et al.), *8734*
• conduction (heat), conductivity, heat sources, semi infinite media, Melamed (L.E.), *8736*
• convection (free), heat transfer (combined modes), internal sources, radiant interchange, turbulent flow, Cheung (F.B.), Chan (S.H.), (et al.), *8743*
• buoyant flow, conductivity, convection (free), diffusion, heat transfer (combined modes), radiant interchange, Epstein (M.), Cheung (F.B.), (et al.), *8751*
• disks, radiant interchange, solar energy, Zyablova (Zh.I.), Komissarchik (M.G.), (et al.), *9726*
• absorption, convection, convection (free), radiant interchange, thermal plumes, Yucel (A.), Bayazitoglu (Y.), *9727*
• fins, heat pipes, radiant interchange, radiators, space vehicles, Furukawa (M.), *9735*
• ignition, limit analysis, thermal explosions, Dik (I.G.), *9746*
• magneto fluid dynamics, numerical methods, plates, similarity methods, Soundalgekar (V.M.), Takhar (H.S.), (et al.), *9784*
• boussinesq equation, convection (benard), convection (free), navier stokes equation, Frick (H.), Clever (R.M.), *10579*
• conduction (heat), cylindrical bodies, transient effects, Beck (J.V.), *10592*
• boiling, dispersed flow, solutions (material), Berman (M.I.), Gorbis (Z.R.), *10606*
• combustion, solar collectors, solar energy, solar radiation, Becker (B.), Finckh (H.H.), (et al.), *10632*
• convection, hydrodynamic stability, porous media, rayleigh number, saturation, Straus (J.M.), Schubert (G.), *11367*
• liquid crystals (nematic), magnetic fluids, plates (parallel), thermal instability, Barratt (P.J.), Sloan (D.M.), *11368*
• convection (free), porous media, rayleigh number, thermal instability, Horne (R.N.), Caltagirone (J.-P.), *11369*
• conductivity, convection (benard), convection (free), slabs, thermal instability, Proctor (M.R.E.), *11763*
• electron beams, energy transport, laser plasma interaction, thermodynamic processes, vacuum, Derzhiev (V.I.), Marchenko (V.S.), (et al.), *11840*
heat engines, real gas effects, thermodynamic processes, Sandri (R.), *721*
• air pollution, diesel engines, emulsions, fuels, Thorp (I.), Armstrong (G.), (et al.), *1759*
• design, diesel engines, marine engineering, Henshall (S.H.), Orbeck (F.), *1760*
• cycles, design, gas turbines, thermodynamic processes, Harman (R.T.C.), *2870, book*
• energy conversion, organic fluid, steam engines, Arques (P.), Gublin (F.), (et al.), *3887*

- energy conversion, thermodynamic processes, Steimle (F.), *4690*
- energy conversion, geothermal energy, thermodynamic functions, thermodynamic processes, Lamb (J.P.), Polansky (G.F.), (et al.), *4691*
- entropy, thermodynamics (irreversible), thermodynamics (nonequilibrium), Heidug (W.), Muschik (W.), *7817*
- mathematical models, stirling cycles, thermodynamic processes, Beans (E.W.), *10546*
- compressors, energy conservation, exhaust gases, gas turbines, heat exchangers, pipelines, Ludtke (K.), *10547*

heat exchangers, fins, heat transfer, transient effects, Senshu (T.), Hatada (T.), (et al.), *763*

- augmentation, fins, Webb (R.L.), *785*
- crossflow, drag, pressure drop, Poskas (P.), Survila (V.), (et al.), *786*
- ducts (curved), pressure drop, swirl flow, Dzyubenko (B.V.), Dreitser (G.A.), *787*
- furnaces, regenerators, swirl flow, Eikjaer (H.P.), *788*
- conduction (heat), heat transfer, nusselt number, rotating fluids, Ramdas (V.), Uhl (V.W.), (et al.), *790*
- design, multivariable systems, process control, regulator problem, Davison (E.J.), Taylor (P.A.), (et al.), *1163*
- heat exchangers (crossflow), heat exchangers (multipass), heat transfer, recuperators, regenerators, Shah (R.K.) eds., Mcdonald (C.F.), (et al.), *1711, book*
- cooling towers, energy conservation, heat addition, heat transfer, Cavaseno (V.) eds., Staff Of Chemical Engineering, *1712, book*
- cooling, nuclear reactors, thermal instability, Proshutinskii (A.P.), Lobachev (A.G.), *1713*
- boundary layer (turbulent), gas turbines, heat transfer, roughness, Coleman (H.W.), Moffat (R.J.), (et al.), *2629*
- design criteria, heat exchangers (multipass), radiant interchange, two phase flow, Kakac (S.) eds., Bergles (A.E.), (et al.), *2825, book*
- augmentation, condensation, convection (forced), fins, Webb (R.L.), *2827*
- augmentation, energy transport, entropy, heat transfer, pressure drop, viscous effects, Bejan (A.), Pfister (P.A.) Jr., *2828*
- channel flow, cooling, heat transfer, laminar flow, Nikitenko (N.I.), Tsybulenko (E.V.), (et al.), *2829*
- dispersion, dispersive layers, Poveshchenko (G.P.), *2830*
- air conditioning, analytical methods, cooling, Sofrata (H.M.), *2838*
- condensation, fins, tubes, Rifert (V.G.), *2843*
- bridges (suspension), buildings (tall), hydraulic machinery, hydraulic structures, nuclear reactors, ship structures, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- distributed parameters, heat transfer, mass transfer, optimal control, process control, sliding optimization, Dubrovin (O.F.), Galchinskiy (L.Yu.), *3190*
- elastic bodies, hydrodynamic stability, multifluid flow, separating wall, Hasegawa (E.), *3697*
- channel flow, conduction (heat), heat addition, rockets, Sultanian (B.K.), Sastri (V.M.K.), *3813*
- energy conversion, evaporation, geothermal energy, Kodres (C.A.), Jacobs (H.R.), (et al.), *3834*
- heat exchangers (crossflow), laminar flow, plates (parallel), Mori (S.), Kataya (M.), (et al.), *3835*
- design (optimum), energy conservation, generators, power plants, Aminov (R.Z.), Radchenko (E.V.), *3837*
- regenerators, resistance, thermal effects, Romie (F.E.), *3839*
- condensers, thermal loading, tube bundles, Schrey (H.-G.), Kern (J.), *3840*
- correlation, heat transfer, real gas effects, turbulent flow, Miropolskii (Z.L.), Karamysheva (A.I.), (et al.), *4648*
- condensers, heat exchanger (folded-tube), stratified flow, tube bundles, Pandolfini (P.P.), Dugger (G.L.), (et al.), *4716*
- ducts (variable area), extended surfaces, heat exchangers (cartridge), rotating fluids, Margittai (T.B.), *4717*
- extended surfaces, fins, pressure drop, tube bundles, Rabas (T.J.), Eckels (P.W.), (et al.), *4719*
- boiling, channel flow, evaporation, film flow, heat transfer, Vasilev (L.L.), Abramenko (A.N.), (et al.), *4721*
- cycles, solar energy, thermodynamic processes, Johnston (A.M.), O'Sullivan (C.H.), *4724*
- condensers, mathematical models, refrigeration, Tassou (S.A.), Green (R.K.), *5592*
- boiling, channel flow, circulation, cooling, thermal instability, Braginskiy (A.M.), Ivanov (L.B.), *5593*
- high temperature, radiant interchange, Mori (Y.), Yamada (Y.), (et al.), *5594*
- energy storage, regenerators, Romie (F.E.), *5596*
- corrosion, fouling, heat transfer, microbial fouling, precipitation, solidification, Somerscales (E.F.C.) eds., Knudsen (J.G.), *5597, book*
- boilers, combustors, magneto plasma dynamics, open loop systems, Johnson (T.R.), Berry (G.F.), (et al.), *5680*
- energy conversion, ocean, power plants, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *5954*
- tube bundles, two phase flow, vibration (flow induced), vibration (forced), Heilker (W.J.), Vincent (R.Q.), *6289*
- conduction (heat), microbial fouling, resistance, thermal contact resistance, thermal effects, Characklis (W.G.), Nimmons (M.J.), (et al.), *6812*
- convection (forced), coolers, forced systems, heat transfer, pressure drop, Gianolio (E.), Cuti (F.), *6813*
- combustion (turbulent), flow obstructions, fluidized beds, Miller (G.), Zakkay (V.), *6815*
- boiling, channel flow, convection (forced), cooling, critical heat flux, Zeigarnik (Yu.A.), Privalov (N.P.), (et al.), *7834*
- annular flow, augmentation, convection, cylindrical bodies, heat transfer, Dyban (E.P.), Lesnikovskii (A.A.), (et al.), *8682*
- conduction (heat), convection (forced), heat transfer (combined modes), pipe flow, slug flow, Vick (B.), Ozisik (M.N.), *8745*
- channel flow, thermal diffusion, transient effects, Suvorov (A.V.), Rabinovich (G.D.), *8746*
- biofilm fouling, extended surfaces, fins, flow obstructions, fouling, Chenoweth (J.M.) eds., Impagliazzo (M.), *8754*
- cooling towers, rotary dry cooling towers, rotating bodies, Valenzuela (J.A.), Glicksman (L.R.), *8755*
- energy storage, mathematical models, solar collectors, solar energy, thermosyphons, Mertol (A.), Place (W.), (et al.), *8756*
- approximation methods, design criteria, extended surfaces, fins, Kern (J.), *8757*
- heat pipes, solutions (material), Semena (M.G.), Myuller (R.), *8762*
- coils, ducts (curved), laminar flow, pipe flow, secondary flow, Balejova (M.), Cakrt (J.), (et al.), *9576*
- biot number, energy storage, optimization, packed beds, thermal regenerators, Schmidt (F.W.), Willmott (A.J.), *9730, book*
- cylindrical bodies, damping, tube bundles, Chen (S.-S.), *10490*
- compressors, energy conservation, exhaust gases, gas turbines, heat engines, pipelines, Ludtke (K.), *10547*
- geometrical properties, heat exchangers (stream-symmetric), heat transfer, internal flow, Singh (K.P.), *10615*
- heat exchangers (rod baffle), tube bundles, vibration isolation, Smyth (R.), *10616*
- contact problems, evaporation, liquid vapor interface, mathematical models, Bukharkin (E.N.), *10617*
- maximum principle, optimization, Nishimura (H.), *10620*
- condensation, freezing, pressure drop, tube bundles, Berg (W.F.), Berg (J.L.), *10626*
- coils, ducts (curved), turbulent flow, Vilemas (Yu.V.), Dzyubenko (B.V.), (et al.), *11490*
- fretting, tube bundles, vibration (flow induced), Ko (P.L.), Rogers (R.J.), *11624*
- cooling, crossflow, evaporation, regenerators, Maclaine-Cross (I.L.), Banks (P.J.), *11767*
- augmentation, heat transfer, tube bundles, viscous effects, Dzyubenko (B.V.), Ievlev (V.M.), *11768*
- contact resistance, heat exchangers (membrane), thermal contact resistance, Makarov (A.M.), Romanovskii (V.R.), *11769*
- boiling, hydrocarbons, lng, natural gas, porous walls, Dvoiris (A.D.), Sirotin (A.G.), (et al.), *11770*

heat exchangers (crossflow), convection (free), heat transfer, mass transfer, tube bundles, El-Riedy (M.K.), *728*

- approximation methods, convection (forced), Roetzel (W.), Furst (J.), *784*
- heat exchangers, heat exchangers (multipass), heat transfer, recuperators, regenerators, Shah (R.K.) eds., Mcdonald (C.F.), (et al.), *1711, book*
- crossflow, cylindrical bodies, heat transfer, Zhukauskas (A.), Zhiugzhda, *2786, book*
- heat exchangers, laminar flow, plates (parallel), Mori (S.), Kataya (M.), (et al.), *3835*
- attenuation, barriers, diffraction, noise (aerodynamic), vortex shedding, Howe (M.S.), *6931*
- evaporation, fins, otec evaporator, pressure drop, transient loading, Chapman (M.C.), Heydt (G.T.), *7867*
- condensation, critical flow, tube bundles, Rabas (T.J.), *10578*
- dynamic response, mathematical models, numerical methods, weighted residual methods, Terasaka (H.), Kanoh (H.), (et al.), *10618*

heat exchangers (multipass), heat exchangers, heat exchangers (crossflow), heat transfer, recuperators, regenerators, Shah (R.K.) eds., Mcdonald (C.F.), (et al.), *1711, book*

- design criteria, heat exchangers, radiant interchange, two phase flow, Kakac (S.) eds., Bergles (A.E.), (et al.), *2825, book*

heat pipes, electro fluid dynamics, heat transfer, liquid vapor interface, wick, Bologa (M.K.), Kozhukhar (I.A.), (et al.), *791*

- evaporation, mechanics, Tolubinskii (V.I.), Antonenko (V.A.), (et al.), *804*
- convection, heat transfer, liquid vapor interface, wick, Frolov (V.F.), Vernikov (E.M.), (et al.), *1717*
- condensers, transient effects, Shukla (K.N.), *3841*
- cooling, space vehicles, thermal loading, Vasilev (L.L.), Gil (V.V.), (et al.), *5599*
- wick, Semena (M.G.), *5600*
- space vehicles, Kaufman (W.B.), Tower (L.K.), *5601*
- heat exchangers, solutions (material), Semena (M.G.), Myuller (R.), *8762*
- fins, heat addition, radiant interchange, radiators, space vehicles, Furukawa (M.), *9735*
- cooling, superfluids, Murakami (M.), *10627*
- capillary flow, viscous effects, wick, Shibayama (S.), Morooka (S.), *10628*

- condensers, vapor gas interface, variable thermal properties, wick, Van Der Vooren (J.), Delil (A.A.M.), (et al.), *10629*
- condensers, contact fronts, variable thermal properties, wick, Van Der Vooren (J.), Sanderse (A.), *10630*
- capillary flow, channel flow, evaporation, Suslov (A.D.), Ustinov (V.Ya.), *11772*

heat pumps, energy storage, heating, mathematical models, Schlosser (K.), Teislev (B.), *2837*

- cycles, mixtures, Rojev (A.), Meyer (C.), (et al.), *5591*
- chemically reactive flow, cycles, energy transport, thermodynamic processes, Abelson (H.I.), Horowitz (J.S.), *6752*
- air conditioning, energy conservation, heating, solar energy, Veziroglu (T.N.) ed., *6818, book*
- high temperature, thermodynamics, Grisval (J.-P.), *9732*
- air conditioning, heating, Von Cube (H.L.), Steimle (F.), *10614, book*
- energy storage, solar collectors, solar energy, Thomas (W.R.L.), *10634*

heat shields, absorption, coatings, radiant interchange, solar radiation, space vehicles, spectral analysis, thermal loading, Bosma (J.), Levadou (F.), *6807*

- dynamic behavior, nonlinear characteristics, space shuttle, Housner (J.M.), Edighoffer (H.H.), (et al.), *11128*
- dynamic stresses, mathematical models, space shuttle, vibration (random), Doyle (G.R.) Jr., *11155*

heat sources, conduction (heat), floors, green function, heating, De Mey (G.), *1700*

- convection, cylindrical bodies, magneto fluid dynamics, numerical analysis, Chukhrov (A.Yu.), *2881*
- disks, thermal stresses, Misra (J.C.), Achari (R.M.), *3993*
- half space, semi infinite media, thermal stresses, thermoelasticity (steady), Chowdhury (K.L.), Glockner (P.G.), *7948*
- convection, thermal instability, viscous effects, Gorlei (V.V.), Shenderovskii (V.A.), *8707*
- conduction (heat), conductivity, heat addition, semi infinite media, Melamed (L.E.), *8736*
- diesel engines, modeling, pistons, thermal diffusion, Kao (T.K.), Wallace (F.J.), *8905*
- convection, disks, plates (circular), Kolyano (Yu.M.), Semerak (M.M.), (et al.), *9715*
- convection (free), stratified flow, Tupitsyn (V.S.), Chashechkin (Yu.D.), *11514*

heat transfer, conduction (unsteady), variational methods, Prokopov (V.G.), Bespalova (E.I.), (et al.), *50*

- convection, diffusion, finite element techniques, Baliga (B.R.), Patankar (S.V.), *96*
- arcs, cutting, plasma, Hinds (B.K.), De Almeida (S.M.), *436*
- matched asymptotic expansions, reynolds number (high), second order analysis, wall jets, Afzal (N.), *592*
- hydrodynamic stability, mass transfer, rayleigh taylor instability, surface tension, viscous effects, Ho (S.-P.), *634*
- boundary layer (turbulent), fluid injection, porous media, turbulence, Mamonov (V.N.), *655*
- flow measurement, hot wire, turbulence, Lecordier (J.C.), Petit (C.), (et al.), *659*
- aerodynamics, axial turbines, cooling, one dimensional flow, Sirotkin (Ya.A.), *701*
- calibration, hot wire, rarefied gases, Gottesdiener (L.), *711*
- convection (free), heat exchangers (crossflow), mass transfer, tube bundles, El-Riedy (M.K.), *728*
- cooling, impact jets, impingement cooling, jets, turbomachinery, Hrycak (P.), *729*
- convection, transient effects, Karvinen (R.), *732*
- blades, cylindrical bodies, film cooling, gas turbines, leading edge, thermal measurements, Mirhosseini (A.), Barrow (H.), *733*
- entrance region, integral methods, pipe flow, transforms, Vick (B.), Ozisik (M.N.), (et al.), *734*
- convection (forced), engines, jets, pipe flow, swirl flow, Caton (J.A.), Heywood (J.B.), *735*
- axial flow, tube bundles, Seale (W.J.), *736*
- empirical methods, freon, nucleate boiling, Nishikawa (K.), Fujita (Y.), (et al.), *739*
- biomechanics, critical heat flux, cryogenics, film boiling, nucleate boiling, Belyakov (V.P.), Budrik (V.V.), *750*
- convection (free), thermal effects, vibration, Dawood (A.S.), Manocha (B.L.), (et al.), *753*
- buoyant flow, convection (free), nusselt number, turbulent flow, Thomas (L.C.), Wood (M.L.), *754*
- convection (free), rayleigh number, shells (fluid-filled), Powe (R.E.), Warrington (R.O.), (et al.), *755*
- closed conduit flow, convection (free), interferometry, Flack (R.D.), Konopnicki (T.T.), (et al.), *756*
- non newtonian flow, power law fluids, stagnation point, transient effects, Gorla (R.S.R.), *759*
- annular flow, friction (internal), laminar flow, pressure drop, rotating disks, Mochizuki (S.), Yang (W.-J.), *761*
- crossflow, impingement cooling, jets, Florschuetz (L.W.), Truman (C.R.), (et al.), *762*
- fins, heat exchangers, transient effects, Senshu (T.), Hatada (T.), (et al.), *763*
- annular flow, conductivity, insulating materials (thermal), isothermal processes, Shimomura (H.), Okamoto (Y.), (et al.), *765*
- melting, phase changes, solidification, velocity profiles, Ramachandran (N.), Jaluria (Y.), (et al.), *769*
- computer aided design, computer programming, mathematical models, Amkreutz (J.H.A.E.), Vanier (D.J.), *778*
- conduction (heat), heat exchangers, nusselt number, rotating fluids, Ramdas (V.), Uhl (V.W.), (et al.), *790*
- electro fluid dynamics, heat pipes, liquid vapor interface, wick, Bologa (M.K.), Kozhukhar (I.A.), (et al.), *791*
- ablation, ellipsoids, three dimensional flow, Apshtein (E.Z.), Pilyugin (N.N.), *796*
- decomposition, mass transfer, radiant interchange, Senchenkov (A.S.), *797*
- absorption, film cooling, mass transfer, Nakoryakov (V.Ye.), Grigoryeva (N.I.), *798*
- cooling, evaporation, mass transfer, water, Arefyev (K.M.), Averkiyev (A.G.), *802*
- boiling, tubes, Andrizhiyevskiy (A.A.), Dolzhenkova (G.G.), (et al.), *805*
- axisymmetric flow, mass transfer, Nesterenko (V.B.), Tverkovkin (B.Ye.), (et al.), *806*
- cylindrical bodies, incompressible flow, mass transfer, Raptis (A.A.), Tzivanidis (G.J.), *814*
- fluid injection, mass transfer, pipe flow, suction, Zaychik (L.I.), *815*
- chemical reactors, Maksimov (E.I.), *827*
- mass transfer, moisture, soils, thermal instability, transient, Hartley (J.G.), Black (W.Z.), *830*
- boundary layer (thermal), hydromagnetic stability, magneto fluid dynamics, theory, Bashtovoi (V.G.), Pavlinov (M.I.), *861*
- multiphase flow, power generation, two phase flow, Bergles (A.E.), Collier (J.G.), (et al.), *934, book*
- mass transfer, particles, spherical bodies, Hughmark (G.A.), *937*
- boiling, bubble dynamics, two phase flow, vaporization, Voloshko (A.A.), *945*
- boundary layer, porous media, Bejan (A.), *957*
- fluid conveyance, porous media, Sophocleous (M.), *959*
- boreholes, earth, measurements, Yokota (T.), Kinoshita (H.), (et al.), *986*
- conduction (unsteady), heat transfer (combined modes), wave equations, Sieniutycz (S.), *1082*
- axial flow, laminar flow, velocity profiles, vortex flow, Simmers (D.A.), Coney (J.E.R.), *1566*
- cooling, high temperature, hydrodynamics, impingement cooling, sprays, Urbanovich (L.I.), Goryainov (V.A.), (et al.), *1653*
- cylindrical bodies, external flow, hot wire, reattachment, separated flow, shear flow, Ota (T.), Kon (N.), (et al.), *1665*
- convection, eckert number, grashof number, incompressible flow, plane flow, Gupta (A.S.), Popp (I.), (et al.), *1667*
- boiling, convection (forced), evaporation, refrigeration, Mishra (M.P.), Varma (H.K.), (et al.), *1669*
- boiling, liquid nitrogen, nucleate boiling, pool boiling, Trepp (C.), V. Hoffmann (T.), *1670*
- boiling, convection (forced), critical heat flux, helium, transition boiling, Petukhov (B.S.), Zhukov (V.M.), (et al.), *1673*
- convection, integral methods, laminar flow, nusselt number, Hwang (U.P.), *1677*
- convection (free), cylindrical bodies, laminar flow, rayleigh number, Chand (J.), Vir (D.), *1679*
- buoyant flow, convection (free), stratified flow, thermal instability, Chashechkin (Yu.D.), Tupitsyn (V.S.), *1684*
- boundary layer (thermal), drag, polar fluids, stagnation point, Subhadra Ramachandran (P.), Mathur (M.N.), *1685*
- convection (forced), nuclear reactors, recirculation, Cho (S.M.), Kane (R.S.), *1687*
- annular flow, convection, entrance region, hydrogen bubble technique, visualization, Ogunba (V.), Barrow (H.), *1690*
- convection (forced), orifices, surface effect, Sparrow (E.M.), Gurdal (U.), *1691*
- experimental methods, thermocouples, Breitkopf (G.), Wittig (S.), (et al.), *1694*
- nonhomogeneous media, thermal diffusion, variable thermal properties, Dulnev (G.N.), Sigalov (A.V.), *1697*
- convection, fins, transforms, unsteady flow, Aziz (A.), Na (T.Y.), *1703*
- heat exchangers, heat exchangers (crossflow), heat exchangers (multipass), recuperators, regenerators, Shah (R.K.) eds., Mcdonald (C.F.), (et al.), *1711, book*
- cooling towers, energy conservation, heat addition, heat exchangers, Cavaseno (V.) eds., Staff Of Chemical Engineering, *1712, book*
- conduction (heat), convection, extended surfaces, fins, Sparrow (E.M.), Hsu (C.F.), *1715*
- desalination, evaporation, Suematsu (H.), Inoue (S.), (et al.), *1716*
- convection, heat pipes, liquid vapor interface, wick, Frolov (V.F.), Vernikov (E.M.), (et al.), *1717*
- annular flow, nusselt number, thermosyphons, Seki (N.), Fukusako (S.), (et al.), *1718*
- condensation, evaporation, thermosyphons, two phase flow, Imura (H.), Kusuda (H.), (et al.), *1719*
- condensation (filmwise), tubes, Volodin (V.I.), Mikhalevich (A.A.), (et al.), *1725*

- mass transfer, transport phenomena, Mujumdar (A.S.), Mashelkar (R.A.), *1735, book*
- boundary layer, combustion, hydrocarbons, mass transfer, porous media, Batievskii (V.L.), Sergeev (G.T.), *1753*
- approximations, arcs (magnetically constrained), forced systems, models, Bublievskii (A.F.), *1776*
- liquid gas mixture, liquid vapor mixture, mass transfer, two phase flow, Nigmatulin (R.I.), Khabeyev (N.S.), *1847*
- tubes, two phase flow, Nejat (Z.), *1855*
- generators, stability, two phase flow, Rakopoulos (C.D.), ElShirbini (A.A.), (et al.), *1857*
- bubble dynamics, pool boiling, Burow (P.), Beer (H.), *1865*
- evaporation, porous surfaces, Rannenberg (M.), Beer (H.), *1873*
- hydrology, mass transfer, Sokolov (A.A.), Kharchenko (S.I.), *1898*
- casting, conduction (unsteady), thermal stresses, Morgan (K.), Lewis (R.W.), (et al.), *2402*
- cavities, finite element methods (hybrid), two dimensional flow, Chen (C.-J.), Naseri-Neshat (H.), (et al.), *2605*
- boundary layer (turbulent), gas turbines, heat exchangers, roughness, Coleman (H.W.), Moffat (R.J.), (et al.), *2629*
- boundary layer, mass transfer, porous surfaces, Pavlov (K.B.), Pokrovskii (L.D.), (et al.), *2638*
- turbulence, turbulence model, turbulent flow, Lam (C.K.G.), Bremhorst (K.), *2700*
- thermodynamic processes, thermodynamics, thermodynamics (nonequilibrium), Smith (D.A.), *2775*
- conductivity, density, gases, thermal measurements, transient effects, Filippov (L.P.), Eldarov (F.G.), (et al.), *2780*
- crossflow, cylindrical bodies, heat exchangers (crossflow), Zhukauskas (A.), Zhiugzhda, *2786, book*
- convection (forced), laminar flow, plane flow, transient effects, Hanawa (J.), *2788*
- approximations, boiling, convection (forced), nucleate boiling, Guglielmini (G.), Nannei (E.), (et al.), *2793*
- convection (free), cooling, nuclear reactors, Agrawal (A.K.) eds., Guppy (J.G.), *2797, book*
- closed conduit flow, convection (free), finite difference methods, laminar flow, transient effects, Vasseur (P.), Robillard (L.), *2799*
- boundary layer (thermal), rotating disks, stanton number, turbulent flow, Johnson (M.C.), *2803*
- approximation methods, conduction (heat), nusselt number, Churchill (S.W.), Cheng (S.M.), *2819*
- convection (forced), melting, surface effect, Solomon (A.D.), *2820*
- closed conduit flow, flow measurement, recirculation, Launder (B.E.) eds., Humphrey (J.A.C.), *2826, book*
- augmentation, energy transport, entropy, heat exchangers, pressure drop, viscous effects, Bejan (A.), Pfister (P.A.) Jr., *2828*
- channel flow, cooling, heat exchangers, laminar flow, Nikitenko (N.I.), Tsybulenko (E.V.), (et al.), *2829*
- nucleation, Springer (G.S.), *2844*
- dispersions, models, Grishin (A.M.), Loskutov (G.S.), (et al.), *2853*
- mass transfer, metallurgy, Spalding (D.B.), Afgan (N.H.), *2854, book*
- finite difference methods, mass transfer, slug flow, Antonini (G.), Guiffant (G.), *2855*
- equilibrium, reactors, Giger (G.K.), Mutharasan (R.), (et al.), *3001*
- computing techniques, convergence, pade approximation, perturbation methods, Aziz (A.), *3112*
- dynamic analysis, hyperbolic equations, laplace transform, Korolkov (B.P.), Pupin (A.A.), *3115*
- conduction (steady), elliptic equations, finite difference methods, implicit procedure, Schneider (G.E.), Zedan (M.), *3118*
- distributed parameters, heat exchangers, mass transfer, optimal control, process control, sliding optimization, Dubrovin (O.F.), Galchinskiy (L.Yu.), *3190*
- digital control, heat, heat storage, heating, identification, Kulakowski (B.T.), Schmidt (F.W.), *3211*
- defects, delamination, nondestructive tests, plates, thermography, Vavilov (V.P.), *3509*
- blunt bodies, reattachment, separated flow, transition, Ota (T.), Asano (Y.), (et al.), *3654*
- pipe flow, turbulent flow, viscoelastic fluids, Cho (Y.I.), Ng (K.S.), (et al.), *3670*
- drag reduction, pipe flow, turbulent flow, Smith (R.), Edwards (M.F.), *3708*
- boundary layer (thermal), experimental methods, temperature, thermal measurements, Schreiber (V.), Christ (A.), *3776*
- conduction (heat), convection, cylindrical bodies, variable thermal properties, Martinson (L.K.), *3778*
- axial flow, convection, cylindrical bodies, Oosthuizen (P.H.), Rangarajan (N.), *3779*
- axisymmetric flow, reattachment, separated flow, thermal measurements, turbulent flow, Smyth (R.), *3780*
- boundary layer (thermal), boundary layer (turbulent), convection, plane flow, transient effects, turbulent flow, Hanawa (J.), *3781*
- boundary layer (thermal), convection, plates (parallel), porous media, Merkin (J.H.), *3782*
- ducts (variable area), navier stokes equation, sudden expansion, viscous flow, Kharin (B.E.), Dvortsov (V.N.), *3784*
- augmentation, convection, fins, laminar flow, tubes, Soliman (H.M.), Chau (T.S.), (et al.), *3786*
- annular flow, axial flow, cylindrical bodies, Rath (R.S.), Bastia (S.N.), *3787*
- cooling, duct flow, plates (parallel), roughness, turbulent flow, Ichimiya (K.), Hasegawa (S.), (et al.), *3788*
- buoyant flow, convection, pipe flow, supercritical flow, turbulent flow, Kakarala (C.R.), Thomas (L.C.), *3790*
- boiling, critical heat flux, impact jets, impingement cooling, jets, water, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- convection (forced), critical heat flux, dispersed flow, drops, turbulent flow, Yao (S.-C.), Rane (A.), *3795*
- plates (vertical), thermal diffusion, transient effects, Krishan (B.), *3797*
- boundary layer (thermal), convection (free), laminar flow, plates (vertical), Sokovishin (Yu.A.), Semenov (A.G.), *3798*
- blades, rotating fluids, similarity methods, simulation, turbomachinery, Eckert (E.R.G.), *3802*
- channel flow, micropolar media, unsteady flow, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *3805*
- convection, holography, interferometry, visualization, Faw (R.E.), Dullforce (T.A.), *3807*
- extended surfaces, fins, perturbation methods, variable thermal properties, Aziz (A.), Na (T.Y.), *3822*
- critical heat flux, energy conversion, refrigeration, thermosyphons, Savchenkov (G.A.), Kunakov (V.G.), *3836*
- condensation, evaporation, mass transfer, regenerators, rotary regenerators, Van Leersum (J.G.), Ambrose (C.W.), *3838*
- convection, evaporation, interface phenomena, Palmer (H.J.), Makeshri (J.C.), *3849*
- flames (diffusion), Petela (R.), Wilk (K.), (et al.), *3863*
- ablation, boundary layer (turbulent), mass transfer, space vehicles, transpiration, Suzuki (K.), *3867*
- models, particles, pyrolysis, reaction rates, Villermaux (J.), Verzaro (F.), (et al.), *3873*
- perturbation methods, porous media, Lu (P.-C.), *4029*
- boundary layer, oscillatory flow, plates, unsteady state, Ishida (M.), Yamada (T.), *4608*
- correlation, heat exchangers, real gas effects, turbulent flow, Miropolskii (Z.L.), Karamysheva (A.I.), (et al.), *4648*
- bibliography, thermal sciences, thermodynamics, Eckert (E.R.G.), Sparrow (E.M.), (et al.), *4694*
- boundary layer (thermal), convection (free), plates (vertical), Sparrow (E.M.), Faghri (M.), *4697*
- extended surfaces, fins, laminar flow, pipe flow, Sparrow (E.M.), Charmchi (M.), *4699*
- convection (forced), emissivity, nucleate boiling, Stephan (K.), Auracher (H.), *4700*
- insulating materials (thermal), solidification, Zhuk (V.I.), Zavgorodnii (P.F.), (et al.), *4705*
- boundary layer (turbulent), condensation (filmwise), pipe flow, turbulent flow, Chisholm (D.), *4706*
- cylindrical bodies, laminar flow, rotating cylinders, tubes, Woods (J.L.), Morris (W.D.), *4711*
- boiling, channel flow, evaporation, film flow, heat exchangers, Vasilev (L.L.), Abramenko (A.N.), (et al.), *4721*
- differential equations (ordinary), filtration, injection, porous walls, Sergeev (G.T.), *4732*
- mass transfer, mathematical models, packed beds, Rao (S.P.), Gnielinski (V.), *4733*
- couette flow, hall effect, magneto fluid dynamics, rotating disks, Vidyanidhi (V.), Krishnam Raju (G.), (et al.), *4745*
- circulation, currents, oceanography, Sarkisyan (A.S.), Rzheplinskiy (D.G.), *4879*
- impact, thermal shock, Gaiduk (S.I.), Dobrushkin (V.A.), *4971*
- drag, external flow, transport phenomena, viscoelastic fluids, Mashelkar (R.A.), Marrucci (G.), *5383*
- hydrodynamic stability, liquids, surface tension, Takashima (M.), *5457*
- duct flow, turbulence, turbulence model, Malik (M.R.), Pletcher (R.H.), *5467*
- axial turbines, blades, cascades, turbulence (freestream), Bayley (F.J.), Priddy (W.J.), *5504*
- film flow, nusselt number, velocity profiles, Sobin (V.M.), *5536*
- conical bodies, shock tubes, Ardasheva (M.M.), Bezmenov (V.Ya.), (et al.), *5537*
- channel flow, convection, micropolar media, Migun (N.P.), *5538*
- augmentation, electro fluid dynamics, liquids, Jones (T.B.), *5542*
- convection (free), edge effects, plane flow, Hatfield (D.W.), Edwards (D.K.), *5549*
- annuli, convection (free), pipe flow, prandtl number, Kuehn (T.H.), Goldstein (R.J.), *5551*
- laminar flow, rotating bodies, spherical bodies, Suwono (A.), *5559*
- catalytic surfaces, dissociation, hydrogen, real gas effects, shock tubes, Nasser (A.E.M.), East (R.A.), *5562*
- heat addition, peclet number, plates (parallel), power law fluids, Deng (V.-D.), *5563*

- boundary layer (thermal), convection (free), integral methods, variational methods, Singh (P.), Bhattacharya (D.K.), *5567*
- convection, Eckert (E.R.G.), *5568*
- convection, film cooling, film flow, plastics, polypropylene film, Shapovalov (V.M.), Tyabin (N.V.), (et al.), *5570*
- conduction (heat), heat addition, numerical methods, Dean (D.J.), *5579*
- convection, gases, radiant interchange, radiation, spectroscopy, Mattick (A.T.), *5585*
- corrosion, fouling, heat exchangers, microbial fouling, precipitation, solidification, Somerscales (E.F.C.) eds., Knudsen (J.G.), *5597, book*
- ablation, aerodynamic heating, film thickness, Znamenskii (V.V.), Lunev (V.V.), *5607*
- mass transfer, mines, rocks, Kremnev (O.A.), Zhuravlenko (V.Ya.), (et al.), *5609*
- drops, liquid vapor mixture, mass transfer, mathematical models, Monaco (R.), *5610*
- binary flow, liquid vapor interface, mixtures, vaporization, Fakhretdinov (I.A.), Chalyi (A.V.), *5611*
- crystals, freezing, mass transfer, Wheeler (A.A.), *5613*
- convection, mass transfer, prandtl number, Riahi (N.), *5616*
- liquid liquid interface, mass transfer, thermal diffusion, Takao (S.), Narusawa (U.), *5619*
- mass transfer, moisture, porous media, Eckert (E.R.G.), Faghri (M.), *5623*
- friction factor, mass flow, mass transfer, Kast (W.), *5625*
- flames, furnaces, models, radiant interchange, Mastryukov (B.S.), *5639*
- cooling, internal combustion engines, piston rings, Ustinov (A.N.), Neznaev (A.N.), (et al.), *5648*
- ballistics (interior), projectiles, thermal explosions, Grewal (B.S.), *5716*
- materials properties, thermal properties, Najjar (M.S.), Bell (K.J.), *5806*
- bubble dynamics, mass transfer, unsteady flow, Shagapov (V.Sh.), *5818*
- fluidized beds, oscillations, Filippovskii (N.F.), Zharkov (A.A.), (et al.), *5849*
- fluidized beds, tubes, Tabatabaie-Farashahi (M.), Upadhyay (S.N.), (et al.), *5852*
- mass transfer, moving media, porous media, saturation, Verigin (N.N.), Khabibullin (I.L.), (et al.), *5853*
- convection, porous media, Simpkins (P.G.), Blythe (P.A.), *5855*
- conductivity, packed beds, Dietz (P.W.), *5856*
- heat transfer (combined modes), packed beds, Smith (E.M.), *5857*
- microcracks, rocks, Shurchkov (A.V.), Prikhodko (N.K.), (et al.), *5858*
- cooling, cooling ponds, thermal diffusion, Jain (S.C.), *5904*
- circulation, currents, ocean air interaction, oceanography, Bye (J.A.T.), Veronis (G.), *5922*
- convection (free), cooling, currents, lakes, Sturm (T.W.), Kennedy (J.F.), *5924*
- cooling, cooling ponds, Jirka (G.H.), Watanabe (M.), *5925*
- finite element techniques, hydroelasticity, structural analysis, *6102*
- finite element methods (hybrid), nonlinear systems, time dependence, Chung (K.S.), *6121*
- interface phenomena, stratified flow, two component flow, velocity profiles, Takahashi (M.), Inoue (A.), (et al.), *6600*
- disks, navier stokes equation, oscillating bodies, second order analysis, Dohara (N.), *6617*
- boussinesq equation, oscillatory flow, plates, porous surfaces, Soundalgekar (V.M.), Hiremath (S.B.), *6622*
- rarefied flow, rarefied gases, Monaco (R.), Orsi (A.P.), *6635*
- couette flow, rollers, rotating cylinders, slots, Miesch (H.), *6650*
- liquid metals, turbulence, turbulence model, Grotzbach (G.), *6688*
- duct flow, experimental results, flow obstructions, turbulence, turbulent flow, Sparrow (E.M.), Molki (M.), (et al.), *6689*
- cylindrical bodies, heat addition, injection, porous walls, suction, Patnaik (A.), *6760*
- laminar flow, stagnation point, unsteady flow, Sergeev (V.L.), Strogii (A.S.), *6762*
- acoustic emission, duct flow, pipe flow, resonance, turbulent flow, unsteady flow, Andre (P.), Creff (R.), *6764*
- boundary layer (turbulent), friction (skin), reynolds analogy, Repik (E.U.), Kuzenkov (V.K.), *6765*
- flow reversal, transient effects, transport mechanisms, Morrison (F.A.) Jr., Griffiths (S.K.), *6766*
- cylindrical bodies, hypersonic flow, leading edge, shock waves, swept wings, Zemlyanskii (B.A.), Shmanenkova (G.A.), *6767*
- annular flow, convection, dielectrics, electro fluid dynamics, laminar flow, Mizushina (T.), Ogino (F.), (et al.), *6768*
- convection, convection (forced), crossflow, cylindrical bodies, sprays, unsteady flow, Basilico (C.), Jung (G.), (et al.), *6775*
- evaporation, film cooling, film flow, liquid vapor interface, Wassner (L.), *6779*
- boussinesq equation, conduction, convection (free), open thermosyphons, rayleigh number, thermosyphons, Penot (F.), Peube (J.-L.), *6790*
- convection (free), cylindrical bodies, extended surfaces, plates, Sparrow (E.M.), Chrysler (G.M.), *6791*
- thermal measurements, thermocouples, thin films, Godefroy (J.-C.), *6793*
- adiabatic lines, conduction (steady), Lienhard (J.H.), *6796*
- conduction (heat), hot wire, thermal excitation, thermal measurements, Mulyukov (R.R.), *6798*
- nuclear power, nuclear reactors, safety, Jones (O.C.) Jr. ed., *6810*
- convection (forced), coolers, forced systems, heat exchangers, pressure drop, Gianolio (E.), Cuti (F.), *6813*
- energy conservation, insulating materials (thermal), thermal properties, Turner (W.C.), Malloy (J.F.), *6823*
- cooling, drops, Mori (Y.H.), Nagai (K.), (et al.), *6825*
- evaporation, thermal diffusion, wind tunnels (environmental), Reijnhart (R.), Rose (R.), *6826*
- exhaust gases, one dimensional flow, spark ignition engines, thermal measurements, Alkidas (A.C.), *6848*
- helium, pipe flow, resistance, two phase flow, Petukhov (B.S.), Zhukov (V.M.), (et al.), *6976*
- fluidized beds, packed beds, Adams (R.L.), *7018*
- cold climates, Lunardini (V.J.), *7030, book*
- entrainment, mass transfer, mixing layers, oceanography, thermocline, turbulence (geophysical), Shapiro (G.I.), *7069*
- circulation, oceanography, Wunsch (C.), *7080*
- approximation theory, error, finite difference methods, finite element techniques, Stubley (G.D.), Raithby (G.D.), (et al.), *7196*
- composite materials, finite element techniques, mass transfer, porous media, Strada (M.), Lewis (R.W.), *7224*
- finite element techniques, newton method, nonlinear analysis, Hogge (M.A.), *7225*
- convection, friction (skin), reynolds number (critical), tubes, viscous flow, Addlesee (A.J.), *7671*
- finite difference methods, finite element techniques, two dimensional flow, Chung (K.C.), *7673*
- computing techniques, laminar flow, noncircular pipes, pipe flow, swirl flow, Masliyah (J.H.), Nandakumar (K.), *7715*
- inlet flow, pipe flow, turbulent flow, Lau (S.C.), Sparrow (E.M.), (et al.), *7751*
- aerosols, finite amplitude, plane waves, Borisov (A.A.), Vakhgelt (A.F.), (et al.), *7760*
- aerodynamic heating, convection, surface temperature, thermography, wind tunnels, Balageas (D.L.), Ory (D.), *7816*
- compressible flow, convection (forced), noether theorem, variable thermal properties, Garaev (K.G.), *7823*
- convection, dispersed flow, drops, entrance region, tubes, two phase flow, Rane (A.G.), Yao (S.-C.), *7825*
- laminar flow, pipe flow, pseudoplastic fluids, Joshi (S.D.), Bergles (A.E.), *7826*
- annular flow, channel flow, turbulent flow, variable fluid properties, Nemira (M.), Vilemas (J.), (et al.), *7827*
- boiling, nucleate boiling, refrigerant-oil mixtures, refrigeration, Chongrungreong (S.), Sauer (H.J.) Jr., *7831*
- axisymmetric flow, bodies of revolution, boundary layer (thermal), convection (free), laminar flow, Lin (F.N.), Chern (S.Y.), *7837*
- closed conduit flow, convection (free), mathematical models, spectral expansion method, Iyican (L.), Bayazitoglu (Y.), (et al.), *7839*
- blades, rotating bodies, slots, turbomachinery, Kogan (G.A.), Dergach (A.A.), *7842*
- cavities, convection (free), cooling, laminar flow, transient effects, water, Robillard (L.), Vasseur (P.), *7844*
- convection (forced), hot film, thermal measurements, transient effects, Malcolm (D.G.), Verma (V.), *7846*
- cellular flow, conduction (heat), internal flow, Eftekhar (J.), Darkazalli (G.), (et al.), *7848*
- extended surfaces, fins, melting, solidification, Bathelt (A.G.), Viskanta (R.), *7853*
- cylindrical bodies, phase changes, pipes, stefan problem, underground, variable thermal properties, Lunardini (V.J.), *7854*
- convection, laminar flow, plates (parallel), power law geometrics, solar collectors, Naidu (G.M.), Agarwal (J.P.), *7864*
- conduction (heat), diffusion, mass transfer, mathematical models, Hatton (T.A.), Chiang (A.S.), (et al.), *7875*
- boilers, combustion chambers, mathematical models, Gulic (M.G.), Gvozdenac (D.D.), *7886*
- coal, multiphase flow, prediction, slurries, Trela (M.), *7962*
- fluidized beds, walls, Sokolov (A.V.), Baskakov (A.P.), (et al.), *7994*
- earth, gravity, transformation, Hagiwara (Y.), *8012*
- boundary layer (turbulent), incompressible flow, integral methods, Thomas (L.C.), Al-Sharif (M.M.), *8558*
- micropolar media, non newtonian flow, pipe flow, Shirkot (K.S.), Thakur (D.S.), *8580*
- duct flow, fins, friction factor, turbulent flow, Scott (M.J.), Webb (R.L.), *8613*
- pipe flow, pulsatile flow, turbulent flow, unsteady flow, Creff (R.), Andre (P.), (et al.), *8615*
- annular flow, augmentation, convection, cylindrical bodies, heat exchangers, Dyban (E.P.), Lesnikovskii (A.A.), (et al.), *8682*
- critical heat flux, film cooling, film flow, pipe flow, surface tension, Ganic (E.N.), Roppo (M.N.), *8686*
- boiling, bubble dynamics, film boiling, nucleate boiling, Shekriladza (I.G.), *8691*
- laminar flow, mist flow, pipe flow, spray flow, Yao (S.-C.), Rane (A.), *8697*
- convection, crossflow, cylindrical bodies, Bennon (W.D.), Incropera (F.P.), *8700*
- conical bodies, rotating bodies, rotating fluids, spinning bodies, Vira (N.R.), Fan (D.-N.), *8716*
- cladding, conformal mapping, fuel elements, nuclear reactors, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *8729*

- liquid liquid interface, precipitation, solidification, Moresco (L.L.), Marschall (E.), *8737*
- augmentation, computer programming, condensers, fouling, marine engineering, Marto (P.J.) eds., Nunn (R.H.), *8761, book*
- energy conversion, energy storage, packed beds, solar collectors, stratified flow, Phillips (W.F.), *8766*
- cavities, convection, interferometry, thermal measurements, visualization, Semas (V.), Lee (E.I.), *8769*
- ablation, finite difference methods, nucleate boiling, space vehicles, Sutton (G.W.), *8771*
- burners, drops, evaporation, liquid liquid interface, Iida (Y.), Takashima (T.), *8772*
- ablation, fluid mechanics, melting, Omelchenko (K.G.), Trenev (M.G.), *8774*
- cylindrical bodies, mathematical methods, solidification, Beckett (P.M.), *8775*
- boundary layer, mass transfer, moving surfaces, thermal diffusion, Chen (T.S.), Strobel (F.A.), *8776*
- darcy flow, mass transfer, porous media, Vafai (K.), Tien (C.L.), *8782*
- mass transfer, nonlinear analysis, porous media, Thomas (H.R.), Morgan (K.), (et al.), *8783*
- boussinesq equation, convection (free), insulation, porous media, Brailovskaya (V.A.), Kogan (V.R.), (et al.), *8784*
- combustion (turbulent), explosions, ignition, turbulence, Liu (V.C.), *8788*
- axial turbines, blades, rotors, thermal measurements, Pochuev (V.P.), Shcherbakov (V.F.), *8808*
- liquid metals, magneto fluid dynamics, models, welding, Atthey (D.R.), *8818*
- boundary layer (thermal), channel flow, magneto fluid dynamics, performance, Ahluwalia (R.K.), Doss (E.D.), *8826*
- collision models, plasma, propagation, waves, Namikawa (T.), Hamabata (H.), *8828*
- ballistics (interior), detonation, particle dynamics, propagation, turbulent flow, Buckingham (A.C.), *8855*
- power plants, processing, two phase flow, Rothe (P.H.) eds., Lahey (R.T.) Jr., *8901, book*
- interaction, interface phenomena, sprays, three dimensional flow, Palaszewski (S.J.), Jiji (L.M.), (et al.), *8911*
- fluidized beds, particle fluid flow, Seki (N.), Fukusako (K.), (et al.), *8933*
- convection (free), layered media, porous media, Masuoka (T.), Yokota (Y.), (et al.), *8940*
- rotating bodies, shells (spherical), Belvedere (G.), Paterno (L.), (et al.), *8960*
- mixing layers, oceanography, thermal diffusion, thermocline, Posmentier (E.S.), *8993*
- computer programming, computing techniques, energy, mathematical models, numerical analysis, Lewis (R.W.), Morgan (K.), (et al.), *9149*
- damping, liquid solid interface, rayleigh waves, solid solid interface, Van Der Sluijs (J.C.A.), Van Der Sluijs (M.J.), *9339*
- blunt bodies, nonequilibrium flow, supersonic flow, Golovachov (Yu.P.), *9552*
- boundary layer (turbulent), turbulence (geophysical), Subramanian (C.S.), Antonia (R.A.), *9608*
- convection (free), cylindrical bodies, turbulent flow, Na (T.Y.), Chiou (J.P.), *9610*
- pipe flow, turbulence, Ibrahim (M.B.), Walker (V.), *9611*
- capillary flow, closed conduit flow, convection (free), porous media, thermal instability, vortex flow, Catton (I.) eds., Smith (R.N.), *9682, book*
- film cooling, injection, similarity methods, El-Hadik (A.A.B.), Barrow (H.), *9694*
- augmentation, channel flow, convection (free), extended surfaces, plates (parallel), rayleigh number, Sparrow (E.M.), Prakash (C.), *9699*
- dissociation, real gas effects, stagnation point, thermal instability, Agranat (V.M.), Bertsun (V.N.), (et al.), *9704*
- channel flow, non newtonian flow, power law fluids, shear stress, viscoelastic fluids, Shulman (Z.P.), Khusid (B.M.), (et al.), *9706*
- mathematical models, temperature, Duc (E.), *9718*
- contact problems, dispersed flow, liquid liquid interface, spray columns, sprays, Moresco (L.L.), Marschall (E.), *9731*
- pipe flow, Soos (F.), *9734*
- convection (forced), separated flow, solar collectors, Sparrow (E.M.), Samie (F.), (et al.), *9736*
- solar collectors, solar energy, Lunde (P.J.), *9738*
- blades, steam turbines, Breitkopf (G.E.), *9782*
- fluidized beds, multiphase flow, Kato (Y.), Uchida (K.), (et al.), *9896*
- cavities, convection (forced), porous media, viscous effects, Blythe (P.A.), Simpkins (P.G.), *9898*
- freezing, mass transfer, porous media, Jame (Y.-W.), Norum (D.I.), *9900*
- ocean air interaction, oceanography, radiation, Simpson (J.J.), Dickey (T.D.), *9924*
- ocean air interaction, oceanography, radiation, stratification, Holloway (P.E.), *9925*
- climatology, clouds, ice, ocean air interaction, Saltzman (B.), Moritz (R.E.), *9940*
- computing techniques, finite element methods, fluid mechanics, matrix methods, Rao (S.S.), *10061*
- convection (forced), currents, environmental control, gravity, Sturm (T.W.), *10408*
- coordinate systems, navier stokes equation, plane surfaces, three dimensional flow, Agrawal (A.K.), Peckover (R.S.), *10415*
- asymptotic behavior, boundary layer, fluid mechanics, navier stokes equation, Kuiken (H.K.), *10424*
- blunt bodies, hypersonic flow, vorticity, Zemlyanskii (B.A.), Lunev (V.V.), (et al.), *10428*
- boundary layer, convection, hydrodynamic stability, vortex flow, Moutsoglou (A.), Chen (T.S.), (et al.), *10465*
- boundary layer (turbulent), convection (forced), shear flow, turbulence, Thomas (L.C.), Ibrahim (M.B.), *10472*
- jets, mass transfer, turbulence, turbulent flow, Mills (A.F.), Kim (S.), (et al.), *10473*
- experimental methods, hot wire, turbulence, Smits (A.J.), Perry (A.E.), *10481*
- film flow, integral methods, laminar flow, nuclear reactors, tubes, Rogers (J.T.), *10565*
- bubbly flow, convection (forced), pipe flow, two phase flow, Sekoguchi (K.), Nakazatomi (M.), (et al.), *10566*
- blades, convection (forced), gas turbines, thermal loading, Graham (R.W.), *10567*
- channel flow, granular media, nusselt number, peclet number, Spelt (J.K.), Brennen (C.E.), (et al.), *10570*
- duct flow, ducts (variable area), laminar flow, nusselt number, transition flow, turbulent flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- channel flow, fluid injection, nusselt number, porous walls, suction, Yeroshenko (V.M.), Zaichik (L.I.), (et al.), *10572*
- integral methods, laminar flow, mass transfer, rotating disks, rotating fluids, Felsch (K.-O.), Piesche (M.), *10580*
- counterflow, duct flow, film flow, mass transfer, roughness, Fujita (H.), Takahama (H.), (et al.), *10581*
- laminar flow, non newtonian flow, nusselt number, pipe flow, power law fluids, rheology, Joshi (S.D.), Bergles (A.E.), *10582*
- boundary layer, constitutive equations, micropolar media, plane flow, Takhar (H.S.), Soundalgekar (V.M.), *10583*
- buoyant flow, cavities, channel flow, convection, laminar flow, Humphrey (J.A.C.), Jacobs (E.W.), *10585*
- convection (free), laminar flow, tube bundles, Magallon (D.), *10587*
- convection (free), cylindrical bodies, spherical bodies, viscous effects, Ingham (D.B.), *10589*
- acceleration, body force convection, crystals, cylindrical bodies, mass transfer, Feonychev (A.I.), *10595*
- laplace transform, mass transfer, Koprinski (S.Ts.), *10601*
- nonequilibrium flow, real gas effects, stagnation point, Mori (Y.), Himeno (N.), (et al.), *10605*
- ablation, boundary layer, injection, mass transfer, radiant interchange, radiating flow, stagnation point, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10608*
- geometrical properties, heat exchangers, heat exchangers (stream-symmetric), internal flow, Singh (K.P.), *10615*
- channel flow, cylindrical bodies, extended surfaces, fins, Vanfossen (G.J.), *10621*
- condensation, convection, tube bundles, turbulent flow, Kutateladze (S.S.), Gogonin (I.I.), (et al.), *10622*
- regenerators, specific heat, Maclaine-Cross (I.L.), *10624*
- heating, solar energy, Nasonov (E.A.), Bondarenko (Yu.I.), *10631*
- evaporation, vacuum, Palmer (H.J.), Bose (A.), *10644*
- thin films, vaporization, Tolubinskii (V.I.), Antonenko (V.A.), (et al.), *10645*
- centrifugal fans, mass transfer, Kremnev (V.O.), *10647*
- capillary surfaces, condensation, evaporation, Shekriidza (I.G.), Rusishvili (D.G.), *10649*
- bubble dynamics, liquid vapor mixture, mass transfer, two phase flow, Nigmatulin (B.I.), Kroshilin (A.Ye.), (et al.), *10650*
- convection, drops, evaporation, Rane (A.), Yao (S.-C.), *10651*
- laminar flow, mass transfer, mist flow, plates, Trela (M.), Kowalski (J.), *10652*
- burning rate, convection (forced), mass transfer, solids, Joulain (P.), *10663*
- gases, mass transfer, suspensions, Sheiman (V.A.), Nikolaichik (L.V.), *10664*
- evaporation, impingement, jets, mass transfer, navier stokes equation, Mujumdar (A.S.), Li (Y.-K.), (et al.), *10665*
- binary flow, distillation, mass transfer, Ito (A.), Asano (K.), *10666*
- boundary layer, fluid injection, shells (spherical), supersonic flow, Zinchenko (V.I.), Trofimchuk (E.G.), *10682*
- laminar flow, plates (parallel), porous surfaces, Chaudhary (R.C.), Gaur (Y.N.), *10683*
- fluid injection, fluid mechanics, numerical methods, rotating disks, suction, Agarwal (R.S.), Bhargava (R.), *10685*
- evaporation, mass transfer, porous media, Iodko (E.A.), *10692*
- burning velocity, chemical reactions, combustion, particles, Strunin (V.A.), Dyakov (A.P.), (et al.), *10703*
- combustion products, gas surface interaction, radiant interchange, Popov (Yu.A.), Melman (M.M.), (et al.), *10707*
- channel flow, circuits, magneto plasma dynamics, rarefied gases, Soundalgekar (V.M.), Akolkar (S.P.), *10737*
- fluidized beds, radiant interchange, radiation, Borodulya (V.A.), Kovenskii (V.I.), *10840*
- fluidized beds, mass transfer, Glicksman (L.R.), Joos (F.M.), *10842*
- lubricants (liquid), thermal effects, viscosity, Constantinescu (V.N.), Smith (R.N.), (et al.), *10895*

- concrete, thermal effects, thermal stresses, Thurston (S.J.), Priestley (M.J.N.), (et al.), *11328*
- creeping flow, nuclear waste, singularities, spherical bodies, viscous flow, Krenk (S.), *11363*
- convection (free), laminar flow, stratification, Venkatachala (B.J.), Nath (G.), *11371*
- compressible flow, perturbations, Prokofev (V.A.), *11415*
- gases, mixtures, plates (parallel), Nosik (V.I.), *11445*
- couette flow, gases, plates (parallel), Bishaev (A.M.), Rykov (V.A.), *11450*
- couette flow, kinetic theory, porous surfaces, rarefied gases, Khidr (M.A.), Abdel-Gaid (M.A.), *11454*
- gases, plates (parallel), Vestner (H.), *11455*
- magneto fluid dynamics, porous walls, rotating disks, Sarojamma (G.), Krishna (D.V.), *11508*
- channel flow, porous surfaces, pulsatile flow, viscoelastic fluids, Roy (J.S.), Nayak (P.), (et al.), *11509*
- boundary layer, curved surfaces, hydrodynamic stability, taylor instability, Kohama (Y.), Kobayashi (R.), *11527*
- boundary layer (thermal), rotating disks, viscous effects, Vira (N.R.), Fan (D.-N.), *11552*
- boundary layer (turbulent), particle fluid flow, two phase flow, Bose (T.K.), *11556*
- axial turbines, cascades, cooling, gas turbines, Goreiov (G.M.), Fishbein (V.D.), (et al.), *11748*
- conduction (heat), conformal mapping, variational methods, Laura (P.A.A.), Sarmiento (G.S.), *11765, book*
- augmentation, heat exchangers, tube bundles, viscous effects, Dzyubenko (B.V.), levlev (V.M.), *11768*
- augmentation, cylindrical pin fins, extended surfaces, fins, optimization, Sonn (A.), Bar-Cohen (A.), *11771*
- combustion chambers, diesel engines, fuel economy, injection systems, Kamel (M.), Watson (N.), *11797*
- axial turbines, blades, pressure measurement, walls, Dunn (M.G.), Hause (A.), *11798*
- fuel elements, hydraulics, nuclear fuels, numerical methods, Araki (T.), Takeda (T.), (et al.), *11802*
- boilers, convection, experimental results, magneto fluid dynamics, radiation, Im (K.H.), Ahluwalia (R.K.), *11805*
- couette flow, magneto fluid dynamics, plates (parallel), theory, Karimov (I.K.), Ryadno (A.A.), *11810*
- liquid vapor interface, mass transfer, sound propagation, Azamatov (A.Sh.), Shagapov (V.Sh.), *11923*
- bubble dynamics, oscillations, two phase flow, Nigmatulin (R.I.), Khabeev (N.S.), *12031*
- boiling, bubble dynamics, Kusuda (H.), Monde (M.), (et al.), *12047*
- filtration, granular media, mass transfer, Ganzha (V.L.), Zhuravskii (G.I.), *12050*

heat transfer (atmospheric), boundary layer (atmospheric), drag coefficient, mass transfer, Greenhut (G.K.), Bean (B.R.), *981*

- climatology, Nicolis (C.), *988*
- anemometers, scale effects, turbulence (transport), Test (F.L.), Lessmann (R.C.), (et al.), *1662*
- hydrology, mass transfer, meteorology (physical), soils, Lykosov (V.N.), Palagin (E.G.), *1907*
- climatology, North (G.R.), Coakley (J.A.), *1908*
- measurements, oceanography, temperature, Kano (M.), Miyauchi (M.), (et al.), *1909*
- evaporation, mass transfer, Szaniawski (A.), *3021*
- forecasting, weather forecasting, Shteinbok (D.B.), *3022*
- atmospheric circulation, climatology, Golitsyn (G.S.), Mokhov (I.I.), *4056*
- atmospheric circulation, clouds, convection (forced), convection (free), hydrodynamic stability, Falkovich (A.I.), *4063*
- atmospheric circulation, meteorology (physical), weather forecasting, Dymnikov (V.P.), Ishimova (A.V.), *4070*
- atmospheric circulation, meteorology (physical), Dobryshman (E.M.), *4082*
- boundary layer (atmospheric), ground effect, Gibson (M.M.), Launder (B.E.), *4886*
- atmospheric circulation, climatology, Roads (J.O.), *5930*
- climatology, meteorology (physical), potential energy, Vakalyuk (Yu.V.), *5946*
- eddy diffusivity, radiation, turbulence (geophysical), Gay (C.), Thomas (G.E.), *5947*
- boundary layer (atmospheric), radiation, Schonwald (B.), *5948*
- boundary layer (atmospheric), mass transfer, turbulence (geophysical), Reinking (R.F.), *5949*
- boundary layer (atmospheric), ocean air interaction, surface waves, Dvoryaninov (G.S.), *5950*
- boundary layer (atmospheric), mass transfer, ocean air interaction, turbulence (geophysical), Pedersen (K.), Boyum (G.), *5951*
- meteorology (synoptic), Oerlemans (J.), *7071*
- boundary layer (atmospheric), friction coefficient, friction velocity, ocean air interaction, reynolds stresses, turbulence (geophysical), Smith (S.D.), *8997*
- atmospheric circulation, simulation, waves, Lordi (N.J.), Kasahara (A.), (et al.), *9929*
- atmospheric circulation, simulation, waves, Hsu (C.-P.F.), *9930*
- clouds, convection (free), Haman (K.E.), Niewiadomski (M.), *9931*
- boundary layer (atmospheric), convection (forced), Andre (J.-C.), Artaz (M.-A.), *9935*
- convection (forced), cooling, solar collectors, wind, Ramsey (J.W.), Charmchi (M.), *10637*
- boundary layer (thermal), Katsaros (K.B.), *12074*
- boundary layer (atmospheric), clouds, meteorology (physical), Buikov (M.V.), Khvorostyanov (V.I.), *12077*

heat transfer (biological), biomathematics, human body, temperature, Smith (P.), Twizell (E.H.), *6027*

- experimental results, eyes, lasers, thermal effects, Polhamus (G.D.), *7115*
- brain, high temperature, nervous system, Epstein (Y.), Keren (G.), (et al.), *7124*
- biocontrol, human body, thermal effects, Schuette (W.H.), Lees (D.E.), (et al.), *7125*
- finite element methods, human body, variational methods, Smith (P.), Twizell (E.H.), *9069*

heat transfer (combined modes), conduction (heat), convection (free), Miyamoto (M.), Sumikawa (J.), (et al.), *764*

- channel flow, convection, emissivity, radiation, Sparrow (E.M.), Shah (S.), (et al.), *782*
- convection, monte carlo analysis, plates (parallel), radiation, Kobiyama (M.), Taniguchi (H.), (et al.), *783*
- computer programming, nuclear reactors, slug flow, tube bundles, Yeung (M.R.), Wolf (L.), *789*
- film boiling, mass transfer, radiation, Arai (N.), Takahashi (S.), (et al.), *799*
- conduction (unsteady), heat transfer, wave equations, Sieniutycz (S.), *1062*
- boundary layer (thermal), laminar flow, nusselt number, plane flow, Gosse (J.), *1710*
- thermophysical properties, transforms, transient effects, Dulnev (G.N.), Zavgorodnii (V.I.), (et al.), *2812*
- radiant interchange, radiation, thermal sciences, Sparrow (E.M.), Cess (R.D.), *3826, book*
- radiant interchange, radiometer, thermal measurements, Shcherbina (D.M.), *4713*
- conductivity, radiant interchange, Filimonov (S.S.), Khrustalev (B.A.), (et al.), *5569*
- heat transfer, packed beds, Smith (E.M.), *5857*
- annular flow, convection, laminar flow, Hattori (N.), *6776*
- cylindrical bodies, external flow, laminar flow, separated flow, Yao (L.S.), Chen (F.F.), *6777*
- convection, pipe flow, Hieber (C.A.), *6780*
- extended surfaces, fins, integral methods, Heggs (P.J.), Ingham (D.B.), (et al.), *7858*
- emissivity, scattering, Marchenko (N.V.), Venyavkina (E.A.), *7865*
- carbon dioxide, high temperature, injection, regenerators, Asif (S.A.), Khandwawala (A.I.), *7868*
- convection (free), heat addition, internal sources, radiant interchange, turbulent flow, Cheung (F.B.), Chan (S.H.), (et al.), *8743*
- conduction (heat), convection (forced), heat exchangers, pipe flow, slug flow, Vick (B.), Ozisik (M.N.), *8745*
- fluid-structure interaction, nuclear reactors, thermal effects, tube bundles, Bennett (J.G.), Ju (F.), *8747*
- convection (free), cylindrical bodies, melting, Yao (L.S.), Chen (F.F.), *8748*
- conduction, convection, finite difference methods, Griffiths (D.F.), Christie (I.), (et al.), *8750*
- buoyant flow, conductivity, convection (free), diffusion, heat addition, radiant interchange, Epstein (M.), Cheung (F.B.), (et al.), *8751*
- convection, radiant interchange, Janata (J.), *8753*
- combustors, magneto fluid dynamics, mass transfer, three dimensional flow, Im (K.H.), Ahluwalia (R.K.), *8811*
- boundary layer (thermal), magneto fluid dynamics, stability, surface effect, Bashtovoi (V.G.), Pavlinov (M.I.), *8813*
- channel flow, conduction, convection (forced), nucleate boiling, thermal instability, Humbert (M.), Martin (M.), *9685*
- convection, fluid injection, injection, plates (vertical), Tsuruno (S.), Iguchi (I.), *9697*
- aquifers, conduction (heat), convection (free), geothermal reservoirs, thermosyphons, Torrance (K.E.), Chan (V.W.C.), *9724*
- blunt bodies, convection, hypersonic flow, radiant interchange, reflection, Rolin (M.N.), Soloukhin (R.I.), (et al.), *9728*
- adsorption, buoyant flow, convection (free), radiant interchange, solar radiation, Fathalah (K.A.), Elsayed (M.M.), *9729*
- convection, energy storage, hydrocarbons, reservoirs, storage, transient effects, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*
- absorption, conduction (heat), radiant interchange, radiation properties, reflection, Stepanov (S.V.), Bityukov (V.K.), *10602*
- channel flow, convection, plates (parallel), radiant interchange, solar collectors, Liu (C.H.), Sparrow (E.M.), *10610*
- channel flow, convection, radiant interchange, scattering, turbulent flow, Popov (Yu.A.), Polovnikov (V.I.), *10611*
- magneto fluid dynamics, mie scattering, radiant interchange, radiating flow, scattering, three dimensional flow, Ahluwalia (R.K.), Im (K.H.), *10612*
- fluidized beds, two phase flow, Pikashov (V.S.), Ilchenko (A.I.), (et al.), *10613*

- fluidized beds, multiphase flow, packed beds, Kato (Y.), Kago (T.), (et al.), *12068*

heat transfer (direct contact), electrical analogies, friction (solid solid), thermal effects, Lenk (D.), Zscherpel (W.), *933*
- friction (sliding), polymers, wear, Kar (M.K.), Bahadur (S.), *5973*
- brakes, friction (sliding), Newcomb (T.P.), *5974*
- friction (sliding), lubricants (liquid), lubrication (boundary), scoring, Fujita (K.), Obata (F.), *7097*
- friction (sliding), thermal contact resistance, wear, Amosov (A.P.), *8051*

heat treatment, aluminum alloys, crack propagation, fatigue, life expectancy, Chung (D.W.), Chaturvedi (M.C.), *445*
- bauschinger effect, plastic behavior, thermal effects, Aran (A.), Demirkol (M.), *2237*
- erosion, particles, steel, wear, Salik (J.), Buckley (D.H.), *3504*
- abrasion, hardness, mechanical properties, steel, wear, Sorokin (G.M.), Milancheva (N.V.), *5334*
- anisotropy, fatigue, life expectancy, rolling, strength, Nisitani (H.), Kage (M.), *6422*
- bearings (ball), eddy currents, hardness, inspection, transducers, Melnikov (I.V.), Savikovskii (L.A.), (et al.), *6491*
- corrosion fatigue, crack growth, steel, Romaniv (O.N.), Voldemarov (A.V.), (et al.), *7493*
- crack resistance, fracture, Lazko (V.G.), Lazko (V.E.), (et al.), *7534*
- deformation (plastic), pressure, void closure, void fraction, Keife (H.), Stahlberg (U.), *8359*

heating, cyclic loading, polymers, thermal effects, thermal explosions, vibration, Meinkohn (D.), *929*
- conduction (heat), floors, green function, heat sources, De Mey (G.), *1700*
- control, solar energy, solar heating, Auslander (D.M.), Tomizuka (M.), (et al.), *2187*
- cooling, solar collectors, solar distillation, Ward (D.S.), *2834*
- energy storage, heat pumps, mathematical models, Schlosser (K.), Teislev (B.), *2837*
- digital control, heat, heat storage, heat transfer, identification, Kulakowski (B.T.), Schmidt (F.W.), *3211*
- extrusion, non newtonian flow, viscous effects, Dubovik (A.V.), *3588*
- cooling, energy conservation, energy conversion, energy storage, Diamant (R.M.E.), Kut (D.), *3833, book*
- macroscopic characterization, plasma (toroidal), tokamak, turbulence (mechanisms), Mitarai (O.), *3902*
- absorption, diffusion, lasers, metals, Boiko (V.I.), Bunkin (F.V.), (et al.), *5808*
- design, design criteria, regenerators, steam turbines, Sergeeva (V.B.), Ivashchenko (S.S.), (et al.), *6816*
- air conditioning, energy conservation, heat pumps, solar energy, Veziroglu (T.N.) ed., *6818, book*
- energy storage, mathematical models, solar energy, Rabinovich (M.D.), Fert (A.R.), *6820*
- air conditioning, cooling, thermal loading, Urano (Y.), Nanri (H.), (et al.), *9742*
- cavities, compressible flow, jets, pressure change, resonance, supersonic flow, Kuptsov (V.M.), Filippov (K.N.), *10417*
- air conditioning, heat pumps, Von Cube (H.L.), Steimle (F.), *10614, book*
- heat transfer, solar energy, Nasonov (E.A.), Bondarenko (Yu.I.), *10631*
- energy conversion, solar collectors, solar ponds, Sodha (M.S.), Tiwari (G.N.), (et al.), *10633*
- containment, currents, helical flow, plasma, Yamagishi (T.), *10757*

heaving, frost, modeling, soils, Gilpin (R.R.), *1322*
- cylindrical bodies, floating bodies, free boundary, singular integral equations, singularities, Ursell (F.), *4099*
- construction, soils, Pchelintsev (A.M.), Komarov (V.I.), *5254*
- damping, ship motion, surface effect, virtual mass, Kim (C.H.), Tsakonas (S.), *9014*
- critical region, pitching, shallow water, slender bodies, Plotkin (A.), *9942*
- pitching, rolling motion, ship motion, virtual mass, yawing, Troesch (A.W.), *10878*
- floating bodies, gravity waves (finite depth), integral methods, oscillating bodies, Sayer (P.), *11682*

Hebault (D.), acoustic waves, cylindrical waves, diffraction, soils, sound propagation, Filippi (P.), *1808*

Hebel (W.), boiling, bubbly flow, channel flow, convection (forced), critical heat flux, Detavernier (W.), (et al.), *2794*

Hechler (M.), collision models, geosynchronous orbits, mission analysis, probability, Van Der Ha (J.C.), *6882*

Hecht (A.M.), airfoil characteristics, finite difference methods, reynolds equation, stratification, trailing vortices, turbulent flow, vortices, wakes, Bilanin (A.J.), (et al.), *1505*

Hecker (G.E.), energy dissipation, hydraulic structures, inlet flow, models, vortex flow, *7664*

Heckl (M.), acoustics (architectural), noise abatement, sound propagation, *10788*

Hedback (A.J.W.), equations of state, phase changes, steam, steam turbines, *2776*

Hede (A.J.), environmental control, noise, noise abatement, *1817*

Hedgepeth (J.M.), aerospace vehicles, design, space vehicle structures, Miller (R.K.), (et al.), *3562*

Hedrick (J.K.), see Bell (C.E.), *4940*

Hedstrom (G.W.), boundary layer, navier stokes equation, numerical analysis, reynolds number, Osterheld (A.), *606*

Hees (G.), differential equations (ordinary), mathematical methods, matrix methods, structural analysis, *7200*

Hefzy (M.S.), see Nayfeh (A.H.), *522*

Hegde (M.), see Kumar (A.), *7426*

Hegedus (I.), edge effects, matrix methods, plates (rectangular), plates (simply supported), *4386*
- bifurcation, buckling, shells (cylindrical), shells (sandwich), *6257*
- elastic foundations, elasticity (linear), influence coefficients, rings, *8235*

Hegemier (G.A.), see Murakami (H.), *8738*

Heger (F.J.), see Whitman (R.V.), *5896*

Heggs (P.J.), extended surfaces, fins, heat transfer (combined modes), integral methods, Ingham (D.B.), (et al.), *7858*

Hegna (H.A.), airfoils, incompressible flow, stalling, turbulent flow, two dimensional flow, viscous flow, *7788*

Heiberger (D.), see Busse (L.), *7405*

Heidelberg (L.J.), see Rice (E.J.), *11929*

Heidug (W.), entropy, heat engines, thermodynamics (irreversible), thermodynamics (nonequilibrium), Muschik (W.), *7817*

Heifetz (J.), dynamic analysis, elastoplasticity, large displacement, pipes, Benjamin (M.), (et al.), *7362*

Heijkoop (T.), see Luong (L.H.S.), *7079*

Heijnen (J.J.), bubble dynamics, liquid gas mixture, measurements (dynamic), two phase flow, Vant Riet (K.), (et al.), *6972*

Heikal (H.), aerodynamic interference, channel flow, pressure measurement, walls, *10538*

Heilker (W.J.), heat exchangers, tube bundles, two phase flow, vibration (flow induced), vibration (forced), Vincent (R.Q.), *6289*

Heilmann (P.), coatings, friction (sliding), models, plastic flow, Rigney (D.A.), *12089*

Heimeshoff (B.), beams (box), girders, torsion, wood structures, *7316*

Heinecke (E.), see Achenback (E.), *6621*

Heinloo (M.), design (optimum), dynamic loads, pressurized pipes, reinforced bodies, reinforced concrete, Kaliszky (S.), *10349*

Heinrich (J.C.), see Bergman (L.A.), *1267*
- see Bergman (L.A.), *4985*
- convection, diffusion, finite element techniques, *6808*
- finite element techniques, galerkin method, navier stokes equation, reynolds number (small), viscous flow, Marshall (R.S.), *7679*
- see Bergman (L.A.), *10033*

Heins (C.P.), bridges (box girder), design (optimum), Hua (L.-J.), *2532*
- bridges, composite structures, design, slabs, *3545*

Heinzl (J.), design, four bar linkage, mechanisms (planes), *7632*

Heise (U.), boundary value problems, elasticity (linear), elastostatics, integro differential equations, *7186*
- biharmonic equation, boundary value problems, elasticity (linear), singular integral equations, *7271*

Hejazi (M.S.), see Adeli (H.), *7032*

Helal (M.A.), gravity waves (internal), gravity waves (shallow water), liquid liquid interface, nonlinear waves, Molines (J.M.), *5471*

Held (I.M.), atmospheric circulation, meteorology (physical), rotating fluids, stratification, Hou (A.Y.), *8988*
- see Haidvogel (D.B.), *9004*

Helenbrook (R.G.), see Anthony (F.M.), *3538*

helical flow, uniqueness, vortex tubes, Adebiyi (A.), *1508*
- approximations (higher order), ducts (curved), laminar flow, Murata (S.), Miyake (Y.), (et al.), *1555*
- boilers, critical heat flux, dryout, pipe flow, pressure drop, tubes, two phase flow, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
- liquid gas mixture, tubes, two phase flow, Whalley (P.B.), *1845*
- eigenvalue problems, magneto fluid dynamics, modes, stability theory, Lucas (R.J.), *2877*
- conduction (heat), materials possessing memory, uniqueness, Fetecau (C.), *6577*
- inviscid fluid, modeling, turbulence, Yamamoto (K.), Hosokawa (I.), *8610*
- magneto fluid dynamics, modes, streamlines, two dimensional flow, Rakhimov (A.A.), *9788*
- channel flow, magneto fluid dynamics, pumps, two dimensional flow, Kapusta (A.B.), Zibold (A.F.), (et al.), *10756*
- containment, currents, heating, plasma, Yamagishi (T.), *10757*
- channel flow, drag coefficient, magneto fluid dynamics, pumps, Kapusta (A.B.), Likhacheva (A.I.), (et al.), *11808*

helicopters, design, vibration isolation, Reichert (G.), *695*
- control, flight tests, Sinclair (M.), Morgan (M.), *1629*
- digital control, flight control, Stengel (B.F.), Broussard (J.R.), (et al.), *2195*
- vibration (forced), vibration isolation, Done (G.T.S.), *2352*
- control, rotors, springs, vibration, Drees (J.M.), Dooley (L.W.), (et al.), *2745*
- dynamic stability, rotating bodies, Yen (J.G.), Mclarty (T.T.), *4439*
- aerodynamic interference, airplane structures, fuselages, geometrical properties, rotors, Wilby (P.G.), Young (C.), (et al.), *4673*
- ditching, dynamic stability, impact, ocean, Daidola (J.C.), Graham (D.A.), (et al.), *5368*

- aerodynamic interference, design, tails, Brocklehurst (A.), Taylor (P.), *5496*
- impedance methods, vibration (forced), Hohenemser (K.H.), Yin (S.-K.), *6299*
- impedance methods, vibration (forced), vibration isolation, Viswanathan (S.P.), Myers (A.W.), *6300*
- algorithms, controllability, rotors, Du Val (R.W.), *6731*
- aerodynamic performance, flight, rotors, Azuma (A.), Saito (S.), (et al.), *6732*
- aerodynamic performance, downwash, hovering, rotors, wakes, Andrew (M.J.), *7796*
- aerodynamic loads, control, rotors, Mccloud (J.L.) III, *7797*
- airships, design, flight stability, rotors, Nagabhushan (B.L.), Tomlinson (N.P.), *7799*
- aerodynamic interference, blades, noise (aerodynamic), vortex lines, Widnall (S.E.), Wolf (T.L.), *8648*
- automatic control, electrical components, fiber optics, hydraulics, rotors, Kretz (M.), Larche (M.), *8649*
- aerocrane, cranes, flight tests, lift, lifting bodies, models, Curtiss (H.C.) Jr., Putman (W.F.), *8650*
- blades, dynamic analysis, vibration (forced), Lucjanek (W.), Narkiewicz (J.), *9317*
- blades, lift, rotors, turbulence (geophysical), turbulent flow, Fijimori (Y.), *9664*
- blades, numerical methods, pressure distribution, transonic flow, unsteady flow, Chattot (J.-J.), Philippe (J.-J.), *9666*
- aeroelasticity, blades, finite element techniques, rotors, Straub (F.K.), Friedmann (P.P.), *9806*
- airfoil characteristics, blades, oscillating bodies, two dimensional flow, Maresca (C.A.), Favier (D.J.), (et al.), *10502*
- blades, three dimensional flow, unsteady flow, wind tunnels, wings, Monnerie (B.), Philippe (J.J.), *10514*
- composite materials, design, rotors, tails, Huber (H.), Frommlet (H.), (et al.), *10515*
- blades, damping, flapping, Peters (D.A.), Gaonkar (G.H.), *11736*
- blades, damping, flapping, rotors, Gaonkar (G.H.), Peters (D.A.), *11737*
- propellers, rotors, sound generation, Farassat (F.), *11944*
- noise, rotors, Dahan (C.), Gratieux (E.), *11994*

helium, fluid injection, jets, penetration, supersonic flow, Vlagov (V.V.), Masyakin (N.E.), (et al.), *631*
- boiling, convection (forced), critical heat flux, heat transfer, transition boiling, Petukhov (B.S.), Zhukov (V.M.), (et al.), *1673*
- carbon dioxide, crossflow, jets, Borisov (V.N.), Breev (V.V.), (et al.), *2664*
- design, nuclear reactors, power plants, turbomachinery, Mcdonald (C.F.), Smith (M.J.), *2750*
- adiabatic processes, centrifugation, liquid vapor mixture, two phase flow, Zhukovskiy (A.V.), *4014*
- bearings (tilted pad), labyrinth seals, turbines, Franck (D.), Noack (G.), (et al.), *4556*
- cryogenics, thermal excitation, Sergeev (S.I.), Popov (O.M.), (et al.), *5532*
- cycles, power generation, solar energy, turbomachinery, Duban (P.), *5603*
- beam plasma interactions, design, injectors, nuclear fusion, Blum (A.S.), Barr (W.L.), (et al.), *6868*
- heat transfer, pipe flow, resistance, two phase flow, Petukhov (B.S.), Zhukov (V.M.), (et al.), *6976*
- cooling, liquid vapor mixture, regulator problem, temperature, valves, Novikov (N.V.), Gorodyskii (N.I.), (et al.), *7575*

Hellat (J.), burners, combustion, flames (diffusion), swirl, Gunther (R.), *6836*
Hellen (G.), see Kairento (A.-L.), *7110*
Hellen (T.K.), see Blackburn (W.S.), *463*
Hellums (J.D.), see Sheth (B.V.), *3063*

helmholtz equation, coordinate systems, elliptical bodies, mathematical methods, Arscott (F.M.), Darai (A.), *37*
- finite element techniques, two dimensional waves, Helps (J.D.), Daly (P.), *1084*
- meteorology, solar radiation, thermal sciences, three dimensional formulation, transfer theory, Ou (S.-C.S.), Liou (K.-N.), *4180*
- differential equations (partial), eigenvalues, Bareket (M.), *4960*
- boundary value problems, green function, green theorem, stability (numerical), Mattioli (F.), *4982*
- finite element techniques, membranes, variational methods, vibration, Laura (P.A.A.), Sarmiento (G.S.), (et al.), *5025*
- finite element techniques, membranes, variational methods, vibration, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *6097*
- eigenvalues, inequalities, isoperimetric inequalities, Kohler-Jobin (M.-T.), *7163*
- inverse problems, mathematical methods, scattering, sturm-liouville equation, Bojarski (N.N.), *8112*
- group theory, klein-gordon equation, mathematical methods, similarity methods, Steinberg (S.), Wolf (K.B.), *8113*
- boundary integral methods, boundary value problems, existence theorems, scattering, Angell (T.S.), Kleinman (R.E.), *10019*

helmholtz resonator, canals, lakes, oscillations, Miles (J.W.), *3610*
- sound generation, transducers, underwater acoustics, Henriquez (T.A.), Young (A.M.), *4804*

Helps (J.D.), finite element techniques, helmholtz equation, two dimensional waves, Daly (P.), *1084*
Hemami (H.), dynamic analysis, lagrange multiplier, mathematical models, Weimer (F.C.), *1063*
Heming (F.S.) Jr., bending, crack closure, plates, *10298*
Hempel (P.R.), filters, nonlinear analysis, probability, stochastic systems, *3106*
Hendershott (M.C.), see Malanotte Rizzoli (P.), *11617*
Henderson-Sellers (B.), models, plumes, shape factors, *5456*
Hendricks (S.L.), bodies (liquid filled), damping, dynamic stability, rotors, *11688*
Hendriks (T.P.M.), characteristic methods, compressible flow, linear theory, three dimensional formulation, *40*
- characteristic methods, shock waves, sonic booms, supersonic flow, three dimensional flow, *4592, book*

Heneka (A.), see Wachter (J.), *6739*
Henne (P.A.), design, potential flow, three dimensional flow, transonic flow, wings, *9653*
Hennecke (E.), see Hinrichs (T.), *2792*
Henneke (E.G.) II, damage, laminates, stress concentration, thermography, vibration, *10135*
Hennenberg (M.), diffusion, immiscible fluids, interfaces, Bisch (P.M.), (et al.), *3955*
Hennig (K.), see Friedrich (H.), *3526*
Henrard (J.), circumnavigation, lunar theory, orbit mechanics, perturbation methods, planetary satellites, three body problem, *10771*
Henriques (A.G.), finite difference methods, mathematical models, river beds, unsteady flow, *9508*
Henriquez (T.A.), helmholtz resonator, sound generation, transducers, underwater acoustics, Young (A.M.), *4804*
Henrotay (P.), eddies, oceanography, rossby waves, *4854*
Henry (P.), see Giezendanner (W.), *2582*
Henry (R.E.), see Cha (Y.S.), *4828*
- nucleation, thermal explosions, vaporization, Fauske (H.K.), *5547*

Henry (R.F.), finite difference methods, gravity waves (shallow water), tides, *11579*
Henrych (J.), arches, dynamic analysis, frames, *300, book*
Henshall (S.H.), design, diesel engines, heat engines, marine engineering, Orbeck (F.), *1760*
Henze (R.H.), conduction (heat), energy storage, liquid solid interface, melting, phase changes, Humphrey (J.A.C.), *768*
Hepler (A.K.), brazed joints, composite structures, honeycomb structures, sandwich construction, Arnquist (J.), (et al.), *3540*
Herakovich (C.T.), composite materials, finite element techniques, notch sensitivity, shear loading, stress analysis, Bergner (H.W.) Jr., *2455*
- composite materials, delamination, laminates, *7302*

Herbert (M.V.), see Calvert (W.J.), *3745*
Herbert (R.J.), control, feedback, nonlinear systems, second order analysis, sensitivity, *8162*
Herbolzheimer (E.), channel flow, plates (parallel), sedimentation, suspensions, Acrivos (A.), *11358*
Herbst (R.), see Pfeil (H.), *5433*
Herczynski (R.), see Bratos (M.), *11444*
Herdman (P.T.), mechanical properties, paper, structure, *2252*
Herendi (R.), energy, optimization, rolling, temperature, Voith (M.), (et al.), *2395*
Hering (J.), constraints, dynamic analysis, lagrange equations, *1984*
- complex variables, holes, plates (holed), strips, Uj (J.), *2214*
- constraints, dynamic analysis, lagrange equations, mechanics, *6053*

Herman (H.), columns, eccentric loading, imperfections, *7317*
Hermann (W.), see Leithner (R.), *6843*
Hermesh (R.), optimization, rockets, thrust, Katzir (S.), (et al.), *1795*
Heron (B.), convergence, differentiation, iterative methods, parabolic equations, *7183*
- convergence, finite difference methods, mathematical methods, parabolic equations, *9114*

Herrick (J.W.), see Gilbert (J.A.), *1394*
- see Gilbert (J.A.), *1395*
- see Gilbert (J.A.), *8424*

Herrmann (A.G.), cracks, energy release, fracture mechanics, j-integral, mixed mode fracture, path integrals, Herrmann (G.), *8388*
Herrmann (G.), see Rousselet (J.), *2719*
- see King (R.B.), *5294*
- see Pasic (H.), *6268*
- see Herrmann (A.G.), *8388*
- see King (R.B.), *8425*

Herrmann (K.), see Braun (H.), *2456*
Herron (R.H.), see Skrovanek (S.D.), *6954*
Hersey (J.A.), see Lai (F.), *5824*
- see Krycer (I.), *12055*

Hertzberg (R.W.), see Bretz (P.E.), *3434*
Herz (B.), multivariable systems, nonlinear systems, stability theory, *9167*
Herzberger (J.), algorithms, computing techniques, iterative methods, newton method, *4185*
Herzog (M.A.M.), earthquake resistant structures, resonance, soils, structural response, *10853*
Hess (J.), decision theory, dynamic programming, linear systems, optimization, time invariant systems, Kagiwada (H.), (et al.), *8175*
Hess (J.R.) Jr., see Agnew (J.W.), *6724*

Hess (S.), see Keller (J.U.), *10545*
- constitutive relations, liquid crystal, thermodynamic functions, thermodynamics (irreversible), thermodynamics (nonequilibrium), Pardowitz (I.), *10561*

Hetnarski (R.B.), see Bahar (L.Y.), *2979*
Hetsroni (G.), see Haber (S.), *1860*
Hetsroni (G.) ed., mixtures, multiphase flow, systems, *4005, book*
Heuze (F.E.), see Ingraffea (A.R.), *8355*
Hewett (M.E.), combustors, ramjets, regression rate, solid fuels, Netzer (D.W.), *5646*
Hewit (J.R.), algorithms, control, design, manipulators, mechanisms (planes), robotics, Burdess (J.S.), *9482*
Hewitt (G.F.), optical instruments, shadowgraphic methods, two phase flow, Whalley (P.B.), *948*
Hewitt (J.S.), modeling, nonhomogeneous soils, statistical theory, Dexter (A.R.), *1523*
Heydt (G.T.), see Chapman (M.C.), *7867*
Heymann (M.), feedback, optimal control, pole placement, *7230*
Heyt (J.W.), see Lu (C.C.), *9690*
Heywood (J.B.), see Caton (J.A.), *735*
Hiba (M.), edge effects, plates, *1239*
Hickey (J.), see Vito (R.P.), *7113*
Hickox (C.E.), see Gross (R.J.), *10635*
Hidaka (T.), design, dynamic loads, gear teeth, surface profiles, Terauchi (Y.), (et al.), *10373*
Hieber (C.A.), casting, cavities, finite difference methods, finite element techniques, fluid injection, injection molding, Shen (S.F.), *549*
- see Isayev (A.I.), *6656*
- convection, heat transfer (combined modes), pipe flow, *6780*

Higgins (D.T.), baffles, bends, scour, spillways, *9506*
Higgins (F.P.), interferometry, sound fields, ultrasonics, Norton (S.J.), (et al.), *3977*
Higgins (R.J.), river beds, sediment transport, suspensions, *1499*
high cycle fatigue, endurance limit, environmental tests, fatigue, life expectancy, nickel alloys, Mowbray (D.F.), Giaquinto (E.V.), (et al.), *443*
- fatigue, linear theory, probabilistic design, Wirsching (P.H.), Hsieh (S.), *446*
- aluminum alloys, crack propagation, steel, Hoffeiner (W.), *447*
- composite materials, fatigue, glass fibers, life expectancy, Kim (H.C.), Ebert (L.J.), *1209*
- aluminum alloys, fracture criteria, Botvina (L.R.), Shabalina (V.N.), (et al.), *2425*
- alloys, fatigue, high temperature, Ishchenko (I.I.), Golub (V.P.), (et al.), *6469*
- aluminum alloys, cracks, fatigue, ultrasonics, Tschegg (E.), Stanzl (S.), *7473*
- alloys, environmental tests, high temperature, low cycle fatigue, Soo (P.), Chow (J.G.Y.), *7478*
- crack initiation, deformation (plastic), frequency response, Lindner (A.), Bajons (P.), (et al.), *7508*
- fatigue, material testing, Kuzmenko (V.A.), *7510*
- composite structures, low cycle fatigue, reinforced bodies, Rosenkranz (G.), Gerold (V.), *9245*
- crack initiation, crack propagation, ductile fracture, microcracks, Nisitani (H.), Takao (K.-I.), *9389*
- acoustic emission, cyclic loading, steel, Hamel (F.), Bailon (J.P.), (et al.), *10318*
- accelerated testing, correlation, endurance limit, frequencies, Kuzmenko (V.A.), *10339*

high enthalpy, fluid injection, supersonic flow, Baev (V.K.), Boshenyatov (B.V.), (et al.), *10463*
high pressure, cryogenics, diamond, testing equipment, thermophysical properties, Bundy (F.P.), Dunn (K.J.), *2500*
- pressure vessels, thermal measurements, Bock (W.J.), *3810*
- thermophysical properties, transport properties, viscosity, Birnboim (M.H.), Weiss (H.), *5520*
- constitutive equations, equations of state, water, Juza (J.), Sifner (O.), (et al.), *5521*
- constitutive equations, equations of state, solid mechanics, Filimonov (V.A.), *5525*
- blades, cooling, turbomachinery, Holland (M.J.), Thake (T.F.), *5560*
- discharges, measurements, plasma, walled structures, Kiparenko (G.F.), Kozyukov (A.V.), *5690*
- boiling, hydrocarbons, nucleation, water, Avedisian (C.T.), Glassman (I.), *6771*
- density, elastic waves, high temperature, rocks, Levykin (A.I.), Vavakin (V.V.), *7026*
- equations of state, gases, nitrogen, Antanovich (A.A.), *7820*
- fluids, low temperature, molecular theory, transport properties, Chung (T.H.), Lee (L.L.), (et al.), *7821*
- boiling, pipe flow, thermal measurements, Sekoguchi (K.), Tanaka (O.), (et al.), *7830*
- acoustic waves, anisotropy, rocks, Levitova (F.M.), *8010*
- carbides, coatings, friction (sliding), gases, lubricants (gas), wear, Skinner (J.), *9948*
- lubricants (dry film), phase changes, thermophysical properties, Rolle (K.C.), Crisp (J.N.), (et al.), *10564*

high speed flow, hulls, planing surfaces, yawing, Casling (E.M.), *3034*
- reynolds number (high), streamlines, Riley (N.), *3684*

high strength, composite materials, glass fibers, Prewo (K.M.), Brennan (J.J.), *281*
- aluminum alloys, high temperature, material testing, reinforced bodies, Yajima (S.), Okamura (K.), (et al.), *5125*
- elastic constants, fibers, organic fibers, polymers, Black (W.B.), *7280*
- aluminum alloys, corrosion fatigue, powder metallurgy, Pickens (J.R.), *8368*
- aluminum alloys, crack opening displacement, fatigue, material testing, Davidson (D.L.), Lankford (J.), *8373*

high temperature, alloys, creep, thermoviscoelasticity, Nerodenko (L.M.), Dabizha (E.V.), *1192*
- elastoplasticity, shells (thick), shells (thin), Levy (A.), *1205*
- pressurized pipes, reactor structures, structural analysis, Kraus (H.), *1206*
- biaxial loading, life expectancy, low cycle fatigue, Brown (M.W.), Miller (K.L.), *1351*
- creep rupture, material testing, nickel alloys, Dwivedi (V.S.), *1410*
- automobiles, brakes, friction (solid solid), Ricco (M.), *1469*
- cooling, heat transfer, hydrodynamics, impingement cooling, sprays, Urbanovich (L.I.), Goryainov (V.A.), (et al.), *1663*
- elastic constants, refractories, ultrasonics, Bell (J.F.W.), Chen (J.Y.F.), (et al.), *1836*
- fractographic tests, low cycle fatigue, notch tests, steel, triaxial loading, Marloff (R.H.), Johnson (R.L.), *2411*
- crack growth, fatigue, low cycle fatigue, Saxena (A.), *2417*
- crack growth, material testing, steel, Saxena (A.), *2427*
- boron, fibers, tension, testing equipment, Erasov (V.S.), Pirogov (E.N.), (et al.), *2485*
- alloys, crack initiation, crack propagation, cyclic testing, fatigue, turbines, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- alloys, materials properties, phase changes, Guttmann (V.) ed., *2962, book*
- cyclic loading, deformation, low cycle fatigue, Zhitkyavichene (V.P.), Medeksha (G.G.), *3269*
- aluminum alloys, laminates, mechanical properties, Mcwithey (R.R.), Royster (D.M.), *3281*
- crack growth, design, fatigue, life expectancy, Mcgowan (J.J.), Liu (H.W.), *3436*
- crack growth, creep, fatigue, fracture mechanics, stress intensity factor, Yokobori (T.), Sakata (H.), *3494*
- crack growth, creep, fatigue, fracture mechanics, stress intensity factor, Yokobori (T.), Sakata (H.), (et al.), *3495*
- carbides, friction, surfaces, Miyoshi (K.), Buckley (D.H.), *4002*
- low cycle fatigue, steel, vacuum, Maiya (P.S.), *4480*
- creep, materials properties, steel, Brovman (M.Ya.), *4488*
- compression, deformation (plastic), plasticity, testing equipment, Brovman (M.Ya.), *4517*
- ceramics, creep, glass, mechanical properties, Northover (J.P.), Groves (G.W.), *4520*
- aluminum alloys, high strength, material testing, reinforced bodies, Yajima (S.), Okamura (K.), (et al.), *5125*
- curve fitting, fatigue, life expectancy, weibull statistics, Hasegawa (N.), Hirose (M.), (et al.), *5283*
- creep, microscopy, strain measurement, Kornienko (V.T.), Rekov (A.M.), (et al.), *5320*
- heat exchangers, radiant interchange, Mori (Y.), Yamada (Y.), (et al.), *5594*
- combustors, gas turbines, Evin (O.A.), Yankovskii (V.M.), (et al.), *5656*
- blades, cooling, gas turbines, water, El-Masri (M.A.), Louis (J.F.), *5657*
- gas turbines, radial turbines, stresses, Arnold (D.J.), Balje (O.E.), *5658*
- energy spectrum, measurements (dynamic), plasma (toroidal), tokamak, Nakamura (K.), Hiraki (N.), (et al.), *5692*
- crack propagation, deformation (plastic), low cycle fatigue, Ivanova (V.S.), Gintsler (Ya.), (et al.), *6415*
- ceramics, fracture, glass, notch tests, Northover (J.P.), Groves (G.W.), *6440*
- ductile fracture, prestrain, steel, Mutoh (Y.), Toyoda (M.), (et al.), *6450*
- alloys, fatigue, high cycle fatigue, Ishchenko (I.I.), Golub (V.P.), (et al.), *6469*
- carbides, creep, dislocations, electron microscopy, precipitation, steel, Orlova (A.), Milicka (K.), (et al.), *6472*
- fracture toughness, inert gases, tension, testing equipment, vacuum, Babak (A.V.), Uskov (E.I.), *6477*
- failure, filaments, tungsten filaments, Horacsek (O.), *6951*
- cast steel, composite materials, fibers, materials properties, Skrovanek (S.D.), Herron (R.H.), *6954*
- density, elastic waves, high pressure, rocks, Levykin (A.I.), Vavakin (V.V.), *7026*
- brain, heat transfer (biological), nervous system, Epstein (Y.), Keren (G.), (et al.), *7124*
- computing techniques, plastic flow, rolling, steel, stochastics, Murthy (A.), Lenard (J.G.), *7456*
- endurance limit, fatigue, gas turbines, nickel alloys, Palienko (E.Ya.), *7475*
- alloys, environmental tests, high cycle fatigue, low cycle fatigue, Soo (P.), Chow (J.G.Y.), *7478*
- blades, chemical reactions, cyclic loading, surface flaws, Kosygin (E.P.), Verkhovodov (P.A.), *7492*
- carbon dioxide, heat transfer (combined modes), injection, regenerators, Asif (S.A.), Khandwawala (A.I.), *7868*
- anelasticity, nuclear reactors, structural design, Corum (J.M.), *8196*

- extrusion, galerkin method, plastic flow, Shestopal (V.O.), Shestopal (O.Ya.), *8350*
- crack initiation, crack propagation, thermal loading, Lloyd (G.J.), Wood (D.S.), *8372*
- materials properties, steel, strain rate, Krabiel (A.), Dahl (W.), *8886*
- dynamic properties, hopkinson bar, metals, shock waves, Tsoi (P.A.), Novikov (S.A.), (et al.), *8890*
- lattices, oxidation, semiconductors, strain, stress analysis, Franz (G.), Hartmann (W.), *9421*
- heat pumps, thermodynamics, Grisval (J.-P.), *9732*
- cyclic testing, low cycle fatigue, steel, strain softening, Gardiner (T.), *10329*
- compressible flow, energy transport, similarity methods, unsteady flow, Korobeynikov (V.P.), *11419*

high viscosity, fluidized beds, pressure, King (D.F.), Mitchell (F.R.G.), (et al.), *8934*

higher order theories, plates (orthotropic), plates laminated, plates orthotropic, shear, stress strain relationships, Ulyashina (A.N.), *319*
- approximations, computer programming, finite element techniques, shape functions, Wachspress (E.L.), *4192*
- plates, Baluch (M.H.), Voyiadjis (G.Z.), *4378*
- finite element methods (hybrid), hybrid element methods, plates, Spilker (R.L.), Munir (N.I.), *4379*
- nonlinear waves, rockets, solid propellants, Culick (F.E.C.), *7425*

Highter (W.H.), dams, embankments, granular media, mine tailings, mining, Tobin (R.F.), *2387*

Highton (J.), anisotropic structures, axial loading, pressure, reinforced bodies, tubes, Soden (P.D.W.), *10325*

highways, bridge replacement, bridges, integer programming, mathematical models, operations research, Garcia-Diaz (A.), Liebman (J.S.), *3192*
- automobiles, dissipation, dynamic response, roughness, Velinsky (S.A.), White (R.A.), *3384*
- loads, soils, wheels, Corapcioglu (M.Y.), Ural (A.N.), *3416*
- concrete, field tests, sand, subgrade design, Barber (S.D.), Knapton (J.), *3417*
- design (optimum), drainage, networks, stormwater, Templeman (A.B.), Walters (G.A.), *3418*
- automobiles, dynamic analysis, random excitation, Lindgren (G.), *6277*
- experimental methods, surface waves, vibration, Dhir (M.P.), Venkatesha (M.C.), (et al.), *8350*

Hignett (P.), annular flow, boundary layer (thermal), convection, ekman layer, rotating fluids, thermal instability, Ibbetson (A.), (et al.), *8717*

Hiki (Y.), anisotropy, elastic constants, elasticity (nonlinear), *5083*

hilbert space, differential operators, discrete spectra, mathematical methods, spectra, Read (T.T.), *7161*
- group theory, integro differential equations, mathematical methods, transport phenomena, wiener-hopf technique, Van Der Mee (C.V.M.), *8118*
- elasticity (three dimensional), functional analyis, mathematical methods, variational methods, Nowinski (J.L.), *10013*
- algorithms, approximation methods, linear programming, optimal control, Rubio (J.E.), *11051*

Hilbig (H.), conformal mapping, existence theorems, flow obstructions, potential flow, wakes, *2008*

Hildebrandt (A.F.), energy conversion, radiant interchange, solar collectors, solar energy, Dasgupta (S.), *4725*

Hill (E.K.), acoustic emission, piezoelectrics, transducers, Egle (D.M.), *3984*

Hill (E.V.K.), dynamic response, elastic bodies, parallelepipeds, vibration (forced), Egle (D.M.), *10200*

Hill (J.M.), see Aifantis (E.C.), *4973*
- see Davis (G.B.), *9889*

Hill (P.G.), critical region, heavy water, saturation, vapor pressure, water, Macmillan (R.D.C.), *1655*

Hill (R.), acoustic emission, acoustic measurements, transducers, Adams (N.L.), *3585*

Hillier (M.), dynamic analysis, gyrodynamics, satellites, Lehrle (T.), *3082*

Hillestad (J.G.), see Kuniansky (J.), *7995*

Hilliard (J.C.), see Chan (A.K.F.), *2905*

Hillier (R.), bubble dynamics, experimental results, reattachment, separated flow, separation, turbulence, Cherry (N.J.), *5470*

Hills (D.A.), crack propagation, estimation, fatigue, Ashelby (D.W.), *2419*
- elastoplasticity, half space, indentation, residual stresses, shakedown structures, Ashelby (D.W.), *3263*

Hilt (M.B.), see Cutrone (M.B.), *11785*

Himeno (N.), see Mori (Y.), *10605*

Himmelblau (D.M.), see Tanthapanichakoon (W.), *5046*

Hinch (E.J.), axial flow, drops, evolution equations, *1863*

Hindman (R.G.), compressible flow, euler equations, finite difference methods, two dimensional flow, Kulter (P.), (et al.), *587*

Hindmarsh (J.), musculoskeletal system, scoliosis, spine, x ray techniques, Larson (J.), (et al.), *1964*

Hinds (B.K.), arcs, cutting, heat transfer, plasma, De Almeida (S.M.), *436*

Hindson (D.), see Holmes (M.), *8455*

Hindson (W.S.), control, flight tests, stol, Hardy (G.H.), (et al.), *3735*

Hindy (A.), buried structures, earthquake effects, pipes, underground, Novak (M.), *1882*
- buried structures, pipelines, seismic loading, underground, Novak (M.), *8967*

hinged bodies, beams, buckling, frames, postbuckling behavior, Pignataro (M.), Rizzi (N.), (et al.), *343*
- arches, buckling, pressure, Schmidt (R.), *2297*
- arches, postbuckling behavior, Schmidt (R.), *2298*
- buckling, dynamic stability, moving loads, portal frames, Zaslavsky (A.), *3541*
- beams, optimization, structural optimization, Mikhailishchev (V.Ya.), *9438*
- channels, moment coefficient, pressure, wavemakers, Hudspeth (R.T.), Leonard (J.W.), (et al.), *9511*

Hinich (M.J.), acoustics, arrays, sound speed, *3959*

Hinkel (H.M.), critical speed, dynamic response, rotating disks, vibration, *11153*

Hinkley (E.D.), meteorology, weather satellites, *4888*

Hinrichs (T.), boiling, coatings, nucleate boiling, polymers, surface effect, thin films, Hennecke (E.), (et al.), *2792*

Hinsenkamp (M.), bones, demineralization, gravity, strain measurement, zero g phenomena, Burny (F.), (et al.), *6002*

Hinton (R.E.), bearings (journal), laminar flow, lubrication (hydrodynamic), Roberts (J.B.), *1019*

Hippe (P.), control, design, frequency domain techniques, state space techniques, Wurmthaler (C.), *9181*
- automatic control, design, state space techniques, Wurmthaler (C.), *10089*

hips, biological joints, biomechanics, stress analysis, Brinckmann (P.), Frobin (W.), (et al.), *6004*
- composite materials, prosthetic devices, Roberts (J.C.), Ling (F.F.), *8079*
- biological joints, prosthetic devices, Gatti (A.M.), *9067*

Hirai (H.), cavities, integro differential equations, oblateness, penny shaped crack, stress analysis, stress intensity factor, Satake (M.), *1365*

Hirai (M.), see Fujii (N.), *11062*

Hiraki (N.), see Nakamura (K.), *5692*

Hirama (T.), fluidized beds, granular media, thermal diffusion, Adachi (T.), (et al.), *1872*

Hirano (F.), film thickness, gears (spur), lubricants (liquid), oil films, wear, Ichimaru (K.), (et al.), *1016*

Hirano (Y.), beams, transient effects, vibration (forced), Nagaya (K.), *3353*
- beams, dynamic stresses, flexural waves, vibration, Nagaya (K.), (et al.), *5204*
- cracks, plates (rectangular), plates (weakened), vibration, Okazaki (K.), *5211*

Hirao (M.), acoustic measurements, acoustoelasticity, oscillations, thickness oscillations, Miura (Y.), (et al.), *4508*
- acoustics, rayleigh waves, residual stresses, surface waves, Fukuoka (H.), (et al.), *8334*

Hiraoka (S.), eddy viscosity, impellers, mixing, tanks, turbulent flow, Fan (L.T.), *6651*

Hirasaki (G.J.), see Lake (L.W.), *8919*

Hirashima (K.-I.), bending, plates (anisotropic), theory, Muramatsu (M.), *4366*

Hirata (H.), environmental control, mathematical models, pesticide, pollution, Kogo (H.), *2192*

Hiremath (S.B.), see Soundalgekar (V.M.), *6622*

Hirleman (E.D.), data acquisition, lasers, scattering, velocity measurement, *7815*

Hirokawa (S.), feedback, gait, prosthetic devices, simulation, Sugiyama (H.), (et al.), *6150*

Hirose (M.), see Hasegawa (N.), *5283*

Hirose (T.), see Okamoto (S.), *2931*

Hirsch (C.), axial turbines, blades, design, velocity profiles, Denton (J.D.), *7802*
- see Deconinck (H.), *8590*

Hirsch (P.), see Cherns (D.), *5120*

Hirschel (E.H.), compressible flow, separated flow, three dimensional flow, Kordulla (W.), *2636*
- computing techniques, coordinate systems, mathematical methods, navier stokes equation, shear flow, Kordulla (W.), *4596, book*

Hirsh (R.S.), see Cebeci (T.), *3130*

Hirst (E.), energy conservation, environmental control, mathematical models, *208*

Hirst (M.J.S.), beams (composite), composite materials, finite element techniques, Yeo (M.F.), *8237*

Hirt (C.W.), coding, finite difference methods, free boundary, hydrodynamics, Nichols (B.D.), *1115*

Hirth (F.W.), see Hoss (S.), *7810*

Hirth (J.P.), see Lin (I.-H.), *1372*

Hiruma (M.), see Furuhama (S.), *5650*

history, functional analyis, survey, Nowinski (J.L.), *2009*

Hitch (H.), airplanes, dynamic analysis, kinematics, *1069*

Hitomi (K.), computer aided manufacturing, mathematical models, process control, queue theory, stochastic systems, Nakajima (M.), (et al.), *3214*
- computer aided manufacturing, numerical control, operations research, optimization, Ohashi (K.), *7260*

Hitzl (D.L.), hamilton principle, periodic orbits, restricted three body problem, series expansion, Levinson (D.A.), *9812*

Hjelmfelt (A.T.) Jr., hydrology, rainfall, watersheds, *4042*

Hjertager (B.H.), jets, laser doppler velocimeters, three dimensional flow, turbulence, Magnussen (B.F.), *2765*

Hjorth-Hansen (E.), see Sigbjornsson (R.), *3911*

Hladky (K.), corrosion, electrochemical noise, stress corrosion, Dawson (J.L.), *5335*

Hlavacek (I.), see Necas (J.), *5068, book*
Hlavacek (M.), conduction (heat), continuum mechanics, porous media, *7993*
• composite materials, elastic waves, fibers, harmonic waves, *9344*
Ho (C.-M.), feedback, impingement, jets, Nosseir (N.S.), *2677*
• airfoils, unsteady flow, wakes, Chen (S.-H.), *7735*
Ho (C.M.), see Shakir-Khalil (H.), *3583*
Ho (K.K.), calibration, hot wire, Ko (N.W.M.), *710*
Ho (K.W.), see Chen (N.N.S.), *7099*
Ho (S.-P.), heat transfer, hydrodynamic stability, mass transfer, rayleigh taylor instability, surface tension, viscous effects, *634*
Hoa (S.V.), computer programming, finite element techniques, mesh generation, stiffness matrix, vibration, Sankar (S.), *5019*
• see Fabrikant (V.), *7184*
Hoadley (P.W.), see Beaufait (F.W.), *6209*
Hoang (K.), bends, liquid gas mixture, pipe flow, two phase flow, Davis (M.R.), *1853*
Hobbs (J.M.), see Watt (C.S.), *6700*
Hobbs (R.E.), elastic foundations, ocean bed, pipelines, soil mechanics, stress analysis, underwater structures, winkler foundation, *6551*
Hoberock (L.L.), oil wells, pressure change, transient effects, transmission, unsteady flow, Stanbery (S.R.), *2706*
Hoch (J.), interaction, jets, turbulent flow, two dimensional flow, Jiji (L.M.), *3688*
Hochreiter (L.E.) eds., critical heat flux, nuclear power, nuclear reactors, safety, thermal loading, Sozzi (G.L.), *4693, book*
Hocking (L.M.), contact angle, drops, sliding, thin films, two dimensional flow, *1534*
• couette flow, end effects, hydrodynamic stability, taylor number, Skiepko (J.), *4640*
• couette flow, hydrodynamic stability, rotating bodies, spherical bodies, vortices, *8605*
Hodder (S.B.), see Sinclair (G.B.), *292*
Hodgdon (M.L.), dynamic response, electrodynamics, ferroelectric devices, power generation, *1266*
Hodge (P.G.) Jr., anisotropic media, plane stress, work hardening, yield criteria, *268*
• see White (D.L.), *4541*
Hodges (D.H.), approximations, beams, rotating bodies, vibration, *4414*
• beams, finite element methods, rotating bodies, vibration (free), Rutkowski (M.J.), *5213*
Hodgson (T.H.), see Brooks (T.F.), *4768*
hodograph methods, seismic waves, velocity profiles, waveguides, Burmin (V.Yu.), *963*
• gates, weirs, Han (T.Y.), Chow (W.L.), *3600*
• ducts (curved), gravity, irrotational flow, Chow (W.L.), Chan (P.C.T.), *10438*
Hoek (P.J.), flow measurement, fluid mechanics, mass transfer, packed beds, De Rooij (J.G.), (et al.), *7877*
Hoeppner (D.W.), design criteria, failure, fretting, Gates (F.L.), *9390*
Hoerner (C.C.), see Collier (S.L.), *7543*
Hofer (K.), diffusion, jets, stratified flow, turbulence, Hutter (K.), *2696*
• diffusion, jets, stratification, turbulent flow, Hutter (K.), *10457*
Hoff (D.), cauchy problem, hyperbolic equations, isentropic processes, shock, wave equations, *2011*
• existence theorems, hyperbolic equations, mathematical methods, *8117*
Hoff (N.J.), space frames, structural stability, Fernandez-Sintes (J.), *344*
• plates (anisotropic), plates (holed), stress concentration, *7340*
Hoffeiner (W.), aluminum alloys, crack propagation, high cycle fatigue, steel, *447*
Hoffman (R.E.), convergence, mesh generation, stochastics, Guerra (F.M.), (et al.), *6111*
Hoffman (W.), bifurcation, boundary value problems, functional analyis, imperfections, Kupper (T.), *10169*
Hoffmann (J.A.), aerodynamic performance, diffusers, turbulence (freestream), *5445*
Hoffmann (M.), see Bocek (M.), *452*
Hofmeister (W.), structural elements, thermal expansion, thermal loading, thermoelasticity (steady), *1830*
Hogan (S.J.), capillary waves, finite amplitude, gravity waves (surface), surface tension, *11593*
Hogg (R.), see Hwang (C.L.), *4007*
Hogge (M.A.), finite element techniques, heat transfer, newton method, nonlinear analysis, *7225*
Hoglund (L.E.), compressible flow, jets, noise, pressure measurement, Siddon (T.E.), *1649*
Hoheisel (H.), see Stark (U.), *11741*
Hohenbichler (M.), probabilistic design, reliability analysis, safety, structural design, Rackwitz (R.), *8456*
Hohenemser (K.H.), helicopters, impedance methods, vibration (forced), Yin (S.-K.), *6299*
Hohenstein (R.M.), see Pan (H.H.), *23*
Hohlfelder (J.J.), rocks, storage, transport phenomena, water pollution, Hadley (G.R.), *4030*
Holdeman (J.T.), see Kleinstreuer (C.), *7220*
Holditch (S.A.), see Lee (W.J.), *8944*
holes, pressure vessels, shells (axisymmetric), stress analysis, Reuss (P.), *241*
• hovercraft, membranes, Firt (V.), *310*
• buckling, shells (cylindrical), shells (thin), Toda (S.), *349*
• corners, fasteners, finite element methods, stress intensity factor, Grandt (A.F.) Jr., Kullgren (T.E.), *480*
• plates (perforated), stress concentration, Sinclair (G.B.), *1179*
• flexure, inclusions, plates (perforated), strips, Buryshkin (M.L.), *1182*
• crack growth, radial loading, stress intensity factor, Brussat (T.R.), *1364*
• elliptical holes, photoelasticity, stress concentration, Hanus (J.B.), Burger (C.P.), *1389*
• analysis, photothermoelasticity, photoviscoelasticity, plates (circular), Demidova (I.I.), *1392*
• diffusion, hygrothermal effects, thermal stresses, thermoelasticity, Hartranft (R.J.), Sih (G.C.), *1832*
• complex variables, plates (holed), strips, Hering (J.), Uj (J.), *2214*
• beams (cantilever), beams (composite), buckling, buckling, Coull (A.), Alvarez (M.C.), *2292*
• cylindrical bodies, photoelasticity (three dimensional), stress concentration, Stanley (P.), Day (B.V.), *2468*
• approximations, boundary integral methods, laplace equation, Barone (M.R.), Caulk (D.A.), *4161*
• beams, stress concentration, Mazilu (P.), Ieremia (M.), (et al.), *4201*
• complex variables, elasticity (linear), prisms, torsion, Bhargava (R.D.), Puranik (S.S.), *4341*
• design (optimum), reinforced openings, shells, Pelekh (B.L.), Gleba (A.Yu.), *4380*
• infiltration, porous walls, unsteady flow, Raichenko (L.M.), *4839*
• deformation (finite), elasticity (nonlinear), plane strain, plane stress, Varley (E.), Cumberbatch (E.), *5084*
• disks, elasticity (linear), rings, Uspenskii (A.A.), *5166*
• drilling, residual stresses, strain measurement, Eggeman (G.W.), *5322*
• edge effects, elastic waves, Moodie (T.B.), Haddow (J.B.), (et al.), *6330*
• photoelasticity, plane strain, plates (holed), strain measurement, stress concentration, Erickson (M.), Durelli (A.J.), *6461*
• deformation (plastic), residual stresses, rings, strain gages, Misra (A.), Peterson (H.A.), *6466*
• residual stresses, shafts, stress relieving, welding, Bush (A.F.), Kromer (F.J.), *6467*
• experimental methods, permeability, porous media, Dees (P.J.), Tjan (T.G.), (et al.), *7007*
• boundary elements, finite element techniques, infinite medium, mesh generation, mining, Beer (G.), Meek (J.L.), *7206*
• gravity, half space, stress analysis, tunnels, Spencer (S.E.), Sinclair (G.B.), *7264*
• shells (spherical), stress concentration, Reissner (J.E.), *7333*
• crack propagation, cracks, shear, Fuchssteiner (W.), Olsen (O.W.), *7520*
• failure, mining, plastic behavior, tunnels, Kaczmarek (J.), *8155*
• composite structures, laminates, shells (sandwich), Shnerenko (K.I.), *8221*
• elastic waves, mathematical methods, Tait (R.J.), Moodie (T.B.), *8327*
• complex variables, corners, crack initiation, stress intensity factor, Hasebe (N.), Ueda (M.), *9403*
• collapse, cylindrical bodies, stress concentration, Montague (P.), Horne (M.R.), *10168*
• brittle fracture, cracks, plates (weakened), singular integral equations, stress intensity factor, Mirsalimov (V.M.), *10291*
• biaxial loading, finite element techniques, multiple cracks, stress intensity factor, Oladimeji (M.K.), *10295*
• crack growth, cracking, design, plates (holed), pressure vessels, stress intensity factor, Rooke (D.P.), *10332*
• channel flow, finite element techniques, plates (holed), viscoelastic fluids, Richards (G.D.), Townsend (P.), *10445*
• axial loading, buckling, shells (cylindrical), Toda (S.), *11123*
Holford (R.L.), diffraction, ocean, scattering, surface profiles, underwater acoustics, *5785*
• acoustic waves, acoustics, scattering, surface effect, *9849*
Holger (D.K.), acoustics, edge effects, impingement, jets, Wilson (T.A.), (et al.), *9848*
• absorption, attenuation, diffusers, sound propagation, *11961*
Holl (J.W.), see Stinebring (D.R.), *708*
• see Billet (M.L.), *5390*
• air, axisymmetric flow, cavitation, separation, water tunnels, Carroll (J.A.), *6804*
• see Billet (M.L.), *10396*
Holla (V.S.), see Baskaran (V.), *1616*
Holland (M.J.), blades, cooling, high pressure, turbomachinery, Thake (T.F.), *5560*
Holland (W.R.), see Mcwilliams (J.C.), *1890*
• circulation, currents, eddies, oceanography, *4874*
• see Haidvogel (D.B.), *4875*
• circulation, currents, hydrodynamic stability, oceanography, Haidvogel (D.B.), *5920*
• circulation, eddies, oceanography, vorticity, Rhines (P.B.), *10860*
• see Semtner (A.J.) Jr., *10863*

Hollanders (H.), computing techniques, conservation laws, difference equations, implicit schemes, Peyret (R.), *10044*
Holley (E.R.), see Fitzgerald (S.D.), *11492*
Holliger (K.), axial turbines, blades, cascades, transonic flow, visualization, *3740*
Hollinger (F.), asymptotic behavior, curved surfaces, cylindrical waves, *5246*
Holloway (G.), bottom irregularities, eddies, spectra, turbulence (geophysical), *4876*
- internal waves, oceanography, turbulence (geophysical), *10862*

Holloway (H.E.), see Cochran (J.E.), *7923*
Holloway (P.E.), heat transfer, ocean air interaction, oceanography, radiation, stratification, *9925*
Holman (R.A.), bars, beaches, bottom irregularities, drag, sediment transport, Bowen (A.J.), *10400*
Holmes (A.M.C.), see Bushnell (D.), *6259*
Holmes (C.), averaging, bifurcation, dynamic analysis, vibration (nonlinear), Holmes (P.), *3343*
Holmes (J.D.), see Matheson (M.J.), *6872*
- buildings, buildings (tall), pressure distribution, probability theory, wind, *7089*
- buildings, pressure distribution, unsteady flow, wind loads, wind tunnels (environmental), Best (R.J.), *9663*

Holmes (M.), bearing capacity, deflections, falsework, scaffolding, structural response, ultimate strength, Hindson (D.), *8455*
Holmes (M.H.), biomechanics, cochlea, ear, hydroelasticity, *1952*
Holmes (P.), see Holmes (C.), *3343*
- bifurcation, biomathematics, differential equations (ordinary), periodic orbits, Lewis (D.), *9097*
- beams, differential equations (partial), evolution equations, periodic orbits, vibration, Marsden (J.), *10024*

Holmes (P.J.) ed., bibliography, bifurcation, dynamics, mathematical methods, nonlinear mechanics, *1072, book*
holography, algorithms, filters, Krasnov (A.E.), *162*
- bonding, delamination, glass fibers, plates (sandwich), Erdmann-Jesnitzer (F.), Winkler (T.), *483*
- clouds, fog, optical techniques, Smirnov (V.A.), Yaskevich (G.F.), *992*
- lasers, moire methods, optical techniques, stress analysis, Chiang (F.P.), *1393*
- curved surfaces, deflections, moire methods, Gilbert (J.A.), Herrick (J.W.), *1394*
- analysis, displacement, fiber optics, Gilbert (J.A.), Herrick (J.W.), *1395*
- cavitation inception, optical techniques, scattered light, Billet (M.L.), Gates (E.M.), *1638*
- acoustic measurements, acoustics, arrays, Sato (T.), Sasaki (K.), (et al.), *1829*
- optical techniques, theory, Miler (M.), *2476*
- displacement, interferometry, real time solution, receptance measurement, Chaiko (T.), *2477*
- airfoils, computing techniques, interferometry, shock waves, supercritical flow, Spaid (F.W.), Bachalo (W.D.), *2726*
- edge cracks, elastoplasticity, Arkhipov (V.I.), *3454*
- faraday rotator, photoelasticity (dynamic), Qin (Yu.W.), *3484*
- interferometry, strain measurement, Zhilkin (V.A.), *3485*
- bolted joints, bolts, deformation, Muruyama (K.), Yoshimoto (I.), (et al.), *3582*
- convection, heat transfer, interferometry, visualization, Faw (R.E.), Dullforce (T.A.), *3807*
- acoustic measurements, reverberation, Dikshit (H.K.), Dikshit (K.D.), *3971*
- dynamic testing, experimental mechanics, interferometry, vibration, Hazell (C.R.), *4437*
- deformation, finite element methods, flaw detection, inhomogeneities, interferometry, nondestructive tests, Wachutka (H.), Kordisch (H.), (et al.), *5339*
- axial turbines, cascades, interferometry, nozzles, Bryanston-Cross (P.J.), Lang (T.), (et al.), *5505*
- arrays, imaging systems, underwater acoustics, Sutton (J.L.), *5718*
- underwater acoustics, waves, Wu (W.-T.), *5743*
- two phase flow, velocity profiles, Bakrunov (A.O.), Ertanova (O.N.), (et al.), *6964*
- interferometry, Hovanesian (J.D.), Hung (Y.Y.), (et al.), *7549*
- interferometry, lasers, metrology, surfaces, vibration, Kohler (H.), *7552*
- displacement, lasers, modulated systems, optical techniques, waves, Gilbert (J.A.), Herrick (J.W.), *8424*
- deformation, moire methods, stress analysis, Rastogi (P.K.), Spajer (M.), (et al.), *9419*
- deformation, displacement, moire methods, vibration, Abramson (N.), Bjelkhagen (H.), *9420*
- computer analysis, roughness, surface profiles, wear, Groves (D.), Lalor (M.J.), (et al.), *10897*
- interferometry, sensitivity, speckle interferometry, strain measurement, Dandliker (R.), *11314*
- acoustics, diagnostics, gear teeth, vibration, Umezawa (K.), Houjoh (H.), *11339*

Holopainen (E.), atmospheric circulation, Nurmi (P.), *3030*
Holroyd (R.J.), ducts (variable area), experimental methods, liquid metals, magneto fluid dynamics, walls, *10734*
Holsapple (K.A.), cratering, dimensional analysis, impact, satellites, Schmidt (R.M.), *9351*
Holstein (T.), crack growth, energy-release rate, jintegral, plasticity, Schmitt (W.), *2445*
Holt (J.N.), blood flow, fredholm equations, liver, organs, Bracken (A.J.), *9066*
Holve (D.J.), fire, models, pyrolysis, slabs, wood, Kanury (A.M.), *10717*
Holzer (S.M.), buckling, combined loading, lattices, trusses, Plaut (R.H.), (et al.), *341*
Holzweibig (F.), damping, optimization, vibration (torsional), Liebig (S.), *5231*
Homentcovschi (D.), see Dragos (L.), *1502*
- compressible flow, lifting surfaces, navier stokes equation, oseen flow, plates, *4582*

Homsy (G.M.), see Rosenblat (S.), *8603*
- see Jhaveri (B.), *8709*
- see Didwania (A.K.), *9895*

Honda (K.), anisotropic media, cold working, deformation (plastic), rolling, sheet metal, Hosokawa (N.), (et al.), *5271*
Honda (S.), see Yamasaki (H.), *6740*
honeycomb structures, brazed joints, composite structures, sandwich construction, Hepler (A.K.), Arnquist (J.), (et al.), *3540*
- elastic waves, layered media, Park (S.K.), Bertoni (H.L.), *7429*
- containers (partially filled), seismic loading, sloshing, Kuriyama (Y.), Fukuda (H.), *7774*
- reduction, screens, turbulence, turbulent flow, Scheiman (J.), Brooks (J.D.), *9516*
- turbulence (freestream), wind tunnels, Wigeland (R.A.), Tan-Atichat (J.), *10540*

Hong (I.), fredholm equations, linear equations, Yanagi (T.), *2017*
Hong (S.-D.), see Gupta (M.C.), *5618*
Honji (H.), coastal engineering, flow measurement, sediment transport, sloping bottom, visualization, Matsunaga (N.), *2589*
- bed load, oscillations, ripples, scour, *3611*
- see Kamachi (M.), *5473*

Hooker (R.J.), biaxial loading, hysteresis, plasticity, *7138*
- damping, experimental methods, friction (internal), metals, strain, Mead (D.J.), *7587*

Hoots (F.R.), artificial satellites, averaging, equations of motion, oblateness, transformation, *8842*
- approximations, artificial satellites, computer programming, upper atmosphere, *9816*

Hopfengartner (H.), control, manipulators, position control, robotics, servomechanisms, *9189*
Hopfinger (E.J.), see Piat (J.-F.), *8557*
Hopkins (G.R.), see Noah (S.T.), *8289*
Hopkins (H.G.), see Gurkok (A.), *7323*
Hopkins (H.G.) eds., composite materials, elasticity, plasticity, solid mechanics, Sewell (M.J.), *8179, book*
Hopkins (W.E.) Jr., dynamic programming, perturbation theory, stochastics, variational methods, Blankenship (G.L.), *10027*
hopkinson bar, materials properties, radioactivity, reactor structures, strain rate, temperature, tension, welding, Albertini (C.), Montagnani (M.), (et al.), *2488*
- adhesion, fibers, high speed, matrices, strain rate, testing equipment, Rybin (A.A.), *2496*
- impact, microprocessors, strain gages, strain measurement, testing equipment, Signoret (C.), Pouyet (J.M.), (et al.), *4507*
- experimental methods, relaxing media, stress strain relationships, viscoelasticity, Tormala (P.), Paakkonen (E.), (et al.), *5106*
- dynamic properties, high temperature, metals, shock waves, Tsoi (P.A.), Novikov (S.A.), (et al.), *8890*

Hoppe (V.), approximations (polynomial), finite element techniques, interpolation, mathematical methods, *6110*
Hopper (C.T.), eigenvalues, matrix methods, stiffness matrix, transcendental equations, Simpson (A.), (et al.), *3093*
hoppers, filtration, granular media, powders, Murfitt (P.G.), Bransby (P.L.), *6959*
- discharges, granular media, Dryabin (V.A.), Galershtein (D.M.), (et al.), *6997*
- granular media, gravity, transport mechanisms, Savage (S.B.), Sayed (M.), *8915*
- granular media, unsteady flow, Wol-Gajewska (B.), Zawidzki (J.), *12060*

Horacsek (O.), failure, filaments, high temperature, tungsten filaments, *6951*
Horak (D.), see Bell (C.E.), *7146*
Horgan (C.O.), see Nemat-Nasser (S.), *3110*
- boundary value problems, cylindrical bodies, elasticity (nonlinear), saint venant principle, Knowles (J.K.), *8181*

Hori (Y.), lubrication (elastohydrodynamic), oscillations, rubber, squeeze films, variational methods, Kato (T.), (et al.), *4897*
Horii (H.), buckling, elastoviscoplasticity, half space, surface effect, Nemat-Nasser (S.), *10184*
Horikawa (A.), fibers, stress rupture, stress strain relationships, textiles, Yaida (O.), *5132*
Horikawa (H.), beams (cantilever), control, modal control, vibration, vibration (flow induced), Dowell (E.H.), (et al.), *228*
Horikawa (K.), beaches, coastal engineering, currents, ocean waves, sediment transport, *4578*
Horlock (J.H.), axial flow, cascades, choked flow, subsonic flow, three dimensional flow, turbomachinery, *10526*
Hornbogen (E.), see Sandt (A.), *8371*
Hornby (R.P.), algorithms, elliptic equations, finite difference methods, Barrow (H.), *2047*

Horne (M.R.), beam columns, beams (variable cross section), structural stability, Shakir-Khalil (H.), (et al.), *2296*
- see Montague (P.), *10168*

Horne (R.N.), convection (free), heat addition, porous media, rayleigh number, thermal instability, Caltagirone (J.-P.), *11369*
Horne (W.B.), see Yager (T.J.), *1332*
Hornung (R.K.), design, reinforced concrete, slabs, Oesterle (E.), *2522*
Horowitz (I.), control, design, nonlinear systems, van der pol plant, Shur (D.), *116*
- design, multivariable systems, synthesis, Wang (T.-S.), *4268*

Horowitz (J.S.), see Abelson (H.I.), *6752*
Horsfield (K.), bronchi, flow measurement, lungs, respiratory system, Thurlbeck (A.), *9061*
Horstman (C.C.), friction (skin), separated flow, three dimensional flow, topological techniques, Settles (G.S.), (et al.), *10432*
Hortel (M.), nonlinear characteristics, resonance, transmissions, Schmidt (G.), *388*
Horton (H.P.), boundary layer, finite difference methods, laminar flow, navier stokes equation, separated flow, *4614*
Horton (T.E.), integral methods, submerged bodies, vorticity, wave loads, Feifarek (M.J.), *8629*
Horvath (A.J.T.), compressors, pumps, surge, turbomachinery, *8654*
Hoshiya (M.), earthquakes, simulation, stochastic processes, time domain techniques, Chiba (T.), *147*
Hosking (R.J.), see Sivakumaran (N.S.), *9505*
Hosokawa (I.), see Yamamoto (K.), *8610*
Hosokawa (N.), see Honda (K.), *5271*
Hoss (S.), cavitation, corrosion, erosion, surface effect, vibration, Hirth (F.W.), (et al.), *7810*
hot film, anemometers, aorta, blood flow, Yearwood (T.L.), Chandran (K.B.), *6023*
- dilute solutions, drag reduction, polymers, Piau (J.-M.), *6590*
- convection (forced), heat transfer, thermal measurements, transient effects, Malcolm (D.G.), Verma (V.), *7846*

hot wire, axisymmetric flow, boundary layer (turbulent), turbulence, Adomaitis (E.I.), *649*
- flow measurement, heat transfer, turbulence, Lecordier (J.C.), Petit (C.), (et al.), *659*
- calibration, Ho (K.K.), Ko (N.W.M.), *710*
- calibration, heat transfer, rarefied gases, Gottesdiener (L.), *711*
- data acquisition, flow measurement, velocity measurement, Lehmann (B.), *1640*
- cylindrical bodies, external flow, heat transfer, reattachment, separated flow, shear flow, Ota (T.), Kon (N.), (et al.), *1665*
- nusselt number, thermal measurements, thermocouples, Paranthoen (P.), Lecordier (J.C.), (et al.), *2782*
- annular flow, velocity profiles, Simmers (D.A.), Coney (J.E.R.), *3752*
- conduction (heat), thermal measurements, Mohammadi (S.S.), Graboski (M.S.), (et al.), *3808*
- thermal diffusion, turbulent flow, Gaviglio (J.), Anguillet (J.-P.), (et al.), *4652*
- algorithms, calibration, numerical methods, Huffman (G.D.), *5506*
- calibration, geometrical properties, Van Thinh (N.), *5511*
- reynolds stresses, turbulence, De Grande (G.), Kool (P.), *6694*
- air, conduction (heat), conductivity, Scott (A.C.), Johns (A.I.), (et al.), *6754*
- conduction (heat), heat transfer, thermal excitation, thermal measurements, Mulyukov (R.R.), *6798*
- flame propagation, modeling, spark ignition engines, Arques (P.), *6849*
- boundary layer (turbulent), flow irregularities, visualization, Taneda (S.), *7700*
- experimental methods, turbulence, Kukes (V.I.), Ufimtsev (A.A.), (et al.), *7755*
- cold wire, conduction (heat), thermal measurements, turbulence, Lecordier (J.C.), Petit (C.), (et al.), *7757*
- calibration, flow measurement, low velocity flows, velocity measurement, Christman (P.J.), Podzimek (J.), *7812*
- fans, incompressible flow, rotors, turbomachinery, wakes, Lakshminarayana (B.), Govindan (T.R.), (et al.), *8653*
- anemometers, oceanography, velocity measurement, Gust (G.), *8984*
- anemometers, thin films, turbulence (geophysical), Otten (L.J.), Pavel (A.L.), (et al.), *9003*
- experimental methods, heat transfer, turbulence, Smits (A.J.), Perry (A.E.), *10481*
- liquids, thermal measurements, thermophysical properties, Filippov (L.P.), Nefedov (S.N.), (et al.), *10555*
- axial compressors, blades, three dimensional flow, wakes, Reynolds (B.), Lakshminarayana (B.), *11738*

Hothersall (D.C.), see Jones (R.R.K.), *1812*
Hou (A.Y.), see Held (I.M.), *8988*
Houdeville (R.), see Cousteix (J.), *3652*
Houjoh (H.), see Umezawa (K.), *11339*
Houpert (L.), contact problems, lubrication (elastohydrodynamic), rheology, thermal effects, traction, Flamand (L.), (et al.), *8064*
Housner (G.W.), dams, earthquake effects, hydrodynamic pressure, *971*
Housner (J.M.), dynamic behavior, heat shields, nonlinear characteristics, space shuttle, Edighoffer (H.H.), (et al.), *11128*
Houston (B.J.), see Lutton (R.J.), *3414*
Houston (J.R.), diffraction, gravity waves (surface), refraction, sloping bottom, *11576*
Hovanesian (J.D.), holography, interferometry, Hung (Y.Y.), (et al.), *7549*
Hovem (J.M.), nonlinear waves, ocean bed, sedimentation, sound propagation, underwater acoustics, *892*
- attenuation, porous media, sand, saturation, sound propagation, viscosity, Ingram (G.D.), *5733*
- attenuation, ocean bed, porous media, sedimentation, underwater acoustics, *5753*

hovercraft, holes, membranes, Firt (V.), *310*
- design, optimal control, suspension systems, vehicles, Balzer (L.A.), *11078*

hovering, aerodynamic performance, downwash, helicopters, rotors, wakes, Andrew (M.J.), *7796*
Hovichitr (I.), see Karasudhi (P.), *8241*
Howard (I.C.), biaxial loading, crack opening displacement, estimation, fatigue, *2418*
Howard (J.C.), computer algebra, dynamics, navier stokes equation, *7181, book*
Howe (M.S.), boundary layer (turbulent), noise (aerodynamic), sound generation, trailing edge, *2941*
- plates (perforated), reynolds number (high), sound propagation, turbulent flow, unsteady flow, vortex shedding, *6897*
- attenuation, barriers, diffraction, heat exchangers (crossflow), noise (aerodynamic), vortex shedding, *6931*
- airfoils, lift, slots, unsteady flow, vortices, wakes, *7783*
- noise (aerodynamic), sound fields, trailing edge, turbulent flow, *7937*

Howell (G.P.), see Morfey (C.L.), *5766*
Howell (J.R.), see Peng (C.S.P.), *8763*
- see Peng (C.S.P.), *10641*

Howell (K.B.), boundary value problems, elasticity (linear), periodic problems, uniqueness, *2209*
- boundary value problems, elasticity (linear), infinite medium, uniqueness, *4125*

Howell (W.E.), power generation, wind power, wind turbines, Todd (C.J.), *9001*
Howes (F.A.), boundary value problems, differential equations (ordinary), shock layer, singular perturbations, *25*
Howes (V.R.), see Lawn (B.R.), *8433*
Howson (W.P.), columns, stayed columns, structural stability, Williams (F.W.), *3327*
Howze (J.W.), design, feedback, regulator problem, sensitivity, state space techniques, Cavin (R.K.) III, *2083*
Hoyer (H.), see Freund (E.), *8176*
Hoyt (J.W.), cavitation, jets, polymers, two phase flow, Taylor (J.J.), *946*
- additives, drag reduction, jets, Taylor (J.J.), (et al.), *6669*

Hreha (M.A.), airplane performance, spin recovery, stalling, Lutze (F.H.), *2744*
Hrisafovic (N.), cyclic loading, fracture mechanics, missiles, welding, Ledey (J.P.), *1384*
Hromadka (T.V.) II, freezing, modeling, phase changes, soils, Guymon (G.L.), *6388*
- diffusion coefficient, galerkin method, moisture, soils, Guymon (G.L.), *8779*

Hron (F.), modeling, non-geometric effects, seismic waves, Mikhailenko (B.G.), *8952*
Hrycak (P.), cooling, heat transfer, impact jets, impingement cooling, jets, turbomachinery, *729*
Hsia (L.M.), dynamic analysis, kinematics, mathematical methods, Yang (A.T.), *4933*
Hsiao (C.-M.), see Chu (W.-Y.), *9394*
Hsiao (L.), compressible flow, one dimensional flow, one dimensional waves, shock waves, Chang (T.), *2618*
- entropy, thermodynamic functions, thermodynamic properties, viscous effects, *2774*

Hsieh (B.J.), see Kot (C.A.), *6603*
Hsieh (H.J.), see Wilson (H.W.), *8883*
Hsieh (R.K.T.), anelasticity, elasticity (nonhomogeneous), magnetoelasticity, micropolar media, vibration, Voros (G.), *1058*
- see Brulin (O.) eds., *8090, book*

Hsieh (S.), see Wirsching (P.H.), *446*
Hsing (J.C.), attitude control, communication satellites, geosynchronous orbits, gyrodynamics, Ramos (A.), (et al.), *5703*
Hsu (C.-P.F.), atmospheric circulation, heat transfer (atmospheric), simulation, waves, *9930*
Hsu (C.-T.T.), frames, nonlinear analysis, reinforced concrete, Mirza (M.S.), (et al.), *523*
Hsu (C.C.), see Graebel (W.P.), *9711*
Hsu (C.F.), see Sparrow (E.M.), *1715*
- convection (forced), energy storage, freezing, phase changes, Sparrow (E.M.), *5577*

Hsu (C.S.), analytical methods, bilinear systems, biomathematics, immunology, inverse problems, mathematical models, Mohler (R.R.), *3153*
- cell-to-cell mapping, computer programming, dynamics, nonlinear mechanics, probability theory, *4984*

Hsu (C.T.), boundary layer (thermal), bounded media, convection, hydrodynamic stability, porous media, stagnation point, vortex flow, Cheng (P.), *8711*

Hsu (T.C.), membrane theory, shells (axisymmetric), shells (of revolution), shells (thin), Shang (H.M.), *10147*
Hsu (T.L.), see Lee (G.C.), *5174*
Hsu (T.M.), see Mcgee (W.M.), *9414*
Hsu (T.R.), see Cheng (S.Y.), *3271*
• freezing, ice, solidification, Pizey (G.), *9716*
Hsu (T.T.C.), concrete, fatigue, *9447*
Hsu (Y.S.), see Reddy (J.N.), *8888*
Hu (A.S.), frequency response, head, impact, injuries, *6031*
Hua (B.-H.), algorithms, computer programming, finite element techniques, optimization, *10066*
Hua (L.-J.), see Heins (C.P.), *2532*
Hua (T.N.), micromeritics, particle fluid flow, power law fluids, reynolds number (high), Ishii (T.), *12017*
Huang (B.J.), cooling, nuclear power, ocean, pumps, *1912*
Huang (C.L.), see Reddy (J.N.), *4425*
Huang (G.-H.), see Xiao (Y.-G.), *10286*
Huang (H.), acoustic waves, fluid-structure interaction, shells (cylindrical), shock waves, submerged bodies, *11656*
Huang (H.-I.), see Gu (Z.-M.), *5868*
Huang (H.J.), see Shih (T.M.), *7712*
Huang (N.C.), beams (timoshenko), fracture mechanics, ice mechanics, *5142*
Huang (S.-C.), circulatory systems, flow measurement, tracers, transit time, velocity profiles, *6741*
Huang (S.C.), composite materials, conduction (heat), green function, laminates, layered media, unsteady flow, Chang (Y.P.), *8733*
Huang (T.T.), bodies of revolution, cavitation inception, separation, transition, water tunnels, *8516*
Huang (W.-H.), blades, dynamic response, turbomachinery, vibration (forced), vibration (random), *3368*
Hubbard (M.), closed conduit flow, convection, solar energy, solar furnaces, Brewer (J.W.), *8770*
Hubbartt (J.E.), augmentation, vortices, wind turbines, *1630*
• combustion, hydrogen, injection, porous media, Strahle (W.C.), (et al.), *1751*
Huber (H.), composite materials, design, helicopters, rotors, tails, Frommlet (H.), (et al.), *10515*
Huber (P.W.), see Gruel (R.L.), *1596*
• see Kalumuck (K.M.), *7771*
• see Foody (B.E.), *10821*
Hubert (C.), attitude control, data acquisition, guidance theory, spinning bodies, tumbling bodies, *7920*
Hubert (I.), see Leca (A.), *8578*
Huck (R.J.), gases, mixtures, modes, sound propagation, Johnson (E.A.), *6920*
• gases, mixtures, sound propagation, sound speed, Johnson (E.A.), *8860*
Huddleston (J.V.), see Wolde-Tinsae (A.M.), *9267*
Hudson (J.A.), elastic waves, elasticity (three dimensional), nonhomogeneous media, *6323*
Hudspeth (R.T.), design, gravity waves (surface), theory, wave generation, wavemakers, Chen (M.-C.), *7653*
• frequency response, mathematical models, spectra, wavemakers, Leonard (J.W.), *7809*
• channels, hinged bodies, moment coefficient, pressure, wavemakers, Leonard (J.W.), (et al.), *9511*
Hueckel (T.), constitutive equations, cyclic loading, geophysics, strain rate, *6180*
Huenefeld (J.C.), see Plumb (O.A.), *958*
Huerre (P.), free shear layer, hydrodynamic stability, mathematical models, reynolds number (high), Scott (J.F.), *7742*
Huet (C.), materials possessing memory, rheology, thermodynamics (nonequilibrium), *4566*
• aging, computer programming, laminates, viscoelastic materials, volterra equations, *9250*
Huffenus (J.), eulerian approaches, fluid mechanics, lagrangian approach, laminar flow, navier stokes equation, stability theory, Khaletzky (D.), *4999*
Huffman (G.D.), algorithms, calibration, hot wire, numerical methods, *5506*
• calibration, direction, flow measurement, velocity measurement, Rabe (D.C.), (et al.), *5510*
Hughes (B.D.), cylindrical bodies, drag, linear theory, membranes, navier stokes equation, Pailthorpe (B.A.), (et al.), *4584*
Hughes (B.P.), beams (prestressed), concrete, fibers, impulsive loading, reinforced concrete, *1438*
Hughes (J.D.H.), materials properties, metallic composites, stochastics, strength, Morley (H.), (et al.), *3282*
Hughes (P.C.), control, space vehicle structures, stability theory, Abdel-Rahman (T.M.), *2922*
• dissipation, space frames, space structures, space vehicle structures, *8851*
Hughes (R.L.), currents, hydrodynamic stability, oceanography, *4047*
Hughes (R.W.), see Bar-Cohen (A.), *6989*
Hughes (T.J.R.), finite element techniques, mesh generation, singularities, Akin (J.E.), *2065*
• finite element techniques, geometric nonlinearities, shells (nonlinear), Liu (W.K.), *7337*
• finite element techniques, mindlin plates, nonlinear analysis, Tezduyar (T.E.), *8144*
• finite element techniques, nonlinear structures, shells (nonlinear), Liu (W.K.), *9141*
Hughes (T.J.R.) ed., convection, fluid mechanics, galerkin method, numerical methods, surveys, *95, book*
Hughmark (G.A.), heat transfer, mass transfer, particles, spherical bodies, *937*
Hui (D.), buckling, catastrophe theory, elastic stability, elasticity, shells, Hansen (J.S.), *329*
• buckling, imperfections, shells (cylindrical), shells (stiffened), Tennyson (R.C.), (et al.), *8271*
Hui (F.C.), see An (K.N.), *6003*
Hui (W.H.), bodies of revolution, compressible flow, hypersonic flow, unsteady flow, Tobak (M.), *3640*
• compressible flow, hypersonic flow, particle fluid flow, unsteady flow, Tobak (M.), *12103*
Huilgol (R.R.), constitutive equations, extensional flow, non newtonian flow, rheology, *546*
• see Rajagopal (K.R.), *3590*
• continuum theory, kinematics, relativity, rheology, *6038*
Huizing (G.H.), see Van Der Vooren (J.), *11729*
Hujisawa (T.), see Kobayashi (M.), *3424*
Hulkower (N.D.), see Saari (D.G.), *8836*
Hull (M.L.), biological joints, mechanical design, ski binding, sports medicine, Allen (K.W.), *6001*
hull propeller interaction, engines, marine engineering, oscillations, Babitskii (V.I.), Nerubenko (G.P.), *4103*
• design, propellers (marine), vibration (flow induced), Johnsson (C.-A.), *9009*
• hulls, noise (aerodynamic), sound generation, Plunt (J.), Mcqueen (D.), *9011*
• hydroelasticity, structural response, vibration (flow induced), Wereldsma (R.), *9943*
• cavitation, propellers (marine), wakes, water tunnels, Rutgersson (O.), *10880*
hulls, boundary layer (turbulent), computer programming, froude number, three dimensional formulation, Krogstad (P.-A.), *1537*
• lateral stability, rolling motion, ship design, waves, Burcher (R.K.), *1922*
• high speed flow, planing surfaces, yawing, Casling (E.M.), *3034*
• boundary value problems, froude number, nonlinear theory, ship resistance, wavemaking resistance, Maruo (H.), *5969*
• ship structures, structural analysis, Mcvee (J.D.), *6541*
• propellers (marine), propulsion, roughness, surfaces, Schenzle (P.), *7072*
• cavitation, propellers (marine), rudders, towing tanks, water tunnels, Rutgersson (O.), *8044*
• hydroelasticity, penetration, ship slamming, wedges, Gorshkov (A.G.), Vakalov (G.N.), *8628*
• hull propeller interaction, noise (aerodynamic), sound generation, Plunt (J.), Mcqueen (D.), *9011*
• fredholm equations, gravity waves, green function, potential flow, wave trains, Noblesse (F.), *9944*
• girders, ships, torsion, Westin (H.), *10876*
• flexible bodies, ocean waves, wave loads, Bishop (R.E.D.), Price (W.G.), (et al.), *12084*
Hulstrom (R.L.), see Bird (R.E.), *8035*
Hulsurkar (S.), composite materials, creep, cylindrical bodies, pressurized pipes, *7283*
Hultgren (L.S.), asymptotic behavior, boundary layer, laminar flow, time dependence, Gustavsson (L.H.), *2631*
human body, dynamic properties, mass determination, measurements (dynamic), zero g phenomena, Sarychev (V.A.), Sazonov (V.V.), (et al.), *1064*
• computer graphics, moire methods, surface profiles, Duncan (J.P.), Dean (D.P.), (et al.), *1958*
• acceleration, biomechanics, kinematics, Voge (V.M.), *3056*
• biodynamics, experimental methods, kinematics, Alexander (M.J.L.), Colbourne (J.), *3057*
• biological joints, biomechanics, gait, Winter (D.A.), *3058*
• bones, braces, fracture, injuries, Pratt (D.J.), Bowker (P.), (et al.), *3068*
• bones, prosthetic devices, spine, Banks (A.J.), Dervin (E.), *3071*
• acoustics (psychological), noise, Kryter (K.D.), Poza (F.), *3072*
• gait, locomotion, shock absorbers, shock waves, Voloshin (A.), Wosk (J.), (et al.), *4117*
• bones, cartilage, ultrasonics, Rushfeldt (P.D.), Mann (R.W.), *4907*
• biomechanics, gait, pressure measurement, Arvikar (R.), Seireg (A.), *4908*
• joints, lubrication (boundary), lubrication (elastohydrodynamic), lubrication (hydrostatic), Mamell (P.), White (R.K.), *5996*
• kinematics, motion, simulation, Dapena (J.), *6009*
• dynamic analysis, kinematics, Dainis (A.), *6010*
• attenuation, bones, shock waves, Wosk (J.), Voloshin (A.), *6025*
• biomathematics, heat transfer (biological), temperature, Smith (P.), Twizell (E.H.), *6027*
• diagnostics, head, pressure measurement, Viernstein (L.J.), *6028*
• biomechanics, gait, Kairento (A.-L.), Hellen (G.), *7110*
• biodynamics, perception thresholds, vibration, yawing, Irwin (A.W.), *7123*
• biocontrol, heat transfer (biological), thermal effects, Schuette (W.H.), Lees (D.E.), (et al.), *7125*
• biomechanics, center of volume, statics, Gagnon (M.), Montpetit (R.), *7128*
• biodynamics, vibration, Griffin (M.J.), *8080*

- acoustic loading, biodynamics, vibration, Meister (F.J.), *8081*
- biological joints, experimental methods, kinematics, Chao (E.Y.S.), *9048*
- gait, locomotion, rigid bodies, Hardt (D.E.), Mann (R.W.), *9056*
- biodynamics, gait, pressure, Cavanagh (P.R.), Lafortune (M.A.), *9068*
- finite element methods, heat transfer (biological), variational methods, Smith (P.), Twizell (E.H.), *9089*
- cartilage, joints, lubrication (hydrodynamic), squeeze films, viscoelasticity, Manohar (K.), Nigam (K.M.), *9958*
- biological joints, joints, linkages, Kinzel (G.L.), *10379*

human engineering, biomechanics, blood flow, prosthetic devices, Mow (V.C.) ed., *1945, book*
- automobiles, digital simulation, man machine systems, maneuverability, Garrott (W.R.), Wilson (D.L.), (et al.), *5020*
- prosthetic devices, respiratory system, Nouh (A.), *6029*

Humar (J.L.), buildings, dynamic analysis, structural analysis, three dimensional formulation, Khandoker (J.U.), *6531*

Humbert (M.), channel flow, conduction, convection (forced), heat transfer (combined modes), nucleate boiling, thermal instability, Martin (M.), *9685*

Hummel (R.H.), see Azad (R.S.), *6683*

Humphrey (J.A.C.), see Henze (R.H.), *768*
- ductility, erosion, particles, wear, *1930*
- see Launder (B.E.) eds., *2826, book*
- see Chilukuri (R.), *3785*
- channels (closed), counterflow, turbulent flow, visualization, vortex flow, Li (S.), *5397*
- see Han (T.), *6625*
- see Le Quere (P.), *7843*
- see Ramos (J.I.), *8591*
- buoyant flow, cavities, channel flow, convection, heat transfer, laminar flow, Jacobs (E.W.), *10585*

Humphreys (D.A.), aerodynamics, boundary layer (three dimensional), numerical methods, turbulence, wings, *646*

Hundal (M.S.), damping, dynamic response, vibration isolation, *390*

Hung (C.M.), cylindrical bodies, missiles, numerical methods, shock waves, supersonic flow, three dimensional flow, turbulent flow, Chaussee (D.S.), *5413*

Hung (N.), constitutive equations, thermodynamics (irreversible), two phase flow, *4133*

Hung (N.D.), elastoplasticity, mathematical programming, matrix methods, shakedown structures, Palgen (L.), *3544*

Hung (T.-K.), biomechanics, material testing, spine, stress strain relationships, Chang (G.-L.), *4906*
- experimental methods, nervous system, spine, stress strain relationships, tissues, Chang (G.-L.), (et al.), *7105*

Hung (Y.Y.), see Hovanesian (J.D.), *7549*

Hungr (O.), boundary integral methods, computing techniques, fracture, pressure, Morgenstern (N.R.), *7538*

Hunt (B.L.), shock waves, three dimensional flow, two dimensional flow, *680*

Hunt (J.C.R.), design, environmental control, fluid mechanics, *565*
- hydraulic jump, stratified flow, visualization, Snyder (W.H.), *582*
- see Durbin (P.A.), *2694*
- see Durbin (P.A.), *11520*

Hunt (J.N.), diffraction, flow irregularities, gravity waves, travelling waves, Baddour (R.E.), *1590*

Hunt (J.W.), see Foster (F.S.), *7114*

Hunt (K.H.), see Kimbrell (J.E.), *4558*
- couplings, four bar linkage, kinematics, linkages, mechanisms (planes), Fichter (E.F.), *6562*
- see Kimbrell (J.E.), *8478*

Hunt (R.), boundary layer, free jets, similarity methods, transformation, transition flow, Wilks (G.), *1532*
- boundary layer, convection, friction (skin), laminar flow, plates (vertical), shear stress, Wilks (G.), *4696*

Hunter (A.G.M.), descent, dynamic analysis, tractors, vehicles, *9462*

Hunter (I.H.), annular flow, axial turbines, boundary layer, velocity measurement, visualization, *10527*

Hunter (J.F.), see Gross (D.R.), *4916*

Hunter (L.W.), gasification, immersion, mathematical methods, phase changes, thermal expansion, thermal loading, *7852*

Hunter (S.D.), absorption, lasers, sound generation, underwater acoustics, Jones (W.V.), (et al.), *5717*

Huntington (S.W.), ocean waves, offshore structures, wave loads, Gilbert (G.), *11570*

Huntley (E.), distributed parameters, optimal control, riccati equation, *4315*
- beams (timoshenko), dynamic response, laplace transform, transient effects, Zinober (A.S.I.), *7385*

Huppert (H.E.), ice, melting, stratification, Josberger (E.G.), *9926*

Hurst (C.J.), absorption, acoustics (architectural), sound propagation, transmission, *4776*

Huseyin (K.), autonomous systems, differential equations (ordinary), perturbation methods, stability theory, *1995*

Hussain (A.K.M.F.), see Zaman (K.B.M.Q.), *1582*
- excitation, experimental results, hydrodynamic stability, jets, turbulence (structure), Zaman (K.B.M.Q.), *5461*
- see Hasan (M.A.Z.), *9595*
- see Kleis (S.J.), *10470*

Hussain (M.A.), computer programming, edge cracks, singularities, three dimensional formulation, Coffin (L.F.), (et al.), *5021*

Huston (J.C.), dynamic stability, lateral stability, vehicles, Johnson (D.B.), *4546*

Huston (R.L.), contact stresses, fatigue, gear teeth, kinematics, surface profiles, wear, Coy (J.J.), *2558*
- see Krinke (D.C.), *4183*
- dynamic response, flexible bodies, rigid bodies, stiffness matrix, *10012*

Hutchinson (G.L.), see Lightfoot (E.), *2538*
- see Tsicnias (T.G.), *10650*

Hutchinson (J.R.), beams, frequencies, vibration (free), *7381*

Hutchinson (J.W.), see Dean (R.H.), *3464*

Hutin (D.), see Storck (A.), *5621*

Hutter (K.), see Hofer (K.), *2696*
- see Spring (U.), *6608*
- see Spring (U.), *7872*
- see Hofer (K.), *10457*

Huy Duong Bui, brittle materials, damage (cumulative), materials properties, Ky Dang Van, (et al.), *7517*

Hwang (C.), see Shih (Y.-P.), *2054*

Hwang (C.L.), diffusion, mixing, powders, Hogg (R.), *4007*

Hwang (G.J.), see Lee (S.L.), *10662*

Hwang (K.-C.), pressurized components, shells (cylindrical), shells (stiffened), Zheng (Z.-C.), *6253*

Hwang (U.P.), convection, heat transfer, integral methods, laminar flow, nusselt number, *1677*

Hwang (Y.F.), acoustic waves, half space, moving surfaces, reflection, sound fields, spectra, Tichy (J.), *4763*

Hyakutake (H.), crack propagation, fatigue, plastics, Hagio (T.), *3442*

hybrid construction, elastic bodies, inclusions, infinite medium, inhomogeneities, Taya (M.), Chou (T.-W.), *279*
- failure, fibers, glass fibers, micromechanisms, stochastics, Manders (P.W.), Bader (M.G.), *3277*
- laser plasma interaction, radiation properties, reactor structures, thermal effects, Avrorin (E.N.), Zuev (A.I.), (et al.), *5685*
- aerospace, composite materials, structural analysis, Zweben (C.), *10131*

hybrid element methods, finite element methods (hybrid), higher order theories, plates, Spilker (R.L.), Munir (N.I.), *4379*
- plates, Spilker (R.L.), Munir (N.I.), *9279*
- bending, hybrid techniques, mindlin plates, Spilker (R.L.), Munir (N.I.), *9280*

hybrid fuels, combustion products, combustors, gas turbines, Lew (H.G.), Decorso (S.M.), (et al.), *10711*
- combustion products, combustors, gas turbines, Novick (A.S.), Troth (D.L.), (et al.), *10712*
- combustion products, combustors, gas turbines, Cutrone (M.B.), Hilt (M.B.), (et al.), *11785*

hybrid simulation, algorithms, dynamic analysis, stability theory, Allison (J.S.), Johnson (H.M.), *4252*
- numerical methods, soil structure interaction, Gupta (S.), Penzien (J.), (et al.), *10848*

hybrid techniques, experimental methods, large displacement, plates (circular), Laermann (K.-H.), *4387*
- computing techniques, conduction (heat), inverse problems, Matsevityi (Yu.M.), *4712*
- algorithms, mathematical programming, minimization, Adamenko (G.M.), Gaishun (I.V.), *5047*
- bending, hybrid element methods, mindlin plates, Spilker (R.L.), Munir (N.I.), *9280*

Hyde (T.H.), creep, lead, models, ratchetting, stress concentration, thermal shock, Fessler (H.), (et al.), *10333*

hydraulic instruments, experimental methods, mercury, porous media, Van Brakel (J.) ed., *4843, book*
- discharges, jets, orifices, reynolds number (high), Akers (A.), *8510*

hydraulic jump, arch dams, damping, jets, radiating flow, Petrillo (A.), Ranieri (M.), (et al.), *561*
- stratified flow, visualization, Hunt (J.C.R.), Snyder (W.H.), *582*
- channels, divergence, free boundary, France (P.W.), *6595*
- bottom irregularities, channel flow, force, gates, Narayanan (R.), Schizas (L.S.), *6602*
- bottom irregularities, channel flow, free boundary, separation, Bouhadef (M.), Bauche (B.), (et al.), *9510*

hydraulic machinery, mathematical models, servomechanisms, stability theory, Bazhenov (A.I.), *127*
- control, shaking tables, Abedi-Hayati (S.), Auslander (D.M.), *220*
- piston driven flow, pumps, Beswarick (W.J.), *1637*
- digital control, drives, Volosov (V.V.), Voronova (L.I.), (et al.), *2196*
- dynamic analysis, hydrodynamics, rotors, scale models, Bachmann (P.), *2760*
- bridges (suspension), buildings (tall), heat exchangers, hydraulic structures, nuclear reactors, ship structures, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- drives, optimal control, transducers, Kamopp (D.), *4554*
- analog computation, analog simulation, design (optimum), digital analog computation, Sankar (S.), Svoboda (J.V.), *6123*

- control, design, drilling, numerical control, Glaser (D.J.), Nachtigal (C.L.), *6148*
- mathematical models, nonlinear mechanics, Nepraz (F.), *9099*
- control, design, robotics, suboptimal control, Rossler (J.), *9188*
- control, design, position control, state space techniques, Wierschem (T.), *9191*
- compressional waves, numerical methods, water hammer, Lecerf (J.P.), *9624*
- cavitation, cavitation inception, hydraulic structures, scale effects, surface effect, Arndt (R.E.A.), *10531*
- axisymmetric flow, finite element techniques, incompressible flow, swirl flow, viscous flow, Bar-Yoseph (P.), Blech (J.J.), (et al.), *10533*
- control, design, fluidics, pneumatic components, servomechanisms, Mccloy (D.), Martin (H.R.), *11100, book*
- control, stability, unsteady flow, Tanaka (Y.), *11749*

hydraulic structures, cavitation inception, jets, vapor pressure, Bruschin (J.), *2568*
- bridges (suspension), buildings (tall), heat exchangers, hydraulic machinery, nuclear reactors, ship structures, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- air, energy dissipation, entrainment, turbulence, Binder, Duport, (et al.), *3603*
- design criteria, probabilistic design, risk, Tung (Y.-K.), Mays (L.W.), *4530*
- axial loading, design (ultimate strength), flexure, reinforced concrete, Liu (T.C.), Gleason (S.), *7609*
- energy dissipation, inlet flow, models, vortex flow, Hecker (G.E.), *7664*
- river beds, scour, stability, Kumar (D.), Misra (G.C.), (et al.), *9515*
- cavitation, cavitation inception, hydraulic machinery, scale effects, surface effect, Arndt (R.E.A.), *10531*

hydraulic transport, fluid mechanics, sand, stratified flow, Smith (L.), *3004*
- crack propagation, gas wells, Evans (R.D.), Carroll (H.B.) Jr., *8925*
- capsules, particle fluid flow, pipe flow, pressure drop, Tachibana (M.), Matsumoto (Y.), *10447*
- pipelines, slurries, surveys, Round (G.F.), *79999*

hydraulic turbines, design, dimensional analysis, scale models, Etinberg (I.E.), *2753*
- cavitation, geometrical properties, surge, vortex tubes, Dorfler (P.), *5498*

hydraulics, finite element methods, hydraulic cylinders, Ravishankar (N.), *1467*
- harbors, models, sedimentation, Letter (J.V.) Jr., Mcanally (W.H.) Jr., *1500*
- computer programming, hydrology, Croley (T.E.) II, *2595, book*
- fluid power, piston driven flow, pumps, El Heeny (Y.A.H.), *2757*
- computer programming, discharges, rivers, Price (R.K.), Samuels (P.G.), *3613*
- boussinesq equation, reynolds stresses, turbulence model, turbulent flow, Rodi (W.), *4570, book*
- estuaries, finite difference methods, free boundary, lakes, water pollution, Fischer (H.B.) ed., *4577, book*
- crack propagation, fracture mechanics, gas wells, interface cracks, reservoir engineering, Hanson (M.E.), Shaffer (R.J.), (et al.), *5311*
- field tests, fluid injection, fracture, geothermal energy, rocks, Solberg (P.), Lockner (D.), (et al.), *5884*
- composite pressure vessels, hose, pressurized pipes, tubes, Entwistle (K.M.), *6205*
- automatic control, electrical instruments, pumps, servomechanisms, valves, Green (W.L.), Sanger (D.J.), (et al.), *6734*
- froude number, models, particle size, sewerage, Halliwell (A.R.), Saul (A.J.), *7544*
- energy conversion, fluid power, Webb (D.R.) eds., Papadakis (D.N.), *7800, book*
- drainage, groundwater, wells, Ollos (G.), *7975*
- fluid injection, fracture, hydraulic fracturing, rocks, simulation, Settari (A.), *8354*
- interaction, soil mechanics, Lindenberg (J.), Kenter (C.J.), *8513*
- automatic control, electrical components, fiber optics, helicopters, rotors, Kretz (M.), Larche (M.), *8649*
- design, pipe flow, pipelines, soil structure interaction, Stephenson (D.), *10369*
- rewetting, tubes, unsteady flow, Chan (A.M.C.), Banerjee (S.), *10825*
- fuel elements, heat transfer, nuclear fuels, numerical methods, Araki (T.), Takeda (T.), (et al.), *11802*

hydrocarbons, conduction (heat), thermal properties, thermodynamic properties, Baroncini (C.), Di Filippo (P.), (et al.), *724*
- pressure gradient, reservoirs, Tiab (D.), Crichlow (H.B.), *960*
- boundary layer, combustion, heat transfer, mass transfer, porous media, Batievskii (V.L.), Sergeev (G.T.), *1753*
- cyclohexane, thermophysical properties, Nefedov (S.N.), Filippov (L.P.), *5519*
- chemical reactions, combustion, mathematical models, Arbib (H.A.), Goldman (Y.), (et al.), *5645*
- boiling, high pressure, nucleation, water, Avedisian (C.T.), Glassman (I.), *6771*
- absorption, emissions, internal combustion engines, oil films, Carrier (G.), Fendell (F.), (et al.), *7873*
- combustion, emissions, oil films, spark ignition engines, Kaiser (E.W.), Lorusso (J.A.), (et al.), *7882*
- corresponding states principle, critical region, molecular theory, thermophysical properties, Mansoori (G.A.), Patel (V.K.), (et al.), *8676*
- convection, energy storage, heat transfer (combined modes), reservoirs, storage, transient effects, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*
- boiling, heat exchangers, lng, natural gas, porous walls, Dvoiris (A.D.), Sirotin (A.G.), (et al.), *11770*

hydrodynamic pressure, dams, earthquake effects, Housner (G.W.), *971*
- offshore structures, sensitivity, wave loads, Shyam Sunder (S.), Connor (J.J.), *1451*
- pipe flow, sound generation, turbulent flow, vibration (flow induced), Bull (M.K.), Norton (M.P.), *1807*
- earthquake effects, ocean bed, submerged bodies, tanks, Tung (C.C.), *3011*
- currents, cylindrical bodies, gravity waves, Vinje (T.), *3719*
- dams, earthquakes, Yang (C.Y.), Chiarito (V.), *7044*
- dams, seismic loading, soil structure interaction, Chopra (A.K.), Gupta (S.), *10849*

hydrodynamic stability, blasius flow, boundary layer, three dimensional flow, Cebeci (T.), Stewartson (K.), *632*
- jets, liquids, surface tension, Bogy (D.B.), *633*
- heat transfer, mass transfer, rayleigh taylor instability, surface tension, viscous effects, Ho (S.-P.), *634*
- boundary value problems, orr sommerfeld equation, Solopenko (V.I.), *635*
- counterflow, jets, liquids, Entov (V.M.), Yarin (A.L.), *636*
- jets, mathematical models, two dimensional flow, Morris (P.J.), *637*
- buoyancy, mathematical models, microgravity, surface tension, Castillo (J.L.), Velarde (M.G.), *638*
- couette flow, laser doppler velocimeters, taylor vortices, Vasilenko (Yu.G.), Kuznetsov (E.A.), (et al.), *639*
- nonlinear theory, stability theory, Guiraud (J.P.), *640*
- critical phenomena, film boiling, film flow, Ganchev (V.G.), Bokov (A.Ye.), *748*
- non newtonian flow, pipe flow, shear-rate dependent, viscosity, Akbay (U.), *1560*
- buoyancy, couette flow, stability curve, Kolesov (V.V.), *1576*
- finite difference methods, taylor-gortler instability, wall jets, Kobayashi (R.), Fujisawa (N.), *1577*
- interface phenomena, magnetic stabilization, mathematical models, Egorushkin (S.A.), Tsypkin (A.G.), *1578*
- boundary layer (control), reynolds number (critical), tollmien schlichting waves, Milling (R.W.), *1579*
- convection, micropolar media, polar fluids, Lebon (G.), Perez-Garcia (C.), *1975*
- boundary layer, orr sommerfeld equation, roughness, shear flow, stability theory, Lewkowicz (A.K.), *2681*
- decay, perturbations, shear flow, Brown (S.N.), Stewartson (K.), *2682*
- geostrophic flow, stratified flow, Weber (J.E.), *2684*
- end effects, rotating cylinders, stability theory, taylor vortices, Walton (I.C.), *2685*
- asymptotic methods, orr sommerfeld equation, shear layer, stability theory, Monkewitz (P.A.), Monkewitz (M.A.), *2686*
- atmospheric circulation, baroclinic instability, finite difference methods, Dymnikov (V.P.), *3018*
- atmospheric circulation, baroclinic instability, Shakina (N.P.), *3019*
- atmospheric circulation, oscillations, stratification, Kadyshnikov (V.M.), *3029*
- coagulation, colloids, emulsions, non newtonian suspensions, particle size, Reddy (S.R.), Fogler (H.S.), *3592*
- laminar flow, poiseuille flow, transition, Scobelev (B.Yu.), Molorodov (Yu.I.), *3664*
- channel flow, developing flow, orr sommerfeld equation, perturbations, two dimensional flow, Gupta (S.C.), Garg (V.K.), *3696*
- elastic bodies, heat exchangers, multifluid flow, separating wall, Hasegawa (E.), *3697*
- buoyancy, couette flow, Kolesov (V.V.), *3698*
- boundary layer (control), perturbations, tollmien schlichting waves, Levchenko (V.Ya.), Solovev (A.S.), *3699*
- channel flow, developing flow, reynolds number (critical), stability theory, Gupta (S.C.), Garg (V.K.), *3700*
- poiseuille flow, stability theory, three dimensional flow, Itoh (N.), *3701*
- membranes, shear flow, vortex flow, Couder (Y.), *3702*
- gravitational stabilization, thin films, viscous effects, Hasegawa (E.), *3703*
- baroclinic waves, multilayer, stability theory, Donahue (J.F.), *3704*
- constrictions, experimental results, pipe flow, reynolds number (critical), Lopez (J.L.), *3705*
- currents, oceanography, Hughes (R.L.), *4047*
- baroclinic instability, bottom irregularities, oceanography, Tang (C.-M.), *4050*
- atmospheric circulation, clouds, convection (forced), convection (free), heat transfer (atmospheric), Falkovich (A.I.), *4063*
- continuum mechanics, non newtonian flow, thermodynamics (nonequilibrium), Fosdick (R.L.), Rajagopal (K.R.), *4128*
- orr sommerfeld equation, shear flow, stability theory, Salwen (H.), Grosch (C.E.), *4639*
- couette flow, end effects, taylor number, Hocking (L.M.), Skiepko (J.), *4640*
- channel flow, pipe flow, stability theory, Stuart (J.T.), Meyer (R.E.), *4641*
- nonlinear theory, poiseuille flow, stability curve, Struminskii (V.V.), Skobelev (B.Yu.), *4642*
- ocean air interaction, shear flow, surface waves, wind-wave interaction, Kawai (S.), *4857*
- circulation, currents, eddies, oceanography, Haidvogel (D.B.), Holland (W.R.), *4875*
- circulation, oceanography, perturbation methods, Zelenko (A.A.), *4877*
- heat transfer, liquids, surface tension, Takashima (M.), *5457*

- thin films, wind-wave interaction, Hasegawa (E.), Taniyama (N.), *5458*
- compressible flow, perturbations, two dimensional flow, Kerschen (E.J.), Balsa (T.F.), *5459*
- developing flow, pipe flow, reynolds number (critical), velocity profiles, Garg (V.K.), *5460*
- excitation, experimental results, jets, turbulence (structure), Hussain (A.K.M.F.), Zaman (K.B.M.Q.), *5461*
- rotating cylinders, rotational flow, stability theory, thin films, Iwasaki (Y.), Hasegawa (E.), *5462*
- boundary layer, experimental results, perturbations, tollmien schlichting waves, Dovgal (A.V.), Kozlov (V.V.), (et al.), *5463*
- nonlinear analysis, wind-wave interaction, Fabrikant (A.L.), *5474*
- freezing, pipe flow, thermal instability, turbulent flow, Thomason (S.B.), Mulligan (J.C.), *5578*
- baroclinic instability, oceanography, rotating fluids, stratified flow, Killworth (P.D.), *5919*
- circulation, currents, oceanography, Holland (W.R.), Haidvogel (D.B.), *5920*
- atmospheric circulation, internal waves, Kurganskiy (M.V.), *5927*
- stability theory, Drazin (P.G.), Reid (W.H.), *6674*
- free boundary, liquids, surface tension, Svechkareva (M.A.), Tyuptsov (A.D.), *6675*
- developing flow, pipe flow, reynolds number (critical), three dimensional flow, Garg (V.K.), Gupta (S.C.), *6676*
- numerical methods, poiseuille flow, Takeuchi (D.I.), Jankowski (D.F.), *6677*
- multiple scales, nonlinear theory, poiseuille flow, Weinstein (M.), *6678*
- boundary layer, entrainment, turbulence, Gad-El-Hak (M.), Blackwelder (R.F.), (et al.), *6686*
- initial value problems, interface waves, liquid liquid interface, viscous flow, Prosperetti (A.), *6701*
- thermal instability, variable fluid properties, viscosity, Sazontov (A.G.), *6761*
- boiling, compressional waves, nuclear reactors, sodium, thermal instability, Galati (A.), *6770*
- convection, rayleigh number, rotating fluids, shells (spherical), Geiger (G.), Busse (F.), *6787*
- cooling, thermal instability, Kolos (V.P.), Sorokin (V.N.), *6814*
- mixtures, polar fluids, waves, Straughan (B.), *7141*
- micropolar media, polar fluids, Perez-Garcia (C.), Rubi (J.M.), (et al.), *7644*
- columns, gravity, harmonic waves, liquids, Malik (S.K.), Singh (M.), *7740*
- drawing, gravity, inertia, surface tension, Chang (J.C.), Denn (M.M.), (et al.), *7741*
- free shear layer, mathematical models, reynolds number (high), Huerre (P.), Scott (J.F.), *7742*
- coriolis forces, rotating fluids, Gledzer (Ye.B.), Makarov (A.L.), (et al.), *7743*
- gravity waves (surface), mathematical models, Laedke (E.W.), Spatschek (K.H.), *7744*
- gravity waves (internal), shear layer, vortex sheets, Grimshaw (R.H.J.), *7745*
- gravity waves (surface), nonlinear theory, three dimensional flow, Crawford (D.R.), Lake (B.M.), (et al.), *7746*
- interfaces, surface tension, Wilke (H.), *7747*
- film boiling, galilei number, nusselt number, reynolds analogy, Klimenko (V.V.), *7829*
- duct flow, flow reversal, porous media, unsteady flow, Bau (H.H.), Torrance (K.E.), *7840*
- blood flow, viscometry, Dintenfass (L.), Fu-Lung (L.), *8083*
- liquid solid interface, membranes, viscoelasticity, Steinchen (A.), Gallez (D.), (et al.), *8275*
- convection, diffusion, nonlinear theory, perturbation methods, Neu (J.C.), *8602*
- buoyancy, convection, eigenvalues, liquids, surface tension, Rosenblat (S.), Homsy (G.M.), (et al.), *8603*
- mathematical models, vortices, Dhanak (M.R.), *8604*
- couette flow, rotating bodies, spherical bodies, vortices, Hocking (L.M.), *8605*
- couette flow, numerical methods, oscillations, Carmi (S.), Tustaniwskyj (J.I.), *8606*
- poiseuille flow, rotating fluids, Cotton (F.W.), Salwen (H.), *8607*
- mathematical models, navier stokes equation, spectral analysis, Taylor (T.D.), Murdock (J.W.), *8608*
- convection (free), film boiling, liquid vapor interface, pipe flow, thermal instability, two phase flow, Sherman (D.C.), Sabersky (R.H.), *8693*
- bounded media, cellular flow, convection, rotating fluids, Daniels (P.G.), *8710*
- boundary layer (thermal), bounded media, convection, porous media, stagnation point, vortex flow, Hsu (C.T.), Cheng (P.), *8711*
- closed conduit flow, rayleigh number, solar ponds, thermal instability, thermohaline stability criteria, Prueli (D.), *8715*
- boussinesq equation, convection, rotating bodies, rotating fluids, Buhler (K.), Oertel (H.) Jr., *8719*
- dissipation, Kallen (E.), Wiin-Nielsen (A.C.), *8987*
- finite element techniques, poiseuille flow, Li (Y.S.), Kot (S.C.), *9148*
- barotropic fluids, perturbations, two dimensional flow, Grinfeld (M.A.), *9600*
- boundary layer, conical bodies, rotating bodies, Kobayashi (R.), *9601*
- perturbations, sound flow interaction, tollmien schlichting waves, Murdock (J.W.), *9602*
- rheology, rotating disks, Rajagopal (K.R.), Gupta (A.S.), *9603*
- temperature, turbulence, turbulence (structure), velocity measurement, Antonia (R.A.), Chambers (A.J.), (et al.), *9617*
- buoyant flow, convection (free), thermal instability, transition flow, Gebhart (B.), Mahajan (R.L.), *9701*
- channel flow, conduction (heat), thermal instability, transition flow, Hassab (M.A.), Ozisik (M.N.), *9702*
- cylindrical bodies, vortex shedding, vortex streets, Yamamoto (K.), Watanabe (K.), (et al.), *10403*
- inviscid fluid, taylor vortices, vorticity, Vladimirov (V.A.), *10409*
- annular flow, developing flow, perturbations, Gupta (S.C.), Garg (V.K.), *10464*
- boundary layer, convection, heat transfer, vortex flow, Moutsoglou (A.), Chen (T.S.), (et al.), *10465*
- interface phenomena, perturbations, vortex sheets, Shankar (P.N.), *10466*
- convection, stability theory, Banerjee (M.B.), Katoch (D.C.), (et al.), *10467*
- baroclinic instability, ocean waves, Mysak (L.A.), *10468*
- boundary layer, potential flow, turbulence, Van Atta (C.W.), Sokolov (M.), (et al.), *10471*
- gravity waves (internal), stratified flow, wave interactions, Koop (C.G.), Redekopp (L.G.), *10483*
- coasts, currents, oceanography, Collings (I.L.), Grimshaw (R.), *10856*
- currents, rossby waves, Hall (R.E.), *10857*
- convection, heat addition, porous media, rayleigh number, saturation, Straus (J.M.), Schubert (G.), *11367*
- axisymmetric flow, inviscid fluid, rotating fluids, Vladimirov (V.A.), Tarasov (V.F.), *11373*
- couette flow, tollmien schlichting waves, transition, waves (azimuthal), Lvov (V.S.), Predtechensky (A.A.), *11487*
- annuli, laminar flow, rotating cylinders, Hall (P.), *11496*
- couette flow, dilute solutions, polymers, Lhuillier (D.), *11502*
- annular flow, perturbations, stability curve, Garg (V.K.), *11526*
- boundary layer, curved surfaces, heat transfer, taylor instability, Kohama (Y.), Kobayashi (R.), *11527*
- coriolis forces, geostrophic flow, Bubnov (B.M.), *11528*
- boundary layer, perturbations, supersonic flow, Gaponov (S.A.), *11529*
- bubble dynamics, compressible flow, Rath (H.J.), *11530*
- capillary flow, jets, liquids, Filyand (L.V.), *11531*
- bubbly flow, cavities, surface tension, Petrov (A.G.), *11532*
- film flow, pressure gradient, thin films, Mikielewicz (J.), Ihnatowicz (E.), (et al.), *11533*
- liquid vapor interface, supersonic flow, surface tension, Shivamoggi (B.K.), *11534*
- buoyancy, richardson number, shear flow, stratified flow, turbulent flow, Kranenburg (C.), *11535*
- thermal diffusion, thin films, Paliwal (R.C.), Chen (C.F.), *11536*
- pipe flow, swirl flow, vortex flow, Suematsu (Y.), Ito (T.), *11537*
- nonlinear theory, oscillations, thin films, Hasegawa (E.), *11538*
- channel flow, shear flow, stability theory, turbulent flow, velocity profiles, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- acoustic properties, boiling, channel flow, two phase flow, Romberg (T.M.), Rees (N.W.), *11540*
- capillary waves, currents, gravity waves (surface), Voronovich (A.G.), Lobanov (E.V.), (et al.), *11590*
- drops, film flow, jets, viscous flow, Abramov (Yu.I.), *11592*
- film flow, film thickness, surface waves, vertical surfaces, Alekseenko (S.V.), Nakoryakov (V.E.), (et al.), *11612*
- nonlinear analysis, rossby waves, solitary waves, Malanotte Rizzoli (P.), Hendershott (M.C.), *11617*
- flame propagation, flames (laminar), thermal instability, Zeldovich (Ya.B.), *11782*
- flames (diffusion), thermal diffusion, thermal instability, Joulin (G.), Mitani (T.), *11783*

hydrodynamics, coding, finite difference methods, free boundary, Hirt (C.W.), Nichols (B.D.), *1115*

- cooling, heat transfer, high temperature, impingement cooling, sprays, Urbanovich (L.I.), Goryainov (V.A.), (et al.), *1663*
- contact stresses, friction (sliding), gear teeth, gears (worm), Winter (H.), Wilkesmann (H.), *2567*
- dynamic analysis, hydraulic machinery, rotors, scale models, Bachmann (P.), *2780*
- modeling, propellants, pumps, rockets, Kalnin (V.M.), Sherstiannikov (V.A.), *2872*
- gravitational prospecting, inverse problems, potential theory, Danilov (V.L.), Shulman (I.I.), *2995*
- diffusion, discrete systems, equations of motion, one dimensional flow, Vischer (P.B.), *3635*
- differential equations (partial), plasma, theory, two component flow, Forste (J.), *3897*
- contact problems, continuum mechanics, fredholm equations, volterra equations, Aleksandrov (V.M.), Kovalenko (E.V.), *4167*
- darcy flow, filtration, oil removal, underground, Rasulov (M.A.), *4968*
- cylindrical bodies, damping, inertia, vibration, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5232*
- liquids, thermal waves, thermodynamic functions, variable fluid properties, variable thermal properties, Andreev (A.F.), *5516*

- packed beds, velocity profiles, Volkov (V.I.), Danilov (N.S.), (et al.), *5829*
- diffraction, elliptic equations, finite element techniques, infinite medium, Jami (A.), Polyzakis (M.), *6103*
- colloids, electro fluid dynamics, particle fluid flow, spherical bodies, Adler (P.M.), *6580*
- multicomponent flow, statistical mechanics, thermodynamics (nonequilibrium), transport phenomena, Bashkirov (A.G.), *6747*
- acoustic streaming, acoustics, nonlinear characteristics, Gusev (V.E.), Rudenko (O.V.), *6915*
- finite element techniques, matrix methods, simulation, Walters (R.A.), *7221*
- boltzmann equation, initial value problems, rarefied gases, Shapovalov (G.K.), *7694*
- dynamic interaction, explosions, explosive loading, impulsive transfers, Shubin (G.R.), *7932*
- conservation laws, hyperbolic equations, nonlinear mechanics, shock waves, Cheng (K.-S.), *9102*
- explosions, explosive loading, explosive solid interactions, shock waves, Ritter (Z.W.), *9843*
- axial flow, two phase flow, Beattie (D.R.H.), Lawther (K.R.), *9896*
- drops, liquid liquid systems, Patel (P.D.), Theofanous (T.G.), *10826*
- drag, kinetic theory, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11439*
- cylindrical bodies, drag, kinetic theory, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11453*
- bubble dynamics, mixtures, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12027*
- dispersed flow, rods, tube bundles, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12028*

hydroelasticity, containers (partially filled), rectangular container, sloshing, tanks, Bauer (H.F.), *675*
- containers (partially filled), shells (fluid-filled), sloshing, surveys, Dimaggio (F.L.), *676*
- elastic bodies, rotating shafts, surface profiles, Zak (M.), *1174*
- containers (partially filled), shells (cylindrical), shells (fluid-filled), vibration, Perekhrest (V.I.), Ulitin (G.M.), *1610*
- biomechanics, cochlea, ear, Holmes (M.H.), *1952*
- elasticity (three dimensional), fluid-structure interaction, Guz (A.N.), *2947*
- finite element techniques, heat transfer, structural analysis, *6102*
- containers (partially filled), eigenvalue problems, sloshing, Kondo (H.), *6704*
- hulls, penetration, ship slamming, wedges, Gorshkov (A.G.), Vakalov (G.N.), *8628*
- cylindrical waves, oscillatory flow, vibration (flow induced), Sarpkaya (T.), *8834*
- deformable bodies, stresses, viscous flow, Guz (A.N.), *9010*
- hull propeller interaction, structural response, vibration (flow induced), Wereldsma (R.), *9943*
- scale models, shells (axisymmetric), submerged bodies, Takeuchi (K.), Desanto (D.F.), *11672*
- cavitation, fluid-structure interaction, unsteady flow, Galiev (Sh.U.), *11680*
- compressible flow, oscillating bodies, spherical bodies, Guz (A.N.), *11686*
- annular flow, dynamic stability, pipelines, Kozarov (M.), Mladenov (K.), *11687*
- shells (fluid-filled), vibration, vibration (nonaxisymmetric), Radovinskii (A.L.), *11689*
- half space, layered media, surface waves, Gogna (M.L.), *11697*

hydroelectric power, cavitation flow, discharges, gates, tunnels, vibration (flow induced), Giezendanner (W.), Henry (P.), *2582*

hydrofoils, fluid boundaries, froude number, gravity waves (internal), wave generation, Bukreev (V.I.), *4659*
- airfoils, lifting surfaces, mathematical models, Stepanov (G.Yu.), *4669*
- cavitation, inviscid fluid, supercavitating hydrofoils, supercritical flow, Rowe (A.), Kueny (J.L.), *5968*

hydrogen, flames (diffusion), kinetics, Allison (R.A.), Clarke (J.F.), *1741*
- flames (diffusion), jets, Kennedy (I.M.), Kent (J.H.), *1744*
- combustion, injection, porous media, Hubbartt (J.E.), Strahle (W.C.), (et al.), *1751*
- channel flow, combustion, shock waves, supersonic flow, Zimont (V.L.), Levin (V.M.), (et al.), *2865*
- bubble dynamics, velocity measurement, visualization, wakes, Wilkinson (D.L.), Willoughby (M.A.), *3751*
- bubble dynamics, velocity measurement, visualization, Bejan (A.), Yewell (R.B.), *3758*
- metal-hydrogen systems, safety, storage, Veziroglu (T.N.) ed., *4121, book*
- chemical kinetics, ignition, reaction rates, Rogers (R.C.), Schexnayder (C.J.) Jr., *4735*
- combustion, diesel engines, ignition sensitivity, Ikegami (M.), Miwa (K.), (et al.), *4742*
- catalytic surfaces, dissociation, heat transfer, real gas effects, shock tubes, Nasser (A.E.M.), East (R.A.), *5562*
- absorption, hydrogen embrittlement, steel, Ekilik (V.V.), Grigorev (V.P.), (et al.), *6427*
- combustion, flames (diffusion), methane, turbulent flow, Annushkin (Yu.M.), Maslov (G.F.), *6835*
- axial flow, gas turbines, Bykov (N.N.), Chekalov (M.A.), *10525*

hydrogen embrittlement, acoustic emission, inorganic materials, materials properties, Cuthrell (R.E.), Randich (E.), *3451*
- absorption, hydrogen, steel, Ekilik (V.V.), Grigorev (V.P.), (et al.), *6427*
- cracking, stress corrosion, Popperling (R.), Schwenk (W.), *7490*
- corrosion fatigue, crack growth, low cycle fatigue, stress intensity factor, Endo (K.), Komai (K.), (et al.), *7495*
- aging, beryllium, deformation (plastic), strength, Lashuk (N.K.), Tkachenko (V.G.), (et al.), *7502*
- cracking, flaw detection, steel, Szilard (J.), Haynes (R.), *7561*

hydrology, stochastic processes, Bussiaev (I.V.), *1896*
- flood flow, watersheds, Kopylov (A.P.), *1897*
- heat transfer, mass transfer, Sokolov (A.A.), Kharchenko (S.I.), *1898*
- heat transfer (atmospheric), mass transfer, meteorology (physical), soils, Lykosov (V.N.), Palagin (E.G.), *1907*
- computer programming, hydraulics, Croley (T.E.) II, *2595, book*
- roughness, runoff, watersheds, Ellis (F.W.), Ramsey (F.V.), (et al.), *3013*
- rainfall, watersheds, Hjelmfelt (A.T.) Jr., *4042*
- discharges, rivers, streams, Zheleznyakov (G.V.), Danilevich (B.B.), *4045*
- drainage, embankments, erosion, Gonchar (A.I.), Sribnyi (I.K.), *4046*
- roughness, turbulent flow, wavy walls, Melekhova (N.A.), Mikhailova (N.A.), *5915*
- circulation, inlet flow, lakes, models, outflow, Gatto (M.), Rinaldi (S.), *7660*
- boussinesq equation, differential equations (ordinary), differential equations (partial), porous media, similarity methods, Bhutani (O.P.), Sharma (N.L.), *8969*

hydromagnetic stability, cylindrical bodies, liquids, perturbations, waves, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *851*
- boundary layer (thermal), heat transfer, magneto fluid dynamics, theory, Bashtovoi (V.G.), Pavlinov (M.I.), *861*

hydrostatics, bearings (hydrostatic), screws, Bassani (R.), *1018*
- ocean waves, oceanography, tsunamis generation, Zhak (V.M.), Kulikov (E.A.), *1892*
- draft, matrix methods, ships, trim, Chalmers (D.W.), *3033*
- tides, Trubitsyn (V.P.), *5910*

Hyer (M.W.), fibers, geometric nonlinearities, laminates, reinforced bodies, *2247*
- laminates, mechanical stabilization, plates, rayleigh ritz method, shape factors, temperature, *9247*

hygrothermal effects, composite materials, diffusion, Sih (G.C.), Shih (M.T.), (et al.), *931*
- diffusion, holes, thermal stresses, thermoelasticity, Hartranft (R.J.), Sih (G.C.), *1832*

Hyman (W.A.), blood flow, blood vessels, pulsatile flow, Brewer (M.A.), *3066*

hyperbolic equations, cauchy problem, galerkin method, kolmogorov equation, noise (random), Girya (T.V.), *42*
- cauchy problem, existence theorems, inhomogeneities, uniqueness, Ying (L.-A.), Wang (C.-H.), *1089*
- existence theorems, uniqueness, water hammer, Barbu (V.), Morosanu (G.), *2006*
- cauchy problem, isentropic processes, shock, wave equations, Hoff (D.), *2011*
- existence theorems, nonlinear methods, Morosanu (G.), *2012*
- dynamic analysis, heat transfer, laplace transform, Korolkov (B.P.), Pupin (A.A.), *3115*
- characteristic methods, pipelines, rupture, shock tubes, Cronje (J.S.), Bishnoi (P.R.), (et al.), *3721*
- elastic waves, energy splitting, radon transform, transforms, wave equations, Costa (D.G.), Strauss (W.A.), *4165*
- boundary conditions, computing techniques, wave equations, Bayliss (A.), Turkel (E.), *4187*
- characteristic methods, unsteady flow, waves, Kluwick (A.), *4964*
- cauchy problem, characteristic methods, crystals, refraction, Uhlmann (G.A.), *4978*
- boundary conditions, computing techniques, stability (numerical), Sloan (D.M.), *5004*
- asymptotic behavior, magneto fluid dynamics, wave equations, Gustafsson (B.), *6080*
- conservation laws, initial value problems, riemann problem, Roe (P.L.), *6082*
- conservation laws, dynamic analysis, finite difference methods, Harten (A.), Tal-Ezer (H.), *6086*
- algorithms, control, differential games, distributed parameters, parabolic equations, position control, Korotkii (A.I.), Osipov (Iu.S.), *7240*
- existence theorems, mathematical methods, Hoff (D.), *8117*
- boundary value problems, existence theorems, integro differential equations, uniqueness, Krivoshein (L.E.), Leung (K.V.), (et al.), *8121*
- burgers equation, conservation laws, random search, Harten (A.), Lax (P.D.), *8132*
- crack opening displacement, deformation (finite), elliptic equations, Abeyaratne (R.), *8398*
- channel flow, elliptic equations, unsteady flow, vortex flow, Lyapidevskii (V.Yu.), *8507*
- conservation laws, hydrodynamics, nonlinear mechanics, shock waves, Cheng (K.-S.), *9102*
- asymptotic behavior, boundary conditions, lyapunov's functions, nonlinear analysis, Radzikowski (J.), Sadkowski (W.), *9104*
- control, distributed parameters, modal control, optimal control, self-adjoint systems, Meirovitch (L.), Baruh (H.), *9170*

- difference equations, shock waves, Laval (P.), *9638*
- conservation laws, existence theorems, shock waves, Chang (P.H.), *9639*
- nonlinear analysis, nonlinear waves, sine gordon equation, solitary waves, Olsen (O.H.), Samuelsen (M.R.), *10018*
- differential equations (partial), group theory, mass transfer, Berman (V.S.), *10020*
- characteristic methods, matrices, unsteady flow, Edenhofer (J.), Schmitz (G.), *11382*
- boundary value problems, finite element techniques, initial value problems, stability (numerical), Winther (R.), *11694*

hypergolic propellants, combustion, regression rate, self ignition, Paul (P.J.), Mukunda (H.S.), (et al.), *9770*
- self ignition, solid propellants, thermal instability, Kulkarni (S.G.), Panda (S.P.), *10715*

hypersonic flow, aerodynamic heating, boundary layer (three dimensional), friction (skin), leading edge, Dudin (G.N.), Neiland (V.Ya.), *598*
- boundary layer, interaction, laminar flow, Rodkiewicz (C.M.), Gupta (R.N.), *599*
- boundary layer, laminar flow, oscillating bodies, Stepanov (G.N.), *1535*
- pressure distribution, wings, Golubkin (V.N.), *2728*
- aerodynamics, inlet flow, missiles, Dillon (J.L.), Marcum (D.C.) Jr., (et al.), *2742*
- interaction, multiphase flow, Blagosklonov (V.I.), Kuznetsov (V.M.), (et al.), *2963*
- bodies of revolution, compressible flow, unsteady flow, Hui (W.H.), Tobak (M.), *3640*
- blunt bodies, vaporization, Mirskii (V.N.), *3847*
- bodies of revolution, compressible flow, numerical methods, viscid inviscid flow, Polyanskii (A.F.), Skurin (L.I.), (et al.), *5416*
- film cooling, laminar flow, slots, thermal protection, Richards (B.E.), Stollery (J.L.), *5561*
- cylindrical bodies, heat transfer, leading edge, shock waves, swept wings, Zemlyanskii (B.A.), Shmanenkova (G.A.), *6767*
- boundary layer, compressible flow, inlet flow, Boshenyatov (B.V.), Gilyazemdinov (B.N.), (et al.), *7690*
- compressible flow, numerical methods, streamlines, three dimensional flow, viscous effects, Kim (M.D.), Thareja (R.R.), (et al.), *7691*
- conformal mapping, magneto plasma dynamics, solar wind, three dimensional flow, Belotserkovskii (O.M.), Mitnitskii (V.Ya.), *7902*
- asymptotic behavior, blunt bodies, separation, shock layer, two dimensional flow, Barantsev (R.G.), Engelgart (V.N.), *8636*
- missiles, propulsion, ramjets, rockets, Billig (F.S.), Waltrup (P.J.), (et al.), *8810*
- dust, slender bodies, Barron (R.M.), Wiley (J.T.), *8892*
- boundary roughness, reynolds equation (turbulence), transition, Boudreau (A.H.), *9565*
- blunt bodies, convection, heat transfer (combined modes), radiant interchange, reflection, Rolin (M.N.), Soloukhin (R.I.), (et al.), *9728*
- boundary layer, supersonic flow, unsteady state, Gupta (R.N.), Mukherjee (S.), (et al.), *10427*
- blunt bodies, heat transfer, vorticity, Zemlyanskii (B.A.), Lunev (V.V.), (et al.), *10428*
- fluid injection, shock layer, similarity methods, stagnation point, Plostins (P.), Rubin (S.G.), *10495*
- delta wings, pressure distribution, Golubinskiy (A.I.), Schchedrin (A.I.), *10503*
- aerodynamic interference, fins, pressure distribution, projectiles, sabot discard, wind tunnels, Schmidt (E.M.), *10517*
- axisymmetric flow, compressible flow, drag, supersonic flow, Khlopkov (Yu.I.), *11402*
- blunt bodies, compressible flow, drag, optimization, rarefied gases, shape factors, Bunimovich (A.I.), Dubinskii (A.V.), *11405*
- compressible flow, dissociation, Pandey (B.D.), Ram (R.), *11407*
- aerosols, chemically reactive flow, compressible flow, particle fluid flow, wakes, Dmitriev (L.M.), Markachev (Yu.E.), *11408*
- compressible flow, rarefied flow, spherical bodies, Artamonov (A.K.), Arknipov (V.N.), *11409*
- compressible flow, particle fluid flow, unsteady flow, Hui (W.H.), Tobak (M.), *12103*

hypervelocity, interaction, magneto plasma dynamics, pulsatile flow, shock waves, Oliver (D.A.), Swean (T.F.) Jr., (et al.), *7898*

Hysing (T.), ice, loads, offshore structures, ship structures, *5364*

hysteresis, dynamic analysis, nonlinear systems, sensitivity, structural response, structures, Ray (D.), Pister (K.S.), (et al.), *106*
- crack growth, low cycle fatigue, Radhakrishnan (V.M.), *449*
- dissipation, linearization, random excitation, structural optimization, Grossmayer (R.L.), Iwan (W.D.), *2318*
- buckling, multistory frames, Jain (A.K.), Goel (S.C.), (et al.), *3339*
- biaxial loading, plasticity, Hooker (R.J.), *7138*
- deformation (plastic), dislocations, imperfections, Guelin (P.), *8092*
- random excitation, seismic waves, structures, vibration (random), Baber (T.T.), Wen (Y.-K.), *9106*
- boussinesq equation, convection, thermal diffusion, Walden (R.W.), Ahlers (G.), *9534*
- damping, dynamic analysis, vibration (forced), Fabries (M.), *10192*

I

Iakovlev (V.F.), see Apykhtin (N.G.), *4757*
Iannece (D.), dielectrics, electroelasticity, variational methods, Romano (A.), *5088*
Iannetta (S.), see Cenedese (A.), *8619*
Ibanez (J.A.), diffusion, membranes (permeable), permeability, thermal effects, Tejerina (A.F.), *7874*
Ibar (J.P.), casting, polymers, rheomolding, vibration (electromechanical), vibration (forced), Solomat (S.A.), *10266*
Ibbetson (A.), see Hignett (P.), *8717*
Ibidapo-Obe (O.), echinodome, optimization, shape factors, tanks, Royles (R.), (et al.), *5344*
Ibrahim (I.M.), dynamic analysis, plates (anisotropic), plates (sandwich), Farah (A.), (et al.), *5160*
Ibrahim (M.B.), heat transfer, pipe flow, turbulence, Walker (V.), *9611*
- see Thomas (L.C.), *10472*

Ibrahim (M.M.A.), see Brown (K.J.), *4151*
Ibrahim (R.A.), random excitation, stochastic systems, vibration (parametric), *7372*
- see Pan (C.H.T.), *9959*

Ibrahim (S.I.), crack detection, cracks, fatigue, ultrasonics, Whittaker (V.N.), *10275*
ice, plates, viscoelastic waves, Bates (H.F.), Shapiro (L.H.), *1303*
- free boundary, rivers, velocity profiles, Shen (H.T.), Ackermann (N.L.), *1493*
- atmospheric circulation, ocean air interaction, oceanography, Belevich (M.Yu.), *1911*
- icebergs, ocean air interaction, oceanography, oscillations, surface flow, Mcphee (M.G.), *3017*
- brittle materials, mechanical properties, tests, Timco (G.W.), *3490*
- convection (free), melting, models, Wilson (N.W.), Lee (J.J.), *4728*
- axial loading, bending, friction, mechanical properties, tests, Schwarz (J.), Frederking (R.), (et al.), *5324*
- loads, offshore structures, ship structures, Hysing (T.), *5364*
- icebergs, oceanography, surface flow, weather forecasting, Gebhart (B.), Audunson (T.), *5953*
- boundary layer (atmospheric), currents, icebergs, oscillations, surface flow, Mcphee (M.G.), *7055*
- failure, fatigue, mechanical properties, Mellor (M.), Cole (D.), *7479*
- bending, flexure, strength, Timco (G.W.), *7565*
- freezing, solidification, Hsu (T.R.), Pizey (G.), *9716*
- melting, stratification, Huppert (H.E.), Josberger (E.G.), *9926*
- climatology, clouds, heat transfer, ocean air interaction, Saltzman (B.), Moritz (R.E.), *9940*
- flow obstructions, freezing, pipe flow, Gilpin (R.R.), *10661*
- icebergs, oceanography, two phase flow, Pai (S.I.), Das (M.M.), (et al.), *10864*

ice mechanics, compressible flow, material testing, rate sensitivity, strength, Sinha (N.K.), *493*
- loads, offshore structures, probabilistic design, Wheeler (J.D.), *3524*
- beams (timoshenko), fracture mechanics, Huang (N.C.), *5142*
- beams (cantilever), experimental results, Svec (O.J.), Frederking (R.M.W.), *5145*
- dynamic stresses, experimental mechanics, Maattanen (M.), *6309*
- conduits, finite difference methods, lakes, unsteady flow, Spring (U.), Hutter (K.), *6608*
- crossflow, cylindrical bodies, melting, solidification, Cheng (K.C.), Inaba (H.), (et al.), *8739*
- stresses, Sackinger (W.M.), Nelson (R.D.), *10870*

icebergs, ice, ocean air interaction, oceanography, oscillations, surface flow, Mcphee (M.G.), *3017*
- ice, oceanography, surface flow, weather forecasting, Gebhart (B.), Audunson (T.), *5953*
- bottom irregularities, drag, erosion, ocean, Lopez (R.), Chari (T.R.), (et al.), *6611*
- boundary layer (atmospheric), currents, ice, oscillations, surface flow, Mcphee (M.G.), *7055*
- ice, oceanography, two phase flow, Pai (S.I.), Das (M.M.), (et al.), *10864*

icebreakers, floating structures, gravity waves, Bates (H.F.), Shapiro (L.H.), *8631*
- collapse, finite element techniques, nonlinear analysis, ship structures, Hakala (M.K.), *9005*

Ichida (M.), see Kubota (N.), *11787*
Ichikawa (H.), see Ueda (M.), *11967*
Ichikawa (K.), adaptive systems, model reference systems, synthesis, *2135*
Ichikawa (M.), crack initiation, crack propagation, decomposition, fracture, stochastics, Tanaka (S.), *7509*
Ichikawa (Y.H.), beams (elastic), dynamic response, vibration (nonlinear), Konno (K.), (et al.), *2328*
Ichiki (A.), radiation, radiometers, *991*
Ichimaru (K.), see Hirano (F.), *1016*
Ichimiya (K.), cooling, duct flow, heat transfer, plates (parallel), roughness, turbulent flow, Hasegawa (S.), (et al.), *3788*
Ichtiaroglou (S.), computing techniques, periodic orbits, three body problem, *2919*
Ida (T.), bubble dynamics, impulsive loading, pressure, Sugiya (T.), *6993*
Idczak (W.), impulsive loading, large displacement, plates (circular), viscoplasticity, Rymarz (C.), (et al.), *3314*
Idelsohn (S.), see Geradin (M.), *64*
- finite element techniques, shells (thin), thin walled structures, *6232*

identification, linearization, nonlinear systems, time varying systems, Haber (R.), Kmetty (P.), (et al.), *118*
- algorithms, estimation, Wang (B.-C.), Luus (R.), *132*
- algorithms, estimation, state space techniques, Ginsberg (K.S.), *140*
- algorithms, modeling, process control, Stone (R.), Ivakhnenko (A.G.), (et al.), *149*
- estimation, noise (random), sampling, Semesenko (M.P.), *163*
- algorithms, kaczmarz algorithm, linear systems, Avedyan (E.D.), Tsypkin (Ya.Z.), *190*
- adaptive systems, digital control, furnaces, glass furnace, process control, Kewiczky (L.), Haber (R.), (et al.), *206*
- order statistics, probability theory, statistical theory, Efimov (A.N.), Kuteev (V.M.), *1098*
- dynamic analysis, error, gyrocompasses, gyroscopes, mathematical models, Potemkin (A.E.), *1989*
- algorithms, lumped systems, time varying systems, Saha (D.C.), Rao (G.P.), *2068*
- observability, stochastic systems, Distefano (J.J.) III, Cobelli (C.), *2091*
- adaptive systems, synthesis, tracking, Baradello (C.S.), Neuman (C.P.), *2092*
- dynamic analysis, linear systems, Breslavskii (A.D.), Shubladze (A.M.), *2094*
- algorithms, estimation, Shubladze (A.M.), *2112*
- discrete systems, frequency domain techniques, information theory, Zarrop (M.B.), *2126*
- linear systems, observers, Iwai (Z.), Mano (K.), (et al.), *2133*
- filters, minimax techniques, Kats (I.Ya.), Kurzhanskii (A.B.), *2141*
- algorithms, mathematical models, Kharchev (V.N.), *2147*
- algorithms, estimation, model reduction, Semesenko (M.P.), Ramazanov (S.K.), *2148*
- algorithms, estimation, Kuzmin (N.N.), Korotnikh (Yu.Ya.), (et al.), *2149*
- algorithms, minimax techniques, optimization, process control, Bakan (G.M.), Strashko (V.T.), *2154*
- mathematical models, urban planning, Cirina (M.), *2197*
- estimation, simulation, Cheng (R.C.H.), *2202*
- adaptive systems, filters, stochastic systems, Kushner (H.J.), *3147*
- algorithms, discrete systems, nonlinear systems, realization, Tam (T.-J.), Nonoyama (S.), *3150*
- estimation, nonlinear systems, wiener-hammerstein model, Fakhouri (S.Y.), *3160*
- frequency domain techniques, frequency response, simulation, Frisch (H.P.), *3165*
- airplanes, guns, least squares, mathematical models, Kou (R.S.), Glass (B.C.), (et al.), *3176*
- least squares, linear systems, Zhdanov (A.I.), Katsyuba (O.A.), *3181*
- man machine systems, mathematical models, Krug (E.K.), Legovich (Yu.S.), (et al.), *3182*
- algorithms, decision theory, linear systems, Balk (P.I.), *3207*
- adaptive systems, algorithms, nonlinear systems, Kopysov (O.Yu.), Prokopov (B.I.), *3210*
- digital control, heat, heat storage, heat transfer, heating, Kulakowski (B.T.), Schmidt (F.W.), *3211*
- biocontrol, nervous system, Penev (G.D.), Tairov (O.P.), *3225*
- algorithms, iterative methods, Dudkin (L.M.), Kasparson (V.A.), *4214*
- estimation, filters, kalman filters, Leondes (C.T.), Siu (T.K.), *4218*
- algorithms, discrete systems, kalman filters, linear systems, stochastic systems, Konishi (K.), Inouchi (K.), (et al.), *4219*
- airplanes, algorithms, error, estimation, Ramamoorthy (R.P.), *4223*
- identifiability, linear systems, linear theory, Delforge (J.), *4230*
- algorithms, discrete systems, multivariable systems, stochastic approximation, stochastic processes, El-Sherief (H.), Sinha (N.K.), *4238*
- estimation, linear systems, matrix methods, Schwarz (R.G.), *4254*
- adaptive systems, algorithms, estimation, model reference systems, Van De Ven (H.H.), Groenendaal (A.W.M.), *4255*
- algorithms, linear systems, lumped systems, poisson moment functionals, Saha (D.C.), Rao (G.P.), *4256*
- discrete systems, feedback, linear systems, Sin (K.S.), Goodwin (G.C.), *4259*
- estimation, nonlinear systems, Varlaki (P.), Raibman (N.S.), *4265*
- estimation, stochastic processes, stochastic systems, Kazakov (I.E.), *4266*
- adaptive systems, algorithms, observers, Nuyan (S.), Carroll (R.L.), *4321*
- controllability, nonlinear systems, probability theory, subjective variance functions, Varlaky (P.), Raibman (N.S.), *6137*
- algorithms, linear systems, modeling, multivariable systems, pseudoinverse, static model, Mechetnyy (V.S.), *7235*
- algorithms, linear systems, lumped systems, time delay systems, Saha (D.C.), Rao (G.P.), *7246*
- analysis, deterministic systems, systems, Roth (R.), *8110*
- aquifers, computing techniques, perturbation theory, quasilinearization, Galligani (I.), *8127*
- continuous systems, discrete systems, iterative methods, least squares, stochastic systems, Vorobeychikov (S.E.), Konev (V.V.), *8163*

- controllability, dynamic properties, linear systems, observability, structural response, Udwadia (F.E.), *11048*
- distributed parameters, nonlinear systems, walsh functions, Sinha (M.S.P.), Rajamani (V.S.), (et al.), *11058*
- algorithms, estimation, time delay systems, Banks (H.T.), Burns (J.A.), (et al.), *11060*
- algorithms, estimation, modeling, nonlinear systems, nonlinear theory, stochastic systems, volterra series, Fakhouri (S.Y.), *11080*
- adaptive systems, discrete systems, linear systems, observers, Suzuki (T.), Nakamura (T.), (et al.), *11095*
- algorithms, convergence, iterative methods, linear systems, Tsypkin (Y.Z.), Avedyan (E.D.), (et al.), *11098*

Ideriah (F.J.K.), buoyancy, cavities, prediction, shear, turbulent flow, *7738*

Ido (M.), see Inoue (H.), *6449*
- see Tanaka (Y.), *8214*
- see Kita (Y.), *9377*

Ieremia (M.), see Mazilu (P.), *4201*

Iesan (D.), continuum mechanics, deformation (finite), thermoelasticity (nonlinear), *4816*
- anisotropic media, composite materials, cylindrical bodies, thermal stresses, thermoelasticity (steady), *6952*

Ievlev (V.M.), see Dzyubenko (B.V.), *11768*

Igaki (H.), fracture criteria, iron, triaxial loading, Ikeda (K.), *1370*
- inclusions, iron, stress strain relationships, triaxial loading, yield condition, Ikeda (K.), (et al.), *5325*

Igarashi (A.), see Tsurui (A.), *2415*
- see Ihara (C.), *9384*

Ignaczak (J.), boundary value problems, thermal waves, thermoelasticity (transient), *7949*

ignition, asymptotic methods, thermal excitation, Berman (V.S.), Riazantsev (Iu.S.), (et al.), *2858*
- solid fuels, thermal excitation, Babenko (Yu.I.), *3858*
- boundary layer, chemically reactive flow, plates, vaporization, Law (C.K.), Law (H.K.), *3865*
- boundary layer, chemically reactive flow, nonequilibrium flow, plates, vaporization, Ahluwalia (R.K.), Chung (P.M.), *3866*
- detonative ignition, explosions, thermal explosions, Andersen (W.H.), *3925*
- chemical reactions, combustion, explosions, kinetics, Bowen (J.R.), Manson (N.), (et al.), *4734, book*
- chemical kinetics, hydrogen, reaction rates, Rogers (R.C.), Schexnayder (C.J.) Jr., *4735*
- combustion, flammability, textiles, Miller (B.), Martin (J.R.), (et al.), *4739*
- aluminum, combustion, particles, Polishchuk (D.I.), Shevchuk (V.G.), (et al.), *5829*
- chemical reactions, explosions, ignition sensitivity, Burkina (R.S.), Vilyunov (V.H.), *6832*
- burning rate, combustion, flammability, textiles, Reeves (W.A.), Hammons (M.A.), (et al.), *6834*
- combustion, fire spread, flame propagation, solid propellants, Andoh (E.), Mizomoto (M.), (et al.), *6845*
- catalyzed ignition, combustion waves, convection (free), Pribytkova (K.V.), Khudyaev (S.I.), (et al.), *8705*
- combustion (turbulent), explosions, heat transfer, turbulence, Liu (V.C.), *8788*
- detonation (two phase), explosions, propagation, Smirnov (N.N.), *8853*
- detonative ignition, explosions, impact, Sorel (J.), Lucas (G.), (et al.), *8856*
- mathematical models, reactive systems, thermal ignition, Bazley (N.W.), Wake (G.C.), *9743*
- heat addition, limit analysis, thermal explosions, Dik (I.G.), *9746*
- films, kinetics, metals, particles, Arutyunyan (A.B.), Kharatyan (S.L.), (et al.), *9747*
- films, kinetics, metals, particles, Grigorev (Yu.M.), Safanesv (D.Z.), *9748*
- abrasion, explosives, friction (solid solid), Amosov (A.P.), *9772*
- detonative ignition, explosions, self ignition, thermal explosions, viscous effects, Aleksapolskii (N.B.), Naidenov (V.I.), *9836*
- rockets, solid propellants, space shuttle, thrust, transient effects, Caveny (L.H.), Kuo (K.K.), (et al.), *10723*
- flames (diffusion), kinetics, laminar mixing, Law (C.K.), Law (H.K.), *11780*

ignition sensitivity, combustion, diesel engines, hydrogen, Ikegami (M.), Miwa (K.), (et al.), *4742*
- chemical reactions, explosions, ignition, Burkina (R.S.), Vilyunov (V.H.), *6832*
- boron, particles, suspensions, Zolotko (A.N.), Polishchuk (D.I.), (et al.), *10698*

Igra (O.), axial turbines, geometrical properties, internal flow, wind turbines, *11754*

Iguchi (I.), see Tsuruno (S.), *9697*

Iguchi (M.), dynamic response, elastic foundations, soil structure interaction, vibration (forced), Luco (J.E.), *3375*

Igumentsev (E.A.), see Beskletnyi (M.E.), *11147*

Ihara (A.), see Murai (H.), *10397*
- see Murai (H.), *10532*

Ihara (C.), crack propagation, creep, dislocations, *8382*
- crack propagation, damage (cumulative), fatigue, stochastic processes, Igarashi (A.), *9384*

Ihnatowicz (E.), see Mikielewicz (J.), *11533*

Iida (Y.), liquid gas mixture, prediction, two phase flow, *1852*
- burners, drops, evaporation, heat transfer, liquid liquid interface, Takashima (T.), *8772*

Ikeda (K.), see Igaki (H.), *1370*
- see Igaki (H.), *5325*

Ikeda (M.), lyapunov's functions, matrix inversion, stability theory, systems, Siljak (D.D.), *8102*
- control, large scale systems, multivariable systems, optimal control, power generation, Siljak (D.D.), (et al.), *9175*

Ikeda (S.), bed load, channel flow, free boundary, secondary flow, *7647*

Ikeda (Y.), see Maki (H.), *5508*

Ikegami (M.), combustion, diesel engines, hydrogen, ignition sensitivity, Miwa (K.), (et al.), *4742*
- combustion (unsteady), diesel engines, flames (diffusion), stochastics, Shioji (M.), *10710*

Ikoku (C.U.), non newtonian flow, porous media, power law fluids, transient effects, Ramey (H.J.) Jr., *7977*
- non newtonian flow, porous media, power law fluids, transient effects, Ramey (H.J.) Jr., *8926*

Ikoma (K.), see Kojima (N.), *11948*

Ilahi (M.F.), plates (anisotropic), sheet metal, stress strain relationships, yield criteria, *2275*
- aluminum alloys, anisotropic media, diaphragms, plasticity, pressurized components, Parmar (A.), (et al.), *5112*

Ilcali (C.), see Guruz (K.), *2863*

Ilchenko (A.I.), see Pikashov (V.S.), *10613*

Iliff (K.W.), see Maine (R.E.), *6885*

Ilin (V.P.), see Barabanova (G.Ya.), *9853*

Ilioi (G.), algorithms, convex programming, gradient techniques, iterative methods, *1118*

Iliuc (I.), adhesives, friction (sliding), lubricants (dry film), lubrication (boundary), metals, thin films, *4889, book*

ill posed problems, convergence, least squares, mathematical models, minimization, Seidman (T.I.), *8133*
- approximation methods, error, estimation, Vainikko (G.M.), *10048*
- iterative methods, stability theory, Ramm (A.G.), *10936*

Ilosvai (L.), see El-Gindy (M.), *14*
- see El-Gindy (M.), *4148*
- see ElGindy (M.), *7616*
- see El-Gindy (M.), *8463*

Ilyasov (B.G.), see Babak (S.F.), *4244*

Ilyasov (E.P.), see Burde (G.I.), *9582*
- see Burde (G.I.), *11510*

Ilyukhin (A.A.), see Ivanov (B.P.), *2262*

Im (K.H.), combustors, heat transfer (combined modes), magneto fluid dynamics, mass transfer, three dimensional flow, Ahluwalia (R.K.), *8811*
- see Ahluwalia (R.K.), *10612*
- boilers, convection, experimental results, heat transfer, magneto fluid dynamics, radiation, Ahluwalia (R.K.), *11805*

Imafuku (I.), computing techniques, finite element methods, mesh generation, programming, Kodera (Y.), (et al.), *79*

Imai (K.), design (optimum), duality, framed structures, minimax techniques, Shoji (M.), *6510*

Imai (M.), algorithms, computing techniques, minimization, Fukumura (T.), (et al.), *2057*

Imai (Y.), see Matake (T.), *6418*

Imaichi (K.), bridges, infrasonics, oscillating bodies, sound generation, Tsujimoto (Y.), (et al.), *10790*

Imamura (A.), see Ozaki (T.), *3574*

Imber (M.), conduction (heat), mathematical models, solids, variable thermal properties, *9713*

Imberger (J.), diffusion, lakes, reservoirs, Patterson (J.), (et al.), *5912*
- lakes, mixing layers, reservoirs, wind-wave interaction, Hamblin (P.F.), *8519*

Immich (H.), impulsive propulsion, particles, suspensions, *2984*

immiscible fluids, drops, two phase flow, Molag (M.), Joosten (G.E.H.), (et al.), *944*
- adsorption, liquid vapor interface, surface tension, Haung (K.Z.), Chai (C.P.), (et al.), *1657*
- asymptotic methods, jets, Eliseev (V.I.), Sukhikh (L.I.), (et al.), *3687*
- acoustic waves, free boundary, liquid liquid interface, Bedeaux (D.), Oppenheim (I.), *3713*
- diffusion, interfaces, Hennenberg (M.), Bisch (P.M.), (et al.), *3955*
- porous media, two phase flow, Anderson (R.M.), Ford (W.T.), *4023*
- inhomogeneities, mass transfer, Pergushev (L.P.), Rozentsvaig (A.K.), *5816*
- plates (parallel), thermal effects, thermal instability, Gershuni (G.Z.), Zhukhovitskii (E.M.), *6783*
- plates (parallel), pulsatile flow, rarefied gases, Kant (R.), *7696*
- bubbly flow, buoyant flow, condensation, evaporation, two phase flow, Moalem-Maron (D.), Sokolov (M.), (et al.), *8696*
- combustion (submerged), jets, Sukhov (G.S.), Yarin (L.P.), *9776*
- bubble dynamics, nucleation, two phase flow, Han (J.C.), Yang (W.-J.), *9883*
- fluid injection, porous media, two phase flow, Mishra (S.K.), Verma (S.P.), *9894*

- convection, nonlinear theory, porous media, Gagneux (G.), *10835*
- darcy flow, filtration, porous media, Mircea (O.T.), *10837*

impact, composite materials, contact problems, Takeda (N.), Sierakowski (R.L.), *254*
- conical bodies, layered media, simulation, Rimskii (V.K.), Sabodash (P.F.), *405*
- dynamic behavior, stress intensity factor, Kishimoto (K.), Aoki (S.), (et al.), *471*
- missiles, punch problems, walls, Sliter (G.E.), *510*
- beams, dynamic response, nonlinear structures, transient loading, Meredith (D.), Morman (K.N.) Jr., (et al.), *514*
- boundary layer, diffusion, mass transfer, particle dynamics, Valentin (G.), Le Goff (P.), *803*
- half space, similarity methods, Burenin (A.A.), Lapygin (V.V.), *1310*
- crack arrest, dynamic fracture, shells (cylindrical), surface flaws, Popelar (C.H.), Gehlen (P.C.), (et al.), *1383*
- dynamic stresses, photoviscoelasticity, propagation, time dependence, Arenz (R.J.), Soltesz (U.), *1391*
- crack resistance, material testing, strain rate, Bondarovich (L.A.), Zlochevskii (A.B.), (et al.), *1409*
- biomaterials, bones, frequencies, material testing, Khalil (T.B.), Viano (D.C.), (et al.), *1961*
- networks, strings, Brody (H.), *2374*
- networks, strings, Brody (H.), *2375*
- composite materials, elastic waves, laminates, Takeda (N.), Sierakowski (R.L.), (et al.), *2376*
- forming, sheet metal, Grieve (R.J.), Wambugu (N.W.), *2398*
- crack growth, deformation (plastic), runge kutta method, stiffness, testing equipment, Zhitenev (V.V.), Markochev (V.M.), *2495*
- fluid-structure interaction, numerical methods, shells (cylindrical), Belytschko (T.), Mullen (R.), *2711*
- noise abatement, sound generation, Richards (E.J.), *2956*
- abrasion, cavitation, erosion, wear, Preece (C.M.) ed., *3038, book*
- ogives, plates, Skovoroda (A.R.), *3394*
- armor, rocks, strength, Lutton (R.J.), Houston (B.J.), (et al.), *3414*
- interface cracks, stress intensity factor, Abou-Sayed (I.S.), Burgers (P.), (et al.), *3470*
- deformation, error, strain gages, strain measurement, Malgun (M.M.), Loginov (P.M.), *3488*
- concrete, frequencies, nondestructive tests, tests, Alexander (A.M.), *3496*
- collision models, dynamic effects, Grigoryan (S.S.), *4458*
- experimental methods, testing equipment, Golderman (M.A.), Kochetov (D.A.), (et al.), *4459*
- experimental methods, force, plates (circular), Shibuya (T.), Koizumi (T.), (et al.), *4460*
- hopkinson bar, microprocessors, strain gages, strain measurement, testing equipment, Signoret (C.), Pouyet (J.M.), (et al.), *4507*
- heat transfer, thermal shock, Gaiduk (S.I.), Dobrushkin (V.A.), *4971*
- cylindrical bodies, plastic flow, Klee (K.-D.), Wriggers (P.), *5248*
- plates, shock waves, spherical waves, Yakupov (R.G.), *5249*
- drops, stress analysis, Perelman (R.G.), Freishist (N.A.), *5251*
- ditching, dynamic stability, helicopters, ocean, Daidola (J.C.), Graham (D.A.), (et al.), *5368*
- drops, pressure distribution, solid boundaries, Yakovlev (V.Ya.), *5484*
- particles, pneumatic transport, Ottjes (J.A.), *5810*
- ocean waves, pitching, ship slamming, vibration, Hansen (H.-J.), *5962*
- brain, cavitation, head, injuries, Lubock (P.), Goldsmith (W.), *6007*
- frequency response, head, injuries, Hu (A.S.), *6031*
- dynamic interaction, rigid bodies, Brach (R.M.), *6051*
- beams (intersecting), elastic waves, joints, Desmond (T.P.), *6325*
- cylindrical bodies, nuclear reactors, Bignon (P.G.), Riera (J.D.), *6363*
- plasticity, spherical bodies, Rickerby (D.G.), Macmillan (N.H.), *6365*
- brittle fracture, dimensional analysis, thermal effects, Solntsev (Yu.P.), Zamyatnin (M.M.), (et al.), *6368*
- fluid boundaries, shells (cylindrical), Dvorkin (Ya.P.), *6370*
- fluid boundaries, shells (spherical), Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6371*
- fluid boundaries, shells (cylindrical), Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6372*
- detonation (condensed phase), explosives, piercing, Lucas (G.), Sorel (J.), (et al.), *6893*
- aluminum alloys, erosion, Preece (C.M.), Brunton (J.H.), (et al.), *7091*
- biological joints, experimental methods, injuries, sports medicine, Mclaughlin (T.M.), Miller (N.R.), *7122*
- blades, finite element techniques, jet engines, solid solid interface, Brown (K.W.), Krahula (J.L.), *7211*
- materials properties, polymers, viscoelasticity (dynamic), Matsumoto (H.), Nakahara (I.), (et al.), *7279*
- bifurcation, flexural waves, plastic waves, rods, Lee (L.H.N.), *7419*
- elastic waves, half space, lamb problem, Koshman (V.P.), *7421*
- plates, rods, Johnson (W.), Sengupta (A.K.), (et al.), *7435*
- erosion, repeated loading, Polezhaev (Yu.V.), *7498*
- composite materials, erosion, Polezhaev (Yu.V.), Romanchenkov (V.P.), (et al.), *7499*
- moving loads, random loading, Wood (L.A.), Byrne (K.P.), *8341*
- conical bodies, deformation (plastic), finite element techniques, plasticity, time dependence, Chiesa (M.L.), Callabresi (M.L.), *8342*
- rods, viscoelastic waves, waves, Gaiduk (S.I.), *8343*
- elastic bodies, resistance, structural analysis, Tagliacozzo (C.), *8344*
- detonative ignition, explosions, ignition, Sorel (J.), Lucas (G.), (et al.), *8856*
- bones, fracture, injuries, knees, Viano (D.C.), Stalnaker (R.L.), *9050*
- dynamic properties, materials properties, strain rate, Zukas (J.A.), Nicholas (T.), (et al.), *9350*
- cratering, dimensional analysis, satellites, Holsapple (K.A.), Schmidt (R.M.), *9351*
- drilling, dynamic loads, experimental results, rocks, Goldsmith (W.), Wu (W.-Z.), *9370*
- concrete, experimental mechanics, Schrader (E.K.), *9449*
- bridges (railroad), bridges (truss), dynamic behavior, structural response, Wiriyachai (A.), Chu (K.-H.), (et al.), *9452*
- drag coefficient, spherical bodies, surfaces, water, Moghisi (M.), Squire (P.T.), *9629*
- barriers, magneto fluid dynamics, streams, waves, Berkovskii (B.M.), Bashtovoi (V.G.), (et al.), *9798*
- drops, surface tension, Bechtel (S.E.), Bogy (D.B.), (et al.), *9881*
- dynamic properties, experimental results, rods, strain rate, Sengupta (A.K.), Wigglesworth (C.J.), (et al.), *10241*
- experimental methods, nonlinear characteristics, plates (circular), Dmitrieva (Zh.N.), Efimova (T.A.), (et al.), *10243*
- blades, strain rate, turbines, Gordon (J.T.) Jr., Reaugh (J.E.), *10244*
- cyclic loading, soils, tools, Spektor (M.), *10248*
- lasers, photoelasticity (dynamic), stress analysis, Grellier (J.P.), Lagarde (A.), *10311*
- crack initiation, crack propagation, fatigue, polymers, Takemori (M.T.), *10331*
- net, networks, projectiles, ropes, submerged bodies, Wortman (A.), *10881*
- buckling, dynamic stability, plates (rectangular), Ari-Gur (J.), Singer (J.), (et al.), *11125*
- elastic waves, shells (conical), Barez (F.), Goldsmith (W.), *11157*
- layered media, punch problems, shear, viscoelasticity (dynamic), winkler foundation, Aleksandrov (V.M.), Zelentsov (V.B.), *11159*
- elastoplasticity, shear waves, supersonic flow, Freund (L.B.), Douglas (A.S.), *11161*
- elastoplasticity, numerical methods, viscoelasticity (dynamic), Mikkola (M.J.), Tuomala (M.), (et al.), *11175*
- plates (sandwich), wedges, Rimskii (V.K.), Sabodash (P.F.), *11176*
- filaments, fluid-structure interaction, submerged bodies, Belov (V.I.), Lenskii (E.V.), *11665*
- pressure distribution, ships, sloshing, tanks, Gran (S.), *11667*
- crushing, crystals, Kampfen (Y.), Tobler (W.), *12056*

impact jets, combustion (turbulent), convection (forced), impingement, isothermal processes, jets, thermal measurements, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*
- cooling, heat transfer, impingement cooling, jets, turbomachinery, Hrycak (P.), *729*
- bodies of revolution, green function, separated flow, Shimkovich (D.G.), *1518*
- boiling, critical heat flux, heat transfer, impingement cooling, jets, water, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- boiling, critical heat flux, dispersed flow, drops, impingement cooling, Monde (M.), *3793*
- axisymmetric flow, boundary layer, impingement, jets, plates, Pamadi (B.N.), Belov (I.A.), *8540*
- oscillations, plates, reynolds number (small), viscous buckling, Cruickshank (J.O.), Munson (B.R.), *9526*

Impagliazzo (M.), see Chenoweth (J.M.) eds., *8754*

impedance, ocean, ocean bed, refraction, sound propagation, underwater acoustics, Stickler (D.C.), Ahluwalia (D.S.), *893*
- acoustic measurements, acoustics, sound propagation, Panicker (V.B.), Munjal (M.L.), *902*
- acoustic measurements, layered media, Klein (C.), Cops (A.), *909*
- acoustic measurements, materials properties, Nicholls (B.H.), *3953*
- acoustic measurements, Keefe (D.H.), Benade (A.H.), *3972*
- ground effect, reflection, sound propagation, Dumin (J.), Bertoni (H.L.), *4794*
- transducers, underwater acoustics, Clark (J.A.), *5737*
- acoustic waves, interface phenomena, jets, sound propagation, turbulence (geophysical), Daigle (G.A.), *5784*
- balancing, flexibility, rotors, Shimada (K.), Miwa (S.), *6558*
- acoustics, cylindrical waves, Rdzanek (W.), *6896*
- acoustic waves, gases, nonlinear characteristics, thermal effects, Artamonov (K.I.), Vorobev (A.P.), *6921*
- sound propagation, Thomasson (S.-I.), *6938*
- acoustic waves, ground effect, reflection, sound propagation, surface waves, Habault (D.), Filippi (P.J.T.), *8865*

impedance methods, dynamic viscoelasticity, viscoelasticity (dynamic), Martincek (G.), *261*
- beams (timoshenko), shock, vibration (forced), Rangaiah (V.P.), Neubert (V.H.), *3360*
- bearings (journal), mobility, Moes (H.), Bosma (R.), *5994*
- dynamic analysis, finite element methods, vibration (forced), Nagamatsu (A.), Ookuma (M.), *6281*
- mechanical systems, vibration isolation, Granhall (A.), Kihlman (T.), *6282*

- helicopters, vibration (forced), Hohenemser (K.H.), Yin (S.-K.), *6299*
- helicopters, vibration (forced), vibration isolation, Viswanathan (S.P.), Myers (A.W.), *6300*
- experimental mechanics, vibration, Bessrour (J.), Senicourt (J.M.), (et al.), *8326*
- shells (cylindrical), vibration (free), Eichelberger (E.C.), *10211*
- dynamic analysis, plates (orthotropic), vibration (free), Busch-Vishniac (I.J.), *11127*

imperfection sensitivity, cooling towers, curvature, stress analysis, Ellinas (C.P.), Croll (J.G.A.), (et al.), *2540*
- gases, solidification, thermal properties, Manzhelii (V.G.), Freiman (Yu.A.), (et al.), *5528*
- postbuckling behavior, pressure, rings, Schmidt (R.), *9282*
- buckling, postbuckling behavior, shells (shallow), Srubshchik (L.S.), *9284*
- buckling (nonlinear), columns, elastoplasticity, trusses, Byskov (E.), *10167*

imperfections, finite strain, plane strain, shear bands, shear stress, Abeyaratne (R.), Triantafyllidis (N.), *231*
- elastoplasticity, plates, Rhodes (J.), *270*
- design (optimum), trusses, Rosen (A.), Schmit (L.A.) Jr., *507*
- bearing capacity, bridges (box girder), ultimate strength, Djubek (J.), Karnikova (I.), (et al.), *1446*
- experimental methods, shells (cylindrical), shells (stiffened), Yaffe (R.), Singer (J.), (et al.), *3313*
- collapse, elastoplasticity, shells (plastic), shells (spherical), Kao (R.), *3322*
- buckling, compression, mode interaction, postbuckling behavior, shells (cylindrical), shells (stiffened), Byskov (E.), Hansen (J.C.), *3323*
- beam columns, buckling, end effects, Chen (W.F.), *3324*
- beam columns, prestrained structures, structural stability, Pavlovic (M.N.), Stevens (L.K.), *3329*
- cooling towers, reinforced concrete, shells, stress analysis, Kato (S.), Yokoo (Y.), *3552*
- axial loading, damage, offshore structures, tubes, Taby (J.), Moan (T.), (et al.), *3557*
- arches, buckling, Oran (C.), *5178*
- collapse, framed structures, random media, La Tegola (A.), *6242*
- buckling (large amplitude), plastic behavior, shells (spherical), Kao (R.), *6260*
- buckling (nonlinear), dynamic behavior, shells (spherical), Kao (R.), *6266*
- dynamic behavior, plates (rectangular), vibration, Pasic (H.), Herrmann (G.), *6268*
- dynamic analysis, elastoplasticity, finite amplitude, shells, Ishizaki (T.), Bathe (K.-J.), *7216*
- columns, eccentric loading, Herman (H.), *7317*
- collapse, rods, trusses, Badala (A.), Marinetti (A.), (et al.), *7353*
- dynamic stability, impulsive loading, shells (cylindrical), transient loading, Zimcik (D.G.), Tennyson (R.C.), *7361*
- deformation (plastic), dislocations, hysteresis, Guelin (P.), *8092*
- buckling, shells (cylindrical), shells (stiffened), Hui (D.), Tennyson (R.C.), (et al.), *8271*
- buckling, critical load, shells (cylindrical), shells (stiffened), Ellinas (C.P.), Croll (J.G.A.), *8272*
- bars, notch tests, tension, ultimate strength, Miastkowski (J.), Skrocki (H.), *8437*
- arches, domes, nonlinear analysis, Wolde-Tinsae (A.M.), Huddleston (J.V.), *9267*
- numerical analysis, shells, Aronson (A.Ya.), Gaidaichuk (V.V.), (et al.), *9270*
- buckling (plastic), ductile fracture, dynamic effects, rings, Rajendran (A.M.), Fyfe (I.M.), *9286*
- bifurcation, boundary value problems, functional analyis, Hoffman (W.), Kupper (T.), *10169*
- axisymmetric loading, buckling, shells (cylindrical), Croll (J.G.A.), Batista (R.C.), *10177*

impingement, combustion (turbulent), convection (forced), impact jets, isothermal processes, jets, thermal measurements, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*
- expansion, jets, stability, Shahaf (M.), Goldman (Y.), (et al.), *842*
- feedback, jets, Ho (C.-M.), Nosseir (N.S.), *2677*
- finite difference methods, inviscid fluid, jets, plates, stagnation point, Rubel (A.), *5394*
- axisymmetric flow, boundary layer, impact jets, jets, plates, Pamadi (B.N.), Belov (I.A.), *8540*
- axisymmetric flow, compressible flow, flow obstructions, jets, shock waves, supersonic flow, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- jets, wall jets, Kotansky (D.R.), Glaze (L.W.), *8599*
- acoustics, edge effects, jets, Holger (D.K.), Wilson (T.A.), (et al.), *9848*
- developing flow, jets, Iwamoto (J.), Deckker (B.E.L.), *10462*
- evaporation, heat transfer, jets, mass transfer, navier stokes equation, Mujumdar (A.S.), Li (Y.-K.), (et al.), *10665*
- compressible flow, dimensional analysis, jets, plates, Gerasimov (Yu.I.), *11399*
- axisymmetric flow, jets, particle dynamics, turbulent flow, Korobko (V.I.), Malyi (I.N.), (et al.), *11512*

impingement cooling, cooling, heat transfer, impact jets, jets, turbomachinery, Hrycak (P.), *729*
- crossflow, heat transfer, jets, Florschuetz (L.W.), Truman (C.R.), (et al.), *762*
- cooling, heat transfer, high temperature, hydrodynamics, sprays, Urbanovich (L.I.), Goryainov (V.A.), (et al.), *1663*
- boiling, cooling, film cooling, sprays, Ishigai (S.), Nakanishi (S.), (et al.), *1664*
- leidenfrost phenomenon, liquids, sprays, Grissom (W.M.), Wierum (F.A.), *2839*
- boiling, critical heat flux, heat transfer, impact jets, jets, water, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- boiling, critical heat flux, dispersed flow, drops, impact jets, Monde (M.), *3793*

implosion, dynamic fracture, explosive loading, Didyk (R.P.), Semenyuk (E.A.), (et al.), *886*
- laser plasma interaction, nuclear fusion, shells (spherical), turbulence (transport), Lykov (V.A.), Murashkina (V.A.), (et al.), *1782*
- absorption, experimental results, laser plasma interaction, nuclear fusion, thermonuclear energy, Bekiarian (A.), Decroisette (M.), *5688*
- characteristic methods, explosions, shock waves, Yousaf (M.), *8637*

impulse, bubbly flow, steam, water hammer, Gruel (R.L.), Huber (P.W.), (et al.), *1596*
- bubble dynamics, cylindrical bodies, unsteady flow, velocity profiles, visualization, Nagata (H.), Matsui (T.), (et al.), *3633*
- differential equations (ordinary), nonlinear systems, time delay systems, Martynyuk (D.I.), Tsyganovskii (N.S.), *4154*
- sound fields, transducers, vibrators, Stephanishen (P.R.), *4762*
- elastic bodies, plates, sound generation, Mackertich (S.S.), Hayek (S.I.), *4766*
- differential equations (ordinary), periodic orbits, Perestyuk (N.A.), Shovkopiyas (V.N.), *4952*
- acoustic measurements, sound propagation, Gibbs (B.M.), Davies (J.C.), *5778*
- non newtonian flow, plates, rivlin erickson fluid, viscoelastic fluids, Teipel (I.), *6644*
- acoustic waves, half space, reflection, Chambers (L.G.), *6930*
- acoustic measurements, acoustic waves, scattering, spherical bodies, Deprez (G.), Hazebrouck (R.), *7941*
- calibration, sound fields, transducers (pressure), ultrasonics, Jones (S.M.), Carson (P.L.), (et al.), *7946*
- rods, time dependence, Gaiduk (S.I.), *10029*
- design, rockets, solid propellants, Landsbaum (E.M.), Salinas (M.P.), (et al.), *10726*
- explosions (underwater), transfer functions, underwater acoustics, Dicus (R.L.), *11906*
- experimental methods, plates, sound generation, Nakayama (I.), Nakamura (A.), *11953*
- piezoelectric devices, transducers, Hazony (D.), *12009*
- sound fields, transient, ultrasonics, Stepanishen (P.R.), Fisher (G.), *12010*

impulsive loading, nonlinear structures, vibration (nonlinear), Anderson (J.C.), Masri (S.F.), *1260*
- shells (cylindrical), transient effects, vibration (forced), Ujihashi (S.), Okazaki (T.), (et al.), *1279*
- beams (prestressed), concrete, fibers, reinforced concrete, Hughes (B.P.), *1438*
- plastic behavior, shells (cylindrical), Ramu (S.A.), Iyengar (K.J.), *2373*
- beams, deflections, deformation, Symonds (P.S.), *2525*
- large displacement, plates (circular), viscoplasticity, Idczak (W.), Rymarz (C.), (et al.), *3314*
- beams, dynamic analysis, vibration (forced), Levin (E.M.), Pankova (N.V.), *4417*
- buckling, frames, snap-through, Kounadis (A.N.), *5187*
- beams, design (optimum), distributed parameters, inelasticity, structural support, Lepik (U.), *6508*
- detonation (condensed phase), dynamic behavior, explosive solid interactions, Mardashev (A.M.), *6889*
- bubble dynamics, pressure, Ida (T.), Sugiya (T.), *6993*
- dynamic stability, imperfections, shells (cylindrical), transient loading, Zimcik (D.G.), Tennyson (R.C.), *7361*
- radial loading, shells (spherical), viscoelasticity (dynamic), Guelin (P.), Nowacki (W.K.), (et al.), *8345*
- blast effects, explosions, transient loading, underground, Egorov (V.A.), Kolobashkin (V.M.), (et al.), *9833*
- compaction, explosions, porous media, transient loading, underground, Bovt (A.N.), Kobets (V.I.), (et al.), *9838*
- explosions, explosive loading, explosive solid interactions, impulsive transfers, Lyakhov (G.M.), Kovalenko (V.A.), (et al.), *9840*
- explosions, explosive loading, explosive solid interactions, soil mechanics, Baranov (E.G.), Kovalenko (V.A.), (et al.), *9841*
- explosions, explosive loading, explosive solid interactions, soil mechanics, Artyshev (S.G.), Dunin (S.Z.), (et al.), *9842*
- blast waves, deformation (plastic), plastic flow, plates (circular), Yakupov (R.G.), *10245*
- fracture, spallation, Dremin (A.N.), Molodets (A.M.), *10246*
- dynamic response, nonlinear systems, Tumanov (Yu.A.), Lavrov (V.Yu.), (et al.), *11332*

impulsive propulsion, particles, suspensions, Immich (H.), *2984*
- boundary layer (three dimensional), elliptical bodies, separated flow, Wang (K.C.), Fan (Z.Q.), *8560*
- explosions, explosive loading, explosive solid interactions, Włodarczyk (E.), *9834*
- explosions, explosive loading, explosive solid interactions, transient loading, Ivanov (A.G.), Karpenko (G.Ya.), *9839*

impulsive transfers, computer programming, orbit correction, reduction, simplex method, trajectory optimization, Vladimirov (V.P.), Aleksandrov (E.V.), *3920*

- dynamic interaction, explosions, explosive loading, hydrodynamics, Shubin (G.R.), *7932*
- blast effects, explosions, rarefied gases, Aristov (V.V.), Shakhov (E.M.), *9835*
- explosions, explosive loading, explosive solid interactions, impulsive loading, Lyakhov (G.M.), Kovalenko (V.A.), (et al.), *9840*

Imshennik (V.S.), dissipation, shock waves, similarity methods, *8634*

Imura (H.), condensation, evaporation, heat transfer, thermosyphons, two phase flow, Kusuda (H.), (et al.), *1719*

Imyanitov (I.M.), cloud physics, clouds, precipitation, *12078*

in-plane displacement, measurements, moire methods, photoelasticity, propagation, waves, Basehore (M.L.), Post (D.), *2472*

Inaba (H.), see Cheng (K.C.), *8739*

inclusions, elasticity (nonhomogeneous), inhomogeneities, torsion, Datta (S.), Kanwal (R.P.), *246*

- pressurized components, shells (cylindrical), Bonde (D.H.), Rao (K.P.), *253*
- stress analysis, viscoelastic materials, viscoelasticity, Laws (N.), *260*
- elastic bodies, hybrid construction, infinite medium, inhomogeneities, Taya (M.), Chou (T.-W.), *279*
- composite materials, crack propagation, stress intensity factor, Averbukh (A.Z.), *476*
- boundary elements, composite materials, conduction (steady), Jaworski (A.R.), *932*
- cylindrical bodies, elasticity (nonhomogeneous), screw dislocations, Toya (M.), *1176*
- flexure, holes, plates (perforated), strips, Buryshkin (M.L.), *1182*
- biaxial loading, cracks, rigid bodies, Viola (E.), Piva (A.), *1366*
- elasticity (linear), half space, interference fits, Stagni (L.), *2211*
- contact problems, half space, Gladwell (G.M.L.), Hara (T.), *2222*
- composite materials, effective elastic moduli, micromechanics, nonhomogeneous media, Cleary (M.P.), Chen (I-W.), (et al.), *2224*
- elastic waves, scattering, Bostrom (A.), *2369*
- design (optimum), elasticity, harmonic analysis, Richards (R.) Jr., Bjorkman (G.S.) Jr., *2510*
- plates (nonhomogeneous), thermal stresses, thermoelasticity (steady), Shioya (S.), Matsuda (M.), *2965*
- plates (nonhomogeneous), thermal stresses, thermoelasticity (steady), Araki (H.), Shioya (S.), (et al.), *2966*
- cracks, elasticity (linear), Maiti (M.), Paramguru (R.), *3237*
- elastic foundations, large displacement, plates, Watanabe (K.), *3303*
- embankments, soils, Andrawes (K.Z.), Mcgown (A.), (et al.), *3397*
- analogies, bonded joints, Rose (L.R.F.), *3474*
- cracks, elastic bodies, stress concentration, thermal stresses, Rokne (J.), Dhaliwal (R.S.), (et al.), *3990*
- diffusion, metals, nonhomogeneous media, Trzesowski (A.), *4138*
- elasticity (linear), infinite medium, Selvadurai (A.P.S.), *5074*
- half space, spherical bodies, torsion, Dhaliwal (R.S.), Singh (B.M.), (et al.), *5090*
- iron, stress strain relationships, triaxial loading, yield condition, Igaki (H.), Ikeda (K.), (et al.), *5325*
- plates (nonhomogeneous), thermal stresses, Shioya (S.), Matsuda (M.), (et al.), *5794*
- beams (nonhomogeneous), fredholm equations, tension, Stadnik (M.M.), Silovanyuk (V.P.), *6163*
- elastic behavior, infinite medium, nonhomogeneous media, stress concentration, Andreikiv (A.E.), Stadnik (M.M.), (et al.), *6164*
- composite materials, elastic waves, scattering, sound propagation, spherical waves, Berryman (J.G.), *6898*
- plates (nonhomogeneous), plates (rectangular), thermal stresses, Sumi (N.), *6940*
- liquid gas mixture, measurements, two phase flow, void fraction, Shenderov (L.Z.), Kvashnin (A.G.), (et al.), *6977*
- bubble dynamics, concentration, oscillations, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *6988*
- boundary value problems, cavities, creep, half space, Anderson (C.A.), *7276*
- cavities, dynamic stresses, elastic foundations, punch problems, Kozhabekov (Zh.T.), *7409*
- delamination, flaw detection, nondestructive tests, thermography, Williams (J.H.) Jr., Mansouri (S.H.), (et al.), *7579*
- composite materials, nonhomogeneous media, thermal fatigue, Malygin (A.F.), Yankovskii (Yu.V.), *7954*
- half space, seismic waves, sh waves, stress analysis, Gamer (U.), *8004*
- anisotropic media, biological membranes, membranes (permeable), Pasechnik (V.I.), *8072*
- corners, elasticity (linear), stress concentration, Gomez (C.), Dundurs (J.), *8186*
- bending (elastic), plates (holed), plates (nonhomogeneous), plates (thick), Kosmodamianskii (A.S.), Shaldyrvan (V.A.), *8251, book*
- micromechanisms, phase changes, steel, thermoelasticity, Ling (H.C.), Owen (W.S.), *8884*
- composite materials, damping capacity, viscoelastic materials, Kligman (R.L.), Madigosky (W.M.), (et al.), *9341*
- acoustic emission, brittle fracture, brittle materials, cracks, surface waves, Rose (L.R.F.), *9436*
- crack closure, fatigue, Mayes (I.C.), Baker (T.J.), *10273*

incompressible flow, existence theorems, navier stokes equation, three dimensional flow, Saut (J.C.), Temam (R.), *41*

- finite element techniques, fluid mechanics, free boundary, surface tension, Ruschak (K.J.), *97*
- asymptotic behavior, boundary layer (turbulent), flow obstructions, reynolds number (high), Sykes (R.I.), *595*
- boundary layer, cylindrical bodies, non newtonian flow, separated flow, Shvets (Yu.I.), Vishnevskii (V.K.), *603*
- boundary layer, laminar flow, navier stokes equation, Krause (E.), Kordulla (W.), *608*
- cylindrical bodies, heat transfer, mass transfer, Raptis (A.A.), Tzivanidis (G.J.), *814*
- finite element techniques, fluid mechanics, newton method, viscous flow, Engelman (M.S.), Strang (G.), (et al.), *1128*
- internal flow, rotating cylinders, viscous flow, Bertela (M.), *1516*
- asymptotic methods, boundary layer, interaction, separation, singular perturbations, Veldman (A.E.P.), *1549*
- asymptotic methods, boundary layer, reynolds number (high), separation, surveys, Ruban (A.I.), Sychev (V.V.), *1550*
- airfoil characteristics, pressure distribution, stagnation point, trailing edge, Baskaran (V.), Holla (V.S.), *1616*
- convection, eckert number, grashof number, heat transfer, plane flow, Gupta (A.S.), Popp (I.), (et al.), *1667*
- inviscid fluid, jets, starting, unsteady flow, Kraemer (K.), *2583*
- laminar flow, noncircular pipes, tubes, Lal (K.), *2601*
- boundary layer (thermal), conical bodies, laminar flow, singular perturbations, Kortikov (N.N.), Novikova (I.B.), *2608*
- finite element methods, navier stokes equation, two dimensional flow, Piva (R.), Di Carlo (A.), (et al.), *2611*
- airfoils, flaps, potential flow, vortex sheets, Zaitsev (A.A.), Komarov (A.M.), *3728*
- compressible flow, design, turbomachinery, Balje (O.E.), *3739, book*
- aerodynamic loads, airfoils, harmonic waves, oscillating bodies, Filipkowski (S.), Nowak (M.), *3904*
- free boundary, jets, two dimensional flow, Alt (H.W.), Caffarelli (L.A.), (et al.), *4977*
- aerodynamic loads, slender bodies, yawing, Reding (J.P.), Ericsson (L.E.), *5495*
- anisotropic media, porous media, Kosterin (A.V.), *5828*
- fluid mechanics, fredholm equations, potential flow, Pelant (J.), *6076*
- aerodynamic performance, vortex sheets, wings, Algazin (V.A.), *7784*
- airfoil characteristics, complex variables, potential flow, two dimensional flow, White (J.W.), *7785*
- airfoils, stalling, turbulent flow, two dimensional flow, viscous flow, Hegna (H.A.), *7788*
- airfoils, control, flutter, trailing edge, Nissim (E.), Lottati (I.), *7906*
- channel flow, lubrication (hydrodynamic), navier stokes equation, plates (parallel), squeeze films, Verma (R.L.), *8057*
- boundary layer (turbulent), heat transfer, integral methods, Thomas (L.C.), Al-Sharif (M.M.), *8558*
- fourier transform, porous surfaces, suction, two dimensional flow, Nayfeh (A.H.), Reed (H.L.), (et al.), *8563*
- cascades, finite difference methods, separated flow, viscous flow, Luu (T.S.), Ta Phuoc Loc, *8593*
- fans, hot wire, rotors, turbomachinery, wakes, Lakshminarayana (B.), Govindan (T.R.), (et al.), *8653*
- blades, modeling, three dimensional flow, turbomachinery, Buisine (D.), *8659*
- boundary layer, flow reversal, heat tracer, shear stress, two dimensional flow, velocity measurement, Westphal (R.V.), Eaton (J.K.), (et al.), *8664*
- aerodynamic performance, airfoils, inviscid fluid, Ando (S.), Lee (D.-H.), *9646*
- aerodynamic loads, axial compressors, axial turbines, inviscid fluid, two dimensional flow, unsteady flow, Ispas (I.), Lucking (P.), *9671*
- aerothermoacoustics, sound generation, wave equations, Meecham (W.C.), *9844*
- computing techniques, finite element techniques, numerical analysis, Griffiths (D.F.), *10070*
- annuli, jet flaps, singular integral equations, vortices, wings, Belotserkovskii (S.M.), Lifanov (I.K.), *10496*
- aerodynamic loads, cylindrical bodies, inviscid fluid, lift, Yarmitskii (A.G.), *10500*
- airfoil theory, design, viscous flow, Berak (P.), *10504*
- axisymmetric flow, finite element techniques, hydraulic machinery, swirl flow, viscous flow, Bar-Yoseph (P.), Blech (J.J.), (et al.), *10533*
- dynamic stability, fluid-structure interaction, panels, Matsuzaki (Y.), *11651*
- compressible flow, diffusers, geometrical properties, mixing, pressure drop, Labendik (V.P.), Dantsyg (A.Ya.), (et al.), *11799*
- continuum mechanics, granular media, Nunziato (J.W.), Passman (S.L.), (et al.), *12063*

Incropera (F.P.), see Poplawsky (C.J.), *4723*

- see Bennon (W.D.), *8700*

indentation, axisymmetric loading, coatings, contact problems, Matthewson (M.J.), *248*

- contact problems, friction (solid solid), variational methods, Kravchuk (A.S.), *249*
- adhesion, anisotropic media, contact stresses, half space, Dhawan (G.K.), *250*
- nonhomogeneous media, slip line methods, work hardening, Bhasin (Y.P.), Oxley (P.L.B.), (et al.), *2234*

- abrasion, plastic flow, ploughing, wear, De Vathaire (M.), Delamare (F.), (et al.), *3035*
- elasticity (three dimensional), semi infinite media, stress concentration, Fujita (T.), Tsuchida (E.), (et al.), *3235*
- half space, punch problems, Shibuya (T.), *3244*
- anisotropic media, penetration, plasticity, Litewka (A.), Sawczuk (A.), *3257*
- elastoplasticity, half space, residual stresses, shakedown structures, Hills (D.A.), Ashelby (D.W.), *3263*
- beams (plastic), bearing capacity, large displacement, Low (H.Y.), *3286*
- charpy tests, crack opening displacement, crack resistance, notch tests, Belik (A.V.), Dolzhenkov (F.E.), (et al.), *3502*
- anisotropic media, contact problems, viscoelastic materials, Predeleanu (M.), Dahan (M.), *4348*
- elasticity (nonlinear), punch problems, Choi (I.), Shield (R.T.), *5081*
- hardness, plastic flow, residual stresses, Rubenstein (C.), *6480*
- blasting, rocks, Khalaf (F.), Abouzeid (A.-Z.M.), *7449*
- dislocations, metals, polycrystalline materials, Tanaka (Y.), Ido (M.), (et al.), *8214*
- composite materials, crystals, glass fibers, hardness, Miyata (N.), Jinno (H.), *8219*
- machinability, slip line methods, wedges, Petryk (H.), *8406*
- elastic constants, elastoplasticity, hardness, Lawn (B.R.), Howes (V.R.), *8433*

Indlin (Yu.A.), acoustic measurements, acoustics (psychological), hearing, noise, *2204*

Indrigo (C.), see Guernigou (J.), *6809*

induced drag, boundary layer, magneto fluid dynamics, perturbation methods, rotating fluids, Sneyd (A.D.), *860*
- free boundary, magneto fluid dynamics, propellers, theory, Yakovlev (V.I.), *6864*
- drag, optimization, subsonic flow, wakes, wings, Kuhlman (J.M.), *7786*
- lift, optimization, subsonic flow, swept wings, Lobert (G.), *10501*
- viscous flow, vortex sheets, wakes, wings, Ryzhov (O.S.), Terentev (E.D.), *11730*

inelasticity, buildings, nonlinear analysis, seismic loading, structural response, Cheng (F.Y.), *1449*
- cyclic testing, frames, offshore structures, seismic loading, Popov (E.P.), Mahin (S.A.), (et al.), *2535*
- constraints, finite element techniques, newton method, penalty function, Malkus (D.S.), *3134*
- dynamic loads, space frames, Uzgider (E.A.), *4540*
- beams, design (optimum), distributed parameters, impulsive loading, structural support, Lepik (U.), *6508*
- deformation, elastoplasticity, framed structures, variable loading, work hardening, Tin Loi (F.), *6528*
- earthquake resistant structures, spectra, Lai (S.-S.P.), Biggs (J.M.), *7047*
- crack growth, fracture criteria, thermodynamics, Nikolaevskii (V.N.), *7524*
- fracture mechanics, pipes, stress analysis, thermal stresses, Severud (L.K.), *7619*
- large displacement, plastic behavior, strain rate, structural analysis, Symonds (P.S.), *8347*
- framed structures, reinforced concrete, structural analysis, Krishnamoorthy (C.S.), Mosi (D.R.), *8451*

inequalities, elasticity, plastic flow, plasticity, variational methods, Necas (J.), *51*
- approximations, finite difference methods, Singare (S.M.), Pachpatte (B.G.), *1117*
- free boundary, invariant imbedding, variational methods, Donnelly (J.D.P.), *1119*
- control, optimal control, variational methods, Barbu (V.), *2029*
- algorithms, duality, variational methods, Bermudez (A.), Moreno (C.), *2030*
- fracture, microcracks, plastic behavior, Bazant (Z.P.), *2443*
- mathematical methods, oscillations, Grammatikopoulos (M.K.), *3101*
- diffusion, finite element techniques, Neta (B.), *3137*
- contact problems, contact stresses, elastic behavior, variational methods, Kravchuk (A.S.), Vasilev (V.A.), *3247*
- differential equations (ordinary), finite difference methods, integro differential equations, mathematical methods, Pachpatte (B.G.), *4170*
- algorithms, gauss method, least squares, numerical methods, optimization, penalty function, Bellagamba (L.), *4208*
- elastoplasticity, integral inequalities, plasticity, Berezhnoi (I.A.), Ivlev (D.D.), *4350*
- multivariable systems, robustness properties, sensitivity, Nuzman (D.W.), Sandell (N.R.) Jr., *6130*
- eigenvalues, helmholtz equation, isoperimetric inequalities, Kohler-Jobin (M.-T.), *7163*
- computing techniques, time dependence, variational methods, Glowinski (R.), Lions (J.-L.), (et al.), *7176, book*

inequality constraints, numerical analysis, optimization, penalty function, Davis (C.S.), *1106*

inert gases, binary flow, condensation, Krishna (R.), *811*
- fracture toughness, high temperature, tension, testing equipment, vacuum, Babak (A.V.), Uskov (E.I.), *6477*
- burning rate, flame propagation, oxidizers, porous media, Lebedev (A.D.), Sokolov (A.S.), *11791*

inertial guidance, discrete systems, filters, minimax techniques, Vathsal (S.), *200*
- alignment, gyroscopes, Bar-Itzhack (I.Y.), Porat (B.), *2165*
- navigation, Draper (C.S.), *5060*
- mission analysis, navigation, Harrison (J.V.), Adams (M.G.), (et al.), *5710*
- failure, isolation, statistical theory, Daly (K.C.), Gai (E.), (et al.), *7927*
- kalman filters, model reduction, navigation, Bar-Itzhack (I.Y.), *10083*

inertial waves, rotating cylinders, shells (fluid-filled), tanks, Wood (W.W.), *1587*
- ray method, rotating bodies, shells (fluid-filled), spherical bodies, London (S.), Shen (M.C.), *1599*
- tides, Pekeris (C.L.), *5936*
- numerical analysis, rotational flow, vortices, Thompson (R.O.R.Y.), *7766*
- currents, ocean air interaction, oceanography, oscillations, thermocline, Pollard (R.T.), *10867*
- rotating cylinders, shells (fluid-filled), spectra, Scott (W.E.), *11597*
- bodies (liquid filled), reynolds number, rotating cylinders, Whiting (R.D.), *11684*

infiltration, moving surfaces, numerical methods, Koussis (A.D.), Chow (S.-L.), *953*
- convection (free), porous media, saturation, Plumb (O.A.), Huenefeld (J.C.), *958*
- granular media, groundwater, porous media, river beds, Van'T Woudt (B.D.), Nicolle (K.), *976*
- rainfall, runoff, sediment transport, Smith (R.E.), *4573*
- holes, porous walls, unsteady flow, Raichenko (L.M.), *4839*
- drainage, groundwater, reservoirs, Guzova (A.M.), *4842*
- nonequilibrium flow, porous media, Kosterin (A.V.), *5831*
- free boundary, nonlinear mechanics, porous media, variational methods, Quarteroni (A.), Visintin (A.), *5835*
- fluid mechanics, porous media, Yamagami (K.), Kurashige (M.), *5838*
- porous media, soil mechanics, Reeder (J.W.), *5839*
- moisture, porous media, Dinulescu (H.A.), Eckert (E.R.G.), *5854*
- finite difference methods, porous media, Orasanu (M.), *5861*
- runoff, Sherman (B.), *5914*
- aquifers, diffusion, Dassonville (G.), Emsellem (Y.), *7050*
- collapse, granular media, packed beds, Buevich (Yu.A.), Ellengorn (S.M.), *8923*
- groundwater, porous media, Batu (V.), *8970*
- aquifers, coasts, finite element techniques, porous media, Das Gupta (A.), Arbhabhirama (A.), *8971*
- groundwater, leaks, tunnels, unsteady flow, Bouvard (M.), Niquet (J.-J.), *10838*
- layered media, soils, surface effect, Moore (I.D.), *12064*

infinite medium, finite element techniques, mesh generation, Bettess (P.), *77*
- elastic bodies, hybrid construction, inclusions, inhomogeneities, Taya (M.), Chou (T.-W.), *279*
- crack growth, griffith cracks, Yatomi (C.), *462*
- edge cracks, elasticity, elliptical cracks, Vijayakumar (K.), Atluri (S.N.), *1361*
- cavities, diffusion, mathematical methods, spherical bodies, Akkas (N.), Bauld (N.R.) Jr., *2010*
- approximation theory, boundary value problems, De Hoog (E.R.), Weiss (R.), *3099*
- fluid mechanics, interpolation, rock mechanics, soil mechanics, Lynn (P.P.), Hadid (H.A.), *3132*
- bending, boundary value problems, plates (nonhomogeneous), theory, Bogdan (K.), *3301*
- elasticity (linear), uniqueness, well-posedness, Gaidi (G.P.), Rionero (S.), *4124*
- boundary value problems, elasticity (linear), uniqueness, Howell (K.B.), *4125*
- axisymmetric loading, boussinesq equation, finite element techniques, Medina (F.), *4189*
- crack penetration, edge cracks, stress intensity factor, Maiti (M.), Paramguru (R.), *4492*
- elasticity (linear), inclusions, Selvadurai (A.P.S.), *5074*
- diffraction, elliptic equations, finite element techniques, hydrodynamics, Jami (A.), Polyzakis (M.), *6103*
- elastic behavior, inclusions, nonhomogeneous media, stress concentration, Andreikiv (A.E.), Stadnik (M.M.), (et al.), *6164*
- crack propagation, cracks, discontinuities, time dependence, Wesolowski (Z.), *6452*
- boundary value problems, existence theorems, navier stokes equation, Ladyzhenskaya (O.A.), Solonnikov (V.A.), *7169*
- boundary elements, finite element techniques, holes, mesh generation, mining, Beer (G.), Meek (J.L.), *7206*
- cavities, stress concentration, Wheeler (L.T.), Kunin (I.A.), *8188*
- green function, plates (holed), stress intensity factor, Shivakumar (V.), Forman (R.G.), *8397*
- acoustics, boundary elements, finite element techniques, Felippa (C.A.), *9130*
- elliptic equations, finite element methods, mesh generation, Goldstein (C.I.), *9134*
- edge cracks, shear loading, stress intensity factor, Hara (T.), *9404*
- computing techniques, crack opening displacement, penny shaped crack, stress intensity factor, Mohapatra (R.B.), Parhi (H.), *9415*
- integration, integro differential equations, Sloan (I.H.), *10046*
- elliptical cracks, stress intensity factor, Borodachev (A.N.), *10297*
- laplace transform, magneto plasma dynamics, panels (flat), unsteady flow, Shivamoggi (B.K.), *11814*

inflatable structures, inflation, membranes (inflatable), restraint systems, Cole (B.N.), *1242*
influence coefficients, aerodynamic interference, control, flexible walls, wind tunnels, Dowell (E.H.), *5514*
• elastic foundations, elasticity (linear), rings, Hegedus (I.), *8235*
information theory, discrete systems, frequency domain techniques, identification, Zarrop (M.B.), *2126*
infrasonics, bridges, oscillating bodies, sound generation, Imaichi (K.), Tsujimoto (Y.), (et al.), *10790*
Ingard (K.U.), acoustic properties, layered media, porous surfaces, *11992*
Ingebo (R.D.), acceleration waves, axial flow, capillary waves, jets, *3694*
Ingel (L.Kh.), see Ivanov (L.I.), *4061*
Ingham (D.B.), see Dennis (S.C.R.), *1507*
• see Heggs (P.J.), *7858*
• convection (free), cylindrical bodies, heat transfer, spherical bodies, viscous effects, *10589*
• aerosols, deposition, diffusion, fibers, filters, *12051*
Inglehart (L.J.), ceramics, cracks, flaw detection, gas turbines, photoacoustic microscopy, surface flaws, Thomas (R.L.), (et al.), *9435*
Inglis (R.B.), ellipsoids, free boundary, oscillating bodies, ship motion, singularities, source distribution, Price (W.G.), *8037*
Ingraffea (A.R.), see Blandford (G.E.), *1386*
• boundary elements, quarter-point elements, stress intensity factor, three dimensional formulation, Manu (C.), *6459*
• finite element methods, fracture mechanics, rocks, Heuze (F.E.), *8355*
• see Beech (J.F.), *10337*
Ingram (G.D.), see Hovem (J.M.), *5733*
inhibition, combustion, extinguishment, reaction rates, Nesterko (N.A.), Taran (E.N.), *5636*
inhomogeneities, elasticity (nonhomogeneous), inclusions, torsion, Datta (S.), Kanwal (R.P.), *246*
• elastic bodies, hybrid construction, inclusions, infinite medium, Taya (M.), Chou (T.-W.), *279*
• phase velocity, propagation, scattering, second order analysis, Gray (S.H.), *1085*
• cauchy problem, existence theorems, hyperbolic equations, uniqueness, Ying (L.-A.), Wang (C.-H.), *1089*
• elasticity (nonhomogeneous), half space, stress concentration, Fujita (T.), Tsuchida (E.), *1177*
• brittle fracture, crack initiation, energy methods, fracture toughness, Panckevicius (G.), *1369*
• equilibrium, hamilton principle, linear theory, plasma, Lewis (H.R.), Symon (K.R.), *1780*
• spectra, turbulence, turbulence (correlations), turbulence model, Gurvich (A.S.), *2689*
• finite element techniques, micromechanics, polycrystalline materials, Kuksa (L.V.), Elmanovich (V.I.), *3140*
• excitation, perturbations, plasma, waves, Chang (M.), *4751*
• deformation, finite element methods, flaw detection, holography, interferometry, nondestructive tests, Wachutka (H.), Kordisch (H.), (et al.), *5339*
• convection, electro fluid dynamics, nonlinear characteristics, stability theory, Zhakin (A.I.), *5674*
• capillary flow, magneto fluid dynamics, mass transfer, porous media, Panasyuk (A.L.), Panchenko (M.S.), (et al.), *5677*
• immiscible fluids, mass transfer, Pergushev (L.P.), Rozentsvaig (A.K.), *5816*
• cyclic loading, fatigue, fracture, microcracks, Getman (A.F.), *7487*
• energy conversion, filamentary structures, magneto plasma dynamics, nonequilibrium effects, Petit (J.-P.), Billiotte (M.), *7899*
• crack propagation, fracture criteria, Sih (G.C.), Chen (E.P.), *8414*
• boundary layer (turbulent), dispersion, wind, Durbin (P.A.), Hunt (J.C.R.), *11520*
initial value problems, linearization, plasma, theory, two phase flow, Forste (J.), *1778*
• boundary value problems, inviscid fluid, penetration, unsteady flow, Karzhikhov (A.V.), Ragulin (V.V.), *2598*
• convergence, stability theory, survey, Parter (S.V.), *3125*
• boundary value problems, green function, soil consolidation, Bowen (R.M.), *4160*
• asymptotic behavior, parabolic equations, singular perturbations, Alexiades (V.), *4175*
• algorithms, distributed parameters, numerical methods, optimal control, parabolic equations, Winther (R.), *4207*
• boltzmann equation, carleman equation, kinetic theory, nonlinear analysis, Kaper (H.G.), Leaf (G.K.), *4972*
• stability, turbulent flow, two dimensional flow, vortex shedding, vortex street, Aref (H.), Siggia (E.D.), *5399*
• internal flow, spherical bodies, stokes flow, Bykov (V.M.), *5403*
• boundary value problems, existence theorems, plates, uniqueness, vibration, Uroev (V.M.), *6073*
• conservation laws, hyperbolic equations, riemann problem, Roe (P.L.), *6082*
• burgers equation, diffusion, finite element techniques, Varoglu (E.), Finn (W.D.L.), *6119*
• hydrodynamic stability, interface waves, liquid liquid interface, viscous flow, Prosperetti (A.), *6701*
• differential equations (ordinary), laplace transform, nonlinear systems, Brenig (L.), Fairen (V.), *7159*
• differential equations (ordinary), mathematical methods, Verwer (J.G.), *7182*
• boltzmann equation, hydrodynamics, rarefied gases, Shapovalov (G.K.), *7694*
• boundary value problems, dust, stability, uniqueness, Jain (R.K.), Prabha (S.), *7961*
• computer programming, differential equations (ordinary), Gottwald (B.A.), Wanner (G.), *8141*
• combustion, mathematical models, Tam (K.K.), *8794*
• approximations (polynomial), computing techniques, differential equations (ordinary), splines, Multhei (H.N.), *10049*
• boundary value problems, finite element techniques, hyperbolic equations, stability (numerical), Winther (R.), *11694*
• bubble dynamics, drops, oscillations, Prosperetti (A.), *12046*
injection, mixing, turbulence, turbulent flow, Schetz (J.A.), *653, book*
• cooling, film cooling, transpiration cooling, Crawford (M.E.), Kays (W.M.), (et al.), *726*
• boundary layer (atmospheric), modeling, velocity measurement, wind tunnels, Sluman (T.J.), Van Maanen (H.R.E.), (et al.), *1648*
• eddy viscosity, film cooling, fluid injection, mixing length theory, Kikkawa (S.), Fujii (M.), *1666*
• combustion, hydrogen, porous media, Hubbartt (J.E.), Strahle (W.C.), (et al.), *1751*
• chemical reactions, equilibrium, ionization, plasma, Poissant (G.), Prudhomme (R.), *1779*
• crossflow, jets, Khan (Z.A.), Whitelaw (J.H.), *2665*
• gas turbines, power generation, steam, Brown (D.H.), Cohn (A.), *2749*
• boundary layer (turbulent), flow measurement, interaction, shock waves, Squire (L.C.), Smith (M.J.), *3649*
• fluid injection, supersonic flow, Baranovsky (S.I.), Schetz (J.A.), *4636*
• differential equations (ordinary), filtration, heat transfer, porous walls, Sergeev (G.T.), *4732*
• afterburners, oxygen, turbofan engines, Fishbein (B.D.), *5662*
• cylindrical bodies, heat addition, heat transfer, porous walls, suction, Patnaik (A.), *6760*
• carbon dioxide, heat transfer (combined modes), high temperature, regenerators, Asif (S.A.), Khandwawala (A.I.), *7868*
• buoyancy, convection, plane flow, Grishin (A.M.), Gruzin (A.D.), (et al.), *8685*
• channel flow, crossflow, film cooling, Alekseyev (N.M.), Zelengur (A.A.), *8689*
• film cooling, heat transfer, similarity methods, El-Hadik (A.A.B.), Barrow (H.), *9694*
• convection, fluid injection, heat transfer (combined modes), plates (vertical), Tsuruno (S.), Iguchi (I.), *9697*
• ablation, boundary layer, heat transfer, mass transfer, radiant interchange, radiating flow, stagnation point, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10608*
injection systems, diesel engines, fuel jets, thermodynamic processes, Watson (N.), Kamel (M.), *2869*
• data analysis, piston driven flow, pumps, Turcoiu (T.), Apostolescu (N.), *5503*
• cryogenics, ejectors, wind tunnels, Blanchard (A.), Dor (J.-B.), (et al.), *5515*
• combustion, diesel engines, evaporation, modeling, Baumer (K.), Hartje (J.), (et al.), *8804*
• aerodynamics, design, swirl flow, vortex flow, Volchkov (E.P.), Kislykh (V.I.), (et al.), *10542*
• combustion chambers, diesel engines, fuel economy, heat transfer, Kamel (M.), Watson (N.), *11797*
injectors, combustion, diesel engines, fuel jets, Greeves (G.), *1765*
• cryogenics, transonic flow, wind tunnels, Mignosi (A.), Faulmann (D.), (et al.), *3763*
• geometrical properties, pumps, Parker (G.J.), *4678*
• beam plasma interactions, design, helium, nuclear fusion, Blum (A.S.), Barr (W.L.), (et al.), *6868*
• cavitation, diesel engines, erosion, unsteady flow, visualization, Bastenhof (D.), *8661*
injuries, bones, braces, fracture, human body, Pratt (D.J.), Bowker (P.), (et al.), *3068*
• bones, fracture, prosthetic devices, Banks (A.J.), Dervin (E.), *4922*
• brain, cavitation, head, impact, Lubock (P.), Goldsmith (W.), *6007*
• frequency response, head, impact, Hu (A.S.), *6031*
• biological joints, experimental methods, impact, sports medicine, Mclaughlin (T.M.), Miller (N.R.), *7122*
• biological joints, prosthetic devices, spine, Ghista (D.N.) ed., *8069, book*
• bones, fracture, impact, knees, Viano (D.C.), Stalnaker (R.L.), *9050*
inlet flow, aerodynamics, compressible flow, numerical methods, supersonic flow, Knight (D.D.), *2623*
• aerodynamics, hypersonic flow, missiles, Dillon (J.L.), Marcum (D.C.) Jr., (et al.), *2742*
• conical flow, diffusers, inlet flow (sheared), shear flow, velocity profiles, Nakamura (I.), Ishikawa (K.), (et al.), *3679*
• developing flow, laminar flow, non newtonian flow, pipe flow, Al-Nassri (S.A.), Unny (T.), *4626*
• laminar flow, non newtonian flow, power law fluids, Gupta (R.C.), *5441*
• compressible flow, exhaust gases, internal combustion engines, two-stroke cycle, Sher (E.), *5647*

- circulation, hydrology, lakes, models, outflow, Gatto (M.), Rinaldi (S.), *7660*
- energy dissipation, hydraulic structures, models, vortex flow, Hecker (G.E.), *7664*
- boundary layer, compressible flow, hypersonic flow, Boshenyatov (B.V.), Gilyazemdinov (B.N.), (et al.), *7690*
- heat transfer, pipe flow, turbulent flow, Lau (S.C.), Sparrow (E.M.), (et al.), *7751*
- aerodynamic interference, design, models, wind, wind tunnels, Eckert (W.T.), Mort (K.W.), *8669*
- annular flow, diffusers, swirl flow, Elgammal (A.H.), Elkersh (A.M.), *9669*
- centrifugal compressors, diffusers, laser doppler velocimeters, velocity profiles, Flueckiger (G.), Melling (A.), *10528*
- axial compressors, rotating stall, velocity profiles, Grahl (K.), Neuhoff (H.G.), *10529*

inlets, cascades, contamination, deposition, gas turbines, nozzles, Nealy (D.A.), Timmerman (W.H.), (et al.), *4744*

- viscoelastic fluids, viscous flow, Kim (S.), *5102*
- aerodynamic interference, mathematical models, vortex sheets, wings, Shurygin (V.M.), *6723*
- chemically reactive flow, numerical analysis, scramjets, Kumar (A.), *7726*
- diffusers, simulation, supersonic flow, unsteady flow, Colbourne (D.E.), *9590*
- dilute solutions, laminar flow, pitot tube, polymers, Bistagnino (C.), Cancelli (C.), (et al.), *10444*

Inman (D.J.), damping, dynamic analysis, mathematical methods, vibration (free), *9301*

Inohara (S.), see Hasebe (N.), *7331*

Inonu (E.), boltzmann equation, neutrons, nuclear fusion, scattering, statistical mechanics, transport, Tezcan (C.), *2778*

Inosov (S.V.), damping, dynamic behavior, vibration, *1285*

Inouchi (K.), see Konishi (K.), *4219*

Inoue (A.), design, discrete systems, observers, realization, time optimal systems, Fisher (D.G.), (et al.), *4314*

- see Takahashi (M.), *6600*
- see Akai (M.), *6971*
- see Takahashi (M.), *9691*
- film boiling, melting, shock waves, thermal explosions, thermal shock, Bankoff (S.G.), *11760*
- film boiling, melting, shock waves, thermal explosions, thermal shock, Ganguli (A.), (et al.), *11761*

Inoue (H.), see Jimma (T.), *4445*

- cutting, deformation, dynamic analysis, fracture mechanics, glass fibers, reinforced plastics, Ido (M.), *6449*

Inoue (M.), see Ueda (T.), *4702*

- calibration, design, discharges, flow measurement, meters, venturi tubes, Yano (H.), (et al.), *8665*
- see Fisher (E.H.), *9670*

Inoue (O.), laminar flow, moving surfaces, separated flow, *7708*

Inoue (S.), see Suematsu (H.), *1716*

Inoue (T.), constitutive equations, elastoviscoplasticity, pressurized pipes, thermal stresses, Nagaki (S.), (et al.), *7951*

Inoue (Y.), rotating cylinders, vibration (nonlinear), vibration (torsional), Shibata (T.), (et al.), *11142*

insulating materials (acoustical), elastic constants, materials properties, transfer functions, Pritz (T.), *9676*

insulating materials (thermal), annular flow, conductivity, heat transfer, isothermal processes, Shimomura (H.), Okamoto (Y.), (et al.), *765*

- layered media, optimization, Mikhailov (V.V.), *793*
- ablators, arcjets, joints, reentry, space shuttle, Brewer (W.D.), Pittman (C.M.), (et al.), *1723*
- convection (benard), nonlinear theory, rayleigh benard instability, Chapman (C.J.), Proctor (M.R.E.), *2607*
- heat transfer, solidification, Zhuk (V.I.), Zavgorodnii (P.F.), (et al.), *4705*
- energy conservation, heat transfer, thermal properties, Turner (W.C.), Malloy (J.F.), *6823*
- layered media, partition walls, thermal loading, transient effects, Devisme (J.-M.), *9740*

insulation, sensitivity, structural analysis, thermal effects, Haftka (R.T.), *7606*

- boussinesq equation, convection (free), heat transfer, porous media, Brailovskaya (V.A.), Kogan (V.R.), (et al.), *8784*
- boundary layer, generators, magneto fluid dynamics, walls, Rankin (R.R.), Self (S.A.), (et al.), *8815*
- magneto fluid dynamics, numerical methods, panels (flat), shear flow, Sastry (S.R.N.), *9789*

integral methods, drag reduction, entrance region, pipe flow, turbulent flow, Embaby (M.H.), Verba (A.), *615*

- gravity waves (finite depth), transformation, two dimensional waves, Nakamura (A.), Matsuno (Y.), *668*
- entrance region, heat transfer, pipe flow, transforms, Vick (B.), Ozisik (M.N.), (et al.), *734*
- boundary layer, interaction, suction, Gray (J.D.), Maus (J.R.), *1551*
- breakwater, coasts, diffraction, Mattioli (F.), *1591*
- convection, heat transfer, laminar flow, nusselt number, Hwang (U.P.), *1677*
- boundary integral method, conduction (heat), transient loading, Wrobel (L.C.), Brebbia (C.A.), *2817*
- boundary integral method, conduction (heat), conduction (steady), green function, variable thermal properties, Khader (M.S.), Hanna (M.C.), *2818*
- porous media, soil consolidation, Sukharev (B.V.), *3401*
- freezing, liquid solid interface, solidification, solutions (material), O'Callaghan (M.G.), Cravalho (E.G.), (et al.), *3821*
- conservation laws, continuum mechanics, fracture, mathematical methods, similarity methods, Cherepanov (G.P.), *4489*
- duct flow, laminar flow, Khader (M.S.), *5442*
- boundary layer (thermal), convection (free), heat transfer, variational methods, Singh (P.), Bhattacharya (D.K.), *5567*
- magneto plasma dynamics, transforms, two dimensional flow, viscid inviscid flow, Gorskii (V.B.), *5676*
- displacement, numerical analysis, stress analysis, Bailangadi (M.), Chiang (F.P.), *7548*
- navier stokes equation, plates, rotating disks, viscous flow, Datta (S.), *7670*
- boundary layer (turbulent), pressure gradient, two dimensional flow, Yeung (W.-S.), Yang (R.-J.), *7697*
- conduction (heat), two component flow, Kalinovskii (Yu.V.), *7856*
- extended surfaces, fins, heat transfer (combined modes), Heggs (P.J.), Ingham (D.B.), (et al.), *7858*
- plane flow, radiant interchange, radiation properties, Borishanskii (V.M.), Gotovskii (M.A.), (et al.), *7866*
- bodies of revolution, deformation, ellipsoids, virtual mass, Apshtein (E.Z.), Kolotilova (N.G.), *8534*
- boundary layer (turbulent), heat transfer, incompressible flow, Thomas (L.C.), Al-Sharif (M.M.), *8558*
- submerged bodies, vorticity, wave loads, Horton (T.E.), Feifarek (M.J.), *8629*
- airfoil theory, numerical methods, transonic flow, Sachdev (P.L.), *8652*
- convection (forced), cylindrical bodies, navier stokes equation, transient loading, Lin (S.P.), *8683*
- boundary value problems, green function, ship resistance, wavemaking resistance, Noblesse (F.), *9008*
- boundary layer (turbulent), oscillatory flow, perturbation methods, turbulence (structure), Patel (M.H.), *9562*
- boundary layer (turbulent), cascades, rotors, turbomachinery, Lakshminarayana (B.), Govindan (T.R.), *10449*
- film flow, heat transfer, laminar flow, nuclear reactors, tubes, Rogers (J.T.), *10565*
- heat transfer, laminar flow, mass transfer, rotating disks, rotating fluids, Felsch (K.-O.), Piesche (M.), *10580*
- boundary value problems, green function, magneto fluid dynamics, waves, Aleksandrova (A.A.), Khiznyak (N.A.), *10749*
- floating bodies, gravity waves (finite depth), heaving, oscillating bodies, Sayer (P.), *11682*
- finite element techniques, gravity waves (surface), Mattioli (F.), *11692*
- gravity waves (surface), numerical methods, Salmon (J.R.), Liu (P.L.-F.), (et al.), *11698*
- absorption, radiant interchange, reflection, scattering, slabs, Stramigioli (C.), Santarelli (F.), (et al.), *11766*

integration, hamiltonian equations, mathematical methods, Kozlov (V.V.), Kolesnikov (N.N.), *29*

- continuum mechanics, differential equations (partial), micropolar media, potential theory, Constanda (C.), *43*
- differential equations (partial), rotating shafts, transient effects, Chu (F.H.), Pilkey (W.D.), *1114*
- differential equations (ordinary), energy methods, nonlinear structures, structural analysis, Kamat (M.P.), Hayduk (R.J.), *1181*
- computing techniques, numerical analysis, Thatcher (R.W.), *2048*
- nonlinear methods, numerical analysis, parabolic equations, Adam (Y.), *2049*
- convergence, singular integral equations, Tsamasphyros (G.), Theocaris (P.S.), *2052*
- computing techniques, finite element techniques, modes, Flanagan (D.P.), Belytschko (T.), *2059*
- approximations, differential equations (ordinary), numerical analysis, Mikeladze (Sh.E.), *3116, book*
- boundary elements, computing techniques, singularities, Pina (H.L.G.), Fernandes (J.L.M.), Brebbia (C.A.), *4179*
- computing techniques, differential equations (ordinary), evolution equations, Sepehrnoori (K.), Carey (G.F.), *5000*
- computing techniques, finite element techniques, nonlinear systems, optimization, Schmid (H.J.), *5008*
- games, monte carlo analysis, random search, Goldfain (I.I.), *5011*
- algorithms, computer programming, singularities, Roose (D.), De Doncker (E.), *6094*
- computing techniques, finite element techniques, triangular elements, Reddy (C.T.), Shippy (D.J.), *6113*
- beams, mathematical methods, Becker (O.), *6214*
- finite element methods, finite element techniques, mathematical methods, Okabe (M.), *7203*
- cauchy integrals, computing techniques, singularities, Ioakimidis (N.I.), *8128*
- approximations, error, linearization, particle dynamics, Laitone (J.A.), Laitone (E.V.), *8913*
- transforms, Apelblat (A.), *9107*

- computing techniques, finite element techniques, optimization, Peano (A.), *9129*
- infinite medium, integro differential equations, Sloan (I.H.), *10046*
- differential equations (ordinary), differential equations (stiff), stability theory, Mihelcic (M.), Wingerath (K.), *10052*
- approximations (polynomial), computing techniques, finite element methods (hybrid), isoparametric elements, Spilker (R.L.), Singh (S.P.), *10062*

integro differential equations, discontinuities, mathematical methods, nonlinear characteristics, volterra equations, Aizicovici (S.), *1096*
- cracks, mathematical methods, orthotropic materials, stefan problem, survey, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *1362*
- cavities, oblateness, penny shaped crack, stress analysis, stress intensity factor, Hirai (H.), Satake (M.), *1365*
- averaging, nonlinear theory, viscoelasticity, Turbe (N.), *2015*
- bifurcation, periodic orbits, stability theory, Landman (K.A.), *2016*
- approximations, convergence, iterative methods, volterra equations, Vata (P.), *2051*
- perturbation methods, plasma, propagation, variational methods, wkb method, Berk (H.L.), Pfirsch (D.), *3105*
- differential equations (ordinary), finite difference methods, inequalities, mathematical methods, Pachpatte (B.G.), *4170*
- almost periodic solutions, mathematical models, time delay systems, volterra equations, Alexiades (V.), *4980*
- existence theorems, functional analyis, nonlinear analysis, D'Ambrosio (U.), Krivocheine (L.E.), (et al.), *4981*
- boundary value problems, elasticity (linear), elastostatics, Heise (U.), *7186*
- group theory, hilbert space, mathematical methods, transport phenomena, wiener-hopf technique, Van Der Mee (C.V.M.), *8118*
- fredholm equations, nonlinear analysis, radiation, Ueno (S.), *8120*
- boundary value problems, existence theorems, hyperbolic equations, uniqueness, Krivoshein (L.E.), Leung (K.V.), (et al.), *8121*
- computing techniques, wave equations, Gladkov (A.A.), *9115*
- infinite medium, integration, Sloan (I.H.), *10046*

interception, differential games, guidance, Lutmanov (S.V.), *3201*
- airplanes, design, feedback, feedforward control, optimal control, pursuit, Lunderstadt (R.), *8169*

interface cracks, bimodulus materials, caustics, composite materials, crack opening displacement, stress intensity factor, Theocaris (P.S.), Stassinakis (C.A.), *474*
- composite materials, crack arrest, dynamic loads, stress intensity factor, Theocaris (P.S.), Milios (J.), *475*
- propagation, semi infinite media, viscoelasticity, wiener-hopf technique, Sills (L.B.), Benveniste (Y.), *1376*
- refraction, shear cracks, wiener-hopf technique, Kuliev (V.D.), *2452*
- impact, stress intensity factor, Abou-Sayed (I.S.), Burgers (P.), (et al.), *3470*
- bimodulus materials, wedges, Vainshelbaum (V.M.), Goldshtein (R.V.), (et al.), *3475*
- crack propagation, fracture mechanics, gas wells, hydraulics, reservoir engineering, Hanson (M.E.), Shaffer (R.J.), (et al.), *5311*
- bonding, half space, sh waves, Srivastava (K.N.), Palaiya (R.M.), (et al.), *6343*
- bimodulus materials, elastodynamics, stress intensity factor, waves, Hanzawa (H.), Kishida (M.), (et al.), *6451*
- computing techniques, crack branching, penny shaped crack, singular integral equations, Theocaris (P.S.), *7516*
- bonded joints, composite materials, fracture criteria, singularities, Viola (E.), Piva (A.), *7535*
- cements, copper, stochastics, weibull statistics, Kittl (P.), Galleguillos (E.), *8225*
- cylindrical bodies, edge cracks, penny shaped crack, stress intensity factor, Fan (Y.-X.), Fan (T.-Y.), (et al.), *8386*
- crack branching, stress intensity factor, transforms, wiener-hopf technique, Kuliev (V.D.), *8417*
- cylindrical bodies, multiple cracks, stress intensity factor, torsion, Shibuya (T.), Koizumi (T.), (et al.), *10293*

interface phenomena, absorption, chemical reactions, models, packed beds, Patwardhan (V.S.), *832*
- hydrodynamic stability, magnetic stabilization, mathematical models, Egorushkin (S.A.), Tsypkin (A.G.), *1578*
- boundary conditions, drops, stokes flow, Haber (S.), Hetsroni (G.), *1860*
- convection (forced), mass transfer, two phase flow, Schwarz (E.), Waldheim (W.), (et al.), *2993*
- liquid liquid interface, measurements (dynamic), optical instruments, Piquemal (J.), Barrau (J.J.), *3759*
- convection, evaporation, heat transfer, Palmer (H.J.), Makeshri (J.C.), *3849*
- ocean bed, reflection, refraction, sound propagation, underwater acoustics, Frisk (G.V.), Doutt (J.A.), (et al.), *5725*
- nonlinear waves, plates, sound fields, vibration, Ginsberg (J.H.), *5781*
- acoustic waves, impedance, jets, sound propagation, turbulence (geophysical), Daigle (G.A.), *5784*
- cylindrical bodies, half space, sh waves, Gamer (U.), *6331*
- heat transfer, stratified flow, two component flow, velocity profiles, Takahashi (M.), Inoue (A.), (et al.), *6600*
- half space, layered media, liquids, sound propagation, Bucker (H.P.), *6918*
- deformation, drops, shear flow, Flumerfelt (R.W.), *6990*
- bifurcation, condensation, liquid vapor interface, Bychkov (Yu.A.), Iordanskii (S.V.), *7871*
- mass transfer, multicomponent flow, two phase flow, Rohm (H.-J.), Vogelpohl (A.), *7876*
- creep, deep drawing, drawing, forming, plastics, Ohsawa (H.), Nishimura (H.), *8358*
- cold working, pressure peaks, rolling, strips, Lenard (J.G.), *8361*
- boundary layer (turbulent), flow measurement, richardson number, Piat (J.-F.), Hopfinger (E.J.), *8557*
- buoyancy, density, diffusion, mass transfer, Griffiths (R.W.), Ruddick (B.R.), *8781*
- boundary layer, entrainment, sprays, Macha (J.M.), Norton (D.J.), *8910*
- heat transfer, interaction, sprays, three dimensional flow, Palaszewski (S.J.), Jiji (L.M.), (et al.), *8911*
- porous media, rotational flow, Verruijt (A.), *8928*
- permeability, porous media, Bardon (C.), Longeron (D.G), *8929*
- half space, love waves, prestressed structures, viscoelastic materials, Chattopadhyay (A.), De (R.K.), *9342*
- adhesives, composite materials, concrete, dislocations, Kendall (K.), *9487*
- bonded joints, finite element methods, lap joints, stress analysis, Carpenter (W.C.), *9489*
- films, liquid vapor interface, rotating fluids, two phase flow, Siekmann (J.), Johann (W.), *9877*
- deformation, drops, shear flow, Rallison (J.M.), *9882*
- hydrodynamic stability, perturbations, vortex sheets, Shankar (P.N.), *10466*
- end effects, magneto fluid dynamics, pipe flow, thermoelectric phenomena, Shercliff (J.A.), *10735*
- equilibrium, free boundary, layered media, magneto fluid dynamics, Kiryushin (V.V.), Chung Za Bin, *10744*

interface waves, discontinuities, elastic waves, Schoenberg (M.), *2365*
- attenuation, reflection, solid-fluid interaction, stonely waves, Hawker (K.E.), *4788*
- materials possessing memory, scattering, viscoelastic waves, Lokshin (A.A.), *6341*
- hydrodynamic stability, initial value problems, liquid liquid interface, viscous flow, Prosperetti (A.), *6701*
- two dimensional flow, two phase flow, Akai (M.), Inoue (A.), (et al.), *6971*
- capillary waves, gravity waves, liquid gas mixture, Pramanik (A.K.), *7763*

interfaces, drops, surface tension, Levan (M.D.), *1861*
- diffusion, immiscible fluids, Hennenberg (M.), Bisch (P.M.), (et al.), *3855*
- jets, turbulent flow, Oler (J.W.), Jenkins (P.E.), (et al.), *5452*
- rayleigh waves, reflection, refraction, seismic waves, Lutikov (A.I.), *5866*
- inverse problems, seismic waves, Fedorova (N.V.), Tsirulskiy (A.V.), *5876*
- finite element techniques, rocks, Pande (G.N.), Sharma (K.G.), *6404*
- hydrodynamic stability, surface tension, Wilke (H.), *7747*
- cutting, temperature, thermocouples, tools, Bhatia (S.M.), Pandey (P.C.), (et al.), *8065*
- jet boundaries, layered media, magneto fluid dynamics, transport phenomena, Bashtovoi (V.G.), Krakov (M.S.), *9794*
- drops, two phase flow, Shankar (N.), Cole (R.), (et al.), *9880*
- decomposition, experimental methods, jets, magneto fluid dynamics, Arkhipenko (V.I.), Barkov (Yu.D.), *10745*
- chemical kinetics, convection, liquid liquid interface, surface tension, Dalle Vedove (W.), Sanfeld (A.), *11379*
- bubble dynamics, experimental results, magneto fluid dynamics, stability theory, Tsebers (A.O.), Maiorov (M.M.), *11823*
- numerical methods, porous media, two phase flow, Glimm (J.), Marchesin (D.), (et al.), *12026*

interference, corners, cracks, diffraction, elastic waves, Achenback (J.D.), Norris (A.N.), *1305*
- porous walls, three dimensional flow, transonic flow, wall effects, wind tunnels, Parker (R.L.) Jr., Sickles (W.L.), *1647*
- boundary layer, wakes, Kanemoto (T.), Toyokura (T.), (et al.), *3683*
- sloping bottom, sound propagation, underwater acoustics, Bannister (R.W.), Pedersen (M.A.), *5724*
- acoustic waves, gaussian beams, nonlinear waves, radiation, Fenlon (F.H.), *5736*
- bonded joints, dispersion, flaw detection, layered media, Budenkov (G.A.), (et al.), *6497*
- convection (free), cylindrical bodies, interaction, Sparrow (E.M.), Niethammer (J.E.), *7836*
- acoustic waves, arrays, microphones, transducers, Carnes (T.N.), Reynolds (D.D.), (et al.), *11927*

interference fits, elasticity (linear), half space, inclusions, Stagni (L.), *2211*
- experimental methods, friction (solid solid), photoelasticity, stress analysis, Ghosh (S.P.), Dattaguru (B.), (et al.), *5316*
- contact problems, shells (cylindrical), Murakami (T.), Yanuki (T.), (et al.), *6169*
- friction (sliding), sliding, temperature, thermocouples, Spurr (R.T.), *7085*
- elastoplasticity, machine design, rotating bodies, Kollmann (F.G.), *9467*

interferometry, closed conduit flow, convection (free), heat transfer, Flack (R.D.), Konopnicki (T.T.), (et al.), *756*
- film thickness, optical instruments, Smolinska (B.), Wasowski (J.J.), *1396*
- friction (skin), lasers, Monson (D.J.), *1644*

- convection, entrance region, nusselt number, secondary flow, Yousef (W.W.), Tarasuk (J.D.), *1668*
- displacement, holography, real time solution, receptance measurement, Chalko (T.), *2477*
- airfoils, computing techniques, holography, shock waves, supercritical flow, Spaid (F.W.), Bachalo (W.D.), *2726*
- holography, strain measurement, Zhilkin (V.A.), *3485*
- curvature, grids, twisting, Subramanian (G.), Arunagiri (R.), *3486*
- computing techniques, data analysis, two dimensional flow, Ben-Dor (G.), Whitten (B.T.), (et al.), *3760*
- convection, heat transfer, holography, visualization, Faw (R.E.), Dullforce (T.A.), *3807*
- acoustic measurements, optical techniques, solids, sound speed, Thanh (V.), Burov (J.), (et al.), *3970*
- sound fields, ultrasonics, Higgins (F.P.), Norton (S.J.), (et al.), *3977*
- dynamic testing, experimental mechanics, holography, vibration, Hazell (C.R.), *4437*
- deformation, finite element methods, flaw detection, holography, inhomogeneities, nondestructive tests, Wachutka (H.), Kordisch (H.), (et al.), *5339*
- axial turbines, cascades, holography, nozzles, Bryanston-Cross (P.J.), Lang (T.), (et al.), *5505*
- density, laser plasma interaction, measurements (dynamic), transport phenomena, Benattar (R.), Popovics (C.), *5683*
- density, measurements (dynamic), plasma (toroidal), tokamak, Mitarai (O.), Nakashima (H.), (et al.), *5693*
- laser plasma interaction, measurements (dynamic), schlieren methods, unsteady flow, Klimkin (V.F.), Pikalov (V.V.), *5694*
- attitude control, gyrodynamics, Ellis (J.F.), Creswell (G.A.), *5704*
- combustion products, contamination, exhaust gases, optical techniques, propellants, spectral analysis, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- holography, Hovanesian (J.D.), Hung (Y.Y.), (et al.), *7549*
- holography, lasers, metrology, surfaces, vibration, Kohler (H.), *7552*
- cavities, convection, heat transfer, thermal measurements, visualization, Sernas (V.), Lee (E.I.), *8769*
- friction (skin), oil films, optical techniques, Tanner (L.H.), *10536*
- holography, sensitivity, speckle interferometry, strain measurement, Dandliker (R.), *11314*

interlaminar stresses, composite structures, delamination, effective elastic moduli, micromechanics, Salamon (N.J.), *288*
- adhesives, bonded joints, finite element methods, stiffness, time dependence, Gali (S.), Ishai (O.), *8483*
- composite materials, laminates, perturbation methods, rayleigh ritz method, Bar-Yoseph (P.), Pian (T.H.H.), *9249*
- composite materials, fatigue, fibers, Ratwani (M.M.), Kan (H.P.), *10130*
- composite materials, crack propagation, glass fibers, low temperature, Han (K.S.), Koutsky (J.), *10309*

intermittency, probability, reliability analysis, Schneeweiss (W.G.), *2515*

internal combustion engines, design, laser doppler velocimeters, piston driven flow, swirl, Morse (A.), Whitelaw (J.H.), (et al.), *706*
- computer aided design, digital control, microprocessors, *1167*
- chemically reactive flow, equilibrium, numerical methods, Ramshaw (J.D.), Cloutman (L.D.), *1756*
- flow measurement, thermodynamic processes, ultrasonics, Lakshminarayanan (P.A.), Janakiraman (P.A.), (et al.), *1761*
- exhaust gases, thermodynamic processes, Raible (C.J.), Cox (F.W.), *1762*
- lubricants (liquid), temperature, viscometry, Shaub (H.), Murphy (C.K.), *3757*
- friction, pressure measurement, thermodynamic processes, Vogt (R.), *3882*
- boundary integral methods, finite element techniques, stress strain relationships, Kvitka (A.L.), Voroshko (P.P.), (et al.), *4199*
- automobiles, design, exhaust gases, optimization, Kanarachos (A.), Seifert (H.), *4554*
- dynamic testing, measurements (dynamic), noise, Tschoke (H.), *4741*
- minimum fuel control, optimal control, vehicles, Sweet (L.M.), *5066*
- compressible flow, exhaust gases, inlet flow, two-stroke cycle, Sher (E.), *5647*
- cooling, heat transfer, piston rings, Ustinov (A.N.), Neznaev (A.N.), (et al.), *5648*
- frequency domain techniques, pressure measurement, vibration, Arques (P.), *5649*
- piston rings, tribology, Furuhama (S.), Hiruma (M.), (et al.), *5650*
- control, knocking, pressure measurement, spark ignition, Randall (D.W.), Powell (J.D.), *5653*
- absorption, emissions, hydrocarbons, oil films, Carrier (G.), Fendell (F.), (et al.), *7873*
- axisymmetric flow, compressible flow, finite difference methods, reciprocating engines, turbulent flow, Ramos (J.I.), Humphrey (J.A.C.), (et al.), *8591*
- diodes, fluidics, mass transfer, valves, Sher (E.), *11796*

internal flow, cavities, finite difference methods, navier stokes equation, Glotz (G.), Schonauer (W.), (et al.), *570*
- finite difference methods, friction (skin), rotating disks, viscous flow, Kullen (A.), *1510*
- incompressible flow, rotating cylinders, viscous flow, Bertela (M.), *1516*
- engines, laser doppler velocimeters, piston driven flow, Morse (A.P.), Whitelaw (J.H.), (et al.), *1758*
- convection, heat, space vehicles, vibration, Kamotani (Y.), Prasad (A.), (et al.), *2606*
- cylindrical bodies, finite difference methods, navier stokes equation, rotating disks, Schultz (D.H.), Shah (V.L.), *3621*
- finite difference methods, navier stokes equation, two dimensional flow, vorticity, Shay (W.A.), *4586*
- initial value problems, spherical bodies, stokes flow, Bykov (V.M.), *5403*
- shock waves, three dimensional flow, transonic flow, Brochet (J.), *6662*
- cellular flow, conduction (heat), heat transfer, Eftekhar (J.), Darkazalli (G.), (et al.), *7848*
- conduction (heat), cylindrical bodies, lasers, unsteady flow, Lakusta (K.V.), *7850*
- annular flow, cyclones, cylindrical bodies, inviscid fluid, velocity profiles, vortex flow, Martynov (Yu.V.), *9523*
- reynolds number (small), rotating bodies, spherical bodies, Rumez (W.), *9536*
- convection (forced), external flow, laminar flow, non newtonian flow, turbulent flow, viscoelastic fluids, Shenoy (A.V.), Mashelkar (R.A.), *9707*
- discharges, irrotational flow, orifices, weirs, Cranfield (R.R.), *10390*
- cylindrical bodies, navier stokes equation, rotating disks, torque, Bertela (M.), Gori (F.), *10404*
- boltzmann equation, boundary value problems, uniqueness, Burov (A.V.), *10422*
- geometrical properties, heat exchangers, heat exchangers (stream-symmetric), heat transfer, Singh (K.P.), *10615*
- pressure distribution, temperature, turbofan engines, Braithwaite (W.M.), Soeder (R.H.), *10730*
- channel flow, tube bundles, Aly (A.M.M.), *10824*
- near ground effects, runoff, saturation, soil mechanics, Ahuja (L.R.), Ross (J.D.), (et al.), *10831*
- rotating disks, secondary flow, unsteady flow, vortex flow, Kurokawa (J.), Toyokura (T.), (et al.), *11377*
- compressible flow, cylindrical bodies, fluid-structure interaction, shock waves, Dubrovskaya (L.I.), Kim (A.V.), (et al.), *11410*
- axial turbines, geometrical properties, wind turbines, Igra (O.), *11754*

internal sources, elastic waves, half space, Brock (L.M.), *1293*
- convection (free), heat addition, heat transfer (combined modes), radiant interchange, turbulent flow, Cheung (F.B.), Chan (S.H.), (et al.), *8743*

internal state variables, constitutive equations, creep, thermal fatigue, Mccartney (L.N.), *1187*
- shear waves, viscoelastic fluids, viscoelastic waves, Bampi (F.), Morro (A.), *1971*
- endochronic theory, metals, work hardening, Wu (H.C.), Yip (M.C.), *3265*
- continuum mechanics, rheology, thermodynamics (nonequilibrium), Pfeifroth (L.), *7133*
- continuum mechanics, discontinuities, Matsumoto (E.), *7139*

internal stresses, elastoplasticity, perturbation methods, work hardening, Panzeca (T.), Polizzotto (C.), *269*
- bonded joints, measurements, Sytov (V.A.), Mirzoev (R.G.), (et al.), *1400*
- creep, metals, micromechanisms, power law geometrics, Argon (A.S.), Takeuchi (S.), *5101*

internal waves, spectra, surface waves, wave interactions, Basovich (A.Ya.), *669*
- gravity waves, ocean air interaction, ocean waves, surface waves, thermocline, turbulence, turbulence (geophysical), Phillips (O.M.), *1888, book*
- bottom irregularities, damping, Yermakov (S.A.), *1889*
- boundary layer, eigenvalues, unsteady state, Ryzhov (O.S.), Zhuk (V.I.), *2634*
- hamilton principle, stratified flow, Voronovich (A.G.), *4049*
- ocean air interaction, oceanography, wind-wave interaction, Pelinovskiy (Y.N.), *4863*
- breakers, currents, gravity waves (internal), oceanography, spectra, thermocline, Eriksen (C.C.), *4871*
- atmospheric circulation, hydrodynamic stability, Kurganskiy (M.V.), *5927*
- atmospheric circulation, Guiraud (J.P.), Zeytounian (R.K.), *5938*
- atmospheric circulation, planetary waves, Mashkovich (S.A.), Anzhina (G.I.), *5942*
- acoustic waves, ocean, refraction, sound propagation, Uscinski (B.J.), *6908*
- baroclinic waves, bottom irregularities, kelvin waves, Chao (S.-Y.), *8976*
- bottom irregularities, roughness, stratification, surface waves, tsunami, Yermakov (S.A.), Pelinovskiy (Ye.N.), *8982*
- ocean air interaction, rotating fluids, stratified flow, Klinck (J.M.), Pietrafesa (L.J.), (et al.), *9938*
- oceanography, turbulence (geophysical), Holloway (G.), *10962*

interplanetary probes, space vehicles, trajectories, Frauenholz (R.B.), *1792*
- optimization, orbit correction, orbit transfer, trajectory optimization, D'Amario (L.A.), Bymes (D.V.), (et al.), *5707*
- ablation, conservation laws, planetary atmospheres, shock layer, Moss (J.N.), Simmonds (A.L.), (et al.), *7777*
- fly-by, orbit mechanics, perturbation methods, Georgiev (K.G.), Papkov (O.V.), *10778*

interpolation, computer programming, curve fitting, dynamic response, linear systems, Collings (A.G.), Saunders (L.R.), *2050*
- elasticity, finite element methods (hybrid), materials properties, Spilker (R.L.), *2061*
- computer programming, finite element techniques, Ball (A.A.), *2066*
- finite element techniques, mesh generation, Robinson (J.), Ward (P.), *2067*

- bending, finite element techniques, locking, matrix methods, mindlin plates, plates, shells, Tsach (U.), *2070*
- finite element methods (hybrid), plates (thick), stress analysis, Spilker (R.L.), Munir (N.I.), *2072*
- algorithms, differentiation, Oliver (J.), *3123*
- air pollution, computing techniques, Miksad (R.W.), Long (G.E.), *3127*
- fluid mechanics, infinite medium, rock mechanics, soil mechanics, Lynn (P.P.), Hadid (H.A.), *3132*
- approximations, computing techniques, finite element techniques, isoparametric elements, Webster (W.D.) Jr., *3133*
- algorithms, binary signals, digital simulation, filters, Konkin (A.V.), Kulman (N.K.), *3191*
- differentiation, matrix inversion, singularities, Okabe (M.), Kikuchi (N.), *5022*
- filters, observers, stochastic processes, Grigorev (F.N.), Kurdoya (E.A.), *5057*
- approximations (polynomial), finite element techniques, mathematical methods, Hoppe (V.), *6110*
- elliptic equations, finite difference methods, reynolds number (high), Han (T.), Humphrey (J.A.C.), (et al.), *6625*
- processing, seismic waves, Savaryenskiy (Ye.F.), Kendzera (A.V.), *7021*
- finite element techniques, plates, splines, Qu (S.-N.), *7204*
- boundary value problems, splines, Mettke (H.), Pfeifer (E.), (et al.), *8126*
- convergence, finite element techniques, mesh generation, Babuska (I.), Szabo (B.), *9128*
- approximations (polynomial), finite element techniques, mesh generation, Okabe (M.), *10065*
- finite element techniques, potential flow, Wu (E.-R.), *10067*

Inutake (M.), see Hatakeyama (R.), *4749*

invariant imbedding, free boundary, inequalities, variational methods, Donnelly (J.D.P.), *1119*

- atmosphere, optical thickness, quasilinearization, radiant interchange, solar radiation, Ueno (S.), *6075*

Invernizzi (S.), see Caristi (G.), *24*

inverse method, averaging, korteweg de vries equation, mathematical methods, Flaschka (H.), Forest (M.G.), (et al.), *1086*

- differential equations (ordinary), functional analyis, scattering, Shabat (A.B.), *1998*
- ocean, sound speed, stratification, underwater acoustics, Gray (S.H.), *5721*
- axisymmetric flow, bodies of revolution, boundary layer, drag reduction, Dalton (C.), Zedan (M.F.), *9941*

inverse problems, linear equations, matrix methods, optimization, Torkamani (M.A.M.), *17*

- distributed systems, eigenvalue problems, iterative methods, vibration, Barcilon (V.), Turchetti (G.), *27*
- mathematical methods, scattering, time domain techniques, wave equations, Burridge (R.), *1088*
- conduction (heat), gradient techniques, Artyukhin (E.A.), Rumyantsev (S.V.), *1701*
- coordinate systems, orbit mechanics, potential theory, synodic systems, Szebehely (V.), Broucke (R.), *1785*
- deformation, numerical methods, thermoelasticity, Nikitenko (N.I.), *1833*
- boundary value problems, eigenvalue problems, sturm-liouville problems, Mclaughlin (J.R.), Handelman (G.H.), *1999*
- differential equations (partial), eigenvalues, nonlinear systems, scattering, Gerdzhikov (V.S.), Ivanov (M.I.), (et al.), *2007*
- error, linear systems, statistical theory, Tarantola (A.), *2043*
- gravitational prospecting, hydrodynamics, potential theory, Danilov (V.L.), Shulman (I.I.), *2995*
- analytical methods, bilinear systems, biomathematics, immunology, mathematical models, Hsu (C.S.), Mohler (R.R.), *3153*
- dynamic analysis, estimation, input-output relationships, Benyon (P.R.), *3164*
- deformation (plastic), elastoplasticity, shells (plastic), Burlakov (A.V.), Lvov (G.I.), *3307*
- earthquakes, iterative methods, layered media, Hawley (B.W.), Zandt (G.), (et al.), *3392*
- calorimetry, conduction (heat), plasma, Bespalov (A.M.), Gorshkov (M.I.), (et al.), *3773*
- linear systems, process control, time invariant systems, time lag, Borukhov (V.T.), *4228*
- layered media, uniqueness, Glasko (V.B.), Khudak (Yu.I.), *4451*
- conduction (heat), theorems, uniqueness, Muzylev (N.V.), *4645*
- computing techniques, conduction (heat), hybrid techniques, Matsevityi (Yu.M.), *4712*
- laplace transform, viscoelastic waves, Nigul (U.K.), *5239*
- conduction (heat), numerical methods, Blackwell (B.F.), *5580*
- boundary value problems, conduction (heat), gradient techniques, numerical methods, Artyukhin (E.A.), Rumyantsev (S.V.), *5581*
- field tests, processing, seismic waves, Alekseyev (A.S.), Dobrinskiy (V.I.), (et al.), *5875*
- interfaces, seismic waves, Fedorova (N.V.), Tsirulskiy (A.V.), *5876*
- earth, gravimagnetic anomalies, gravity, magnetic field, Nikonova (F.I.), Tsirulskiy (A.V.), *5879*
- backlund transformations, evolution equations, korteweg de vries equation, scattering, Prikarpatskii (A.K.), *6072*
- conduction (heat), conductivity, mathematical models, numerical methods, Chen (Y.M.), Liu (J.Q.), *7855*
- conduction (heat), conjugate gradient method, data analysis, minimum discrepancy method, steepest descent method, Alifanov (O.M.), Rumyantsev (S.V.), *7859*
- helmholtz equation, mathematical methods, scattering, sturm-liouville equation, Bojarski (N.N.), *8112*
- diffusion, existence theorems, uniqueness, Chrzanowski (E.M.), *8115*
- conduction (heat), mathematical models, Novikov (I.A.), *8730*
- conduction (heat), cylindrical bodies, hardening, heat addition, mathematical models, Glasko (V.B.), Kulik (N.N.), (et al.), *8734*
- elastoplasticity, rocks, tunnels, Gioda (G.), Maier (G.), *9369*

inversion, plasticity, volterra equations, Mashchenko (I.P.), Churikov (F.S.), *1095*

- fluidized beds, laplace transform, multiphase flow, numerical analysis, special functions, Petho (A.), Kuhne (J.), *1101*
- algorithms, computing techniques, continued fraction expansion, Kumar (A.), *2053*
- deconvolution, processing, seismic waves, Kikuchi (M.), Kanamori (H.), *9908*

inviscid fluid, free boundary, supercritical flow, waterfalls, Naghdi (P.M.), Rubin (M.E.), *554*

- channel flow, flumes, free boundary, surface profiles, velocity profiles, Davis (R.W.), Deutsch (S.), *560*
- numerical methods, transonic flow, unsteady flow, Lerat (A.), Sides (J.), *697*
- irrotational flow, singularities, uniform current, Dragos (L.), Homentcovschi (D.), *1502*
- compressible flow, numerical methods, unsteady flow, Zannetti (L.), Colasurdo (G.), *1524*
- incompressible flow, jets, starting, unsteady flow, Kraemer (K.), *2583*
- boundary value problems, initial value problems, penetration, unsteady flow, Karzhikhov (A.V.), Ragulin (V.V.), *2598*
- flow obstructions, shear flow, two dimensional flow, vorticity, Shankar (P.N.), Sinha (U.N.), *2609*
- aerodynamics, compressible flow, perturbation methods, transonic flow, Seebass (A.R.), Yu (N.J.), (et al.), *2617*
- compressible flow, finite difference methods, unsteady flow, Steger (J.L.), Warming (R.F.), *2621*
- axisymmetric flow, mixed flow turbines, vortex flow, Zabolotnyi (F.T.), *2758*
- unsteady flow, vortex rings, Poppe (W.), *3615*
- spherical bodies, unsteady flow, vortex flow, vortices, Mindlin (I.M.), *4579*
- finite difference methods, impingement, jets, plates, stagnation point, Rubel (A.), *5394*
- air water entry, cavities, fredholm equations, wedges, Kuznetsov (A.V.), *5967*
- cavitation, hydrofoils, supercavitating hydrofoils, supercritical flow, Rowe (A.), Kueny (J.-L.), *5968*
- similarity methods, stratified flow, vorticity, Yih (C.-S.), *7655*
- stratified flow, vortex breakdown, vortex flow, Shivamoggi (B.K.), Uberoi (M.S.), *7672*
- aerodynamic loads, axial compressors, stress analysis, unsteady flow, wind tunnels, Lambertz (J.), Wallmann (T.), (et al.), *7808*
- complex variables, cylindrical bodies, plates, porous surfaces, Capodanno (P.), *8521*
- complex variables, cylindrical bodies, plates, porous surfaces, Petrila (T.), *8522*
- corrections, green function, potential flow, wall effects, walls, Barche (J.), *8523*
- deformable bodies, force, potential flow, three dimensional flow, Vilkhovchenko (S.D.), Yakimov (Yu.L.), *8524*
- shear flow, velocity profiles, vortex flow, Kida (S.), *8528*
- compressible flow, mathematical models, transonic flow, Oswatitsch (K.), *8546*
- duct flow, vortex flow, Kazhikhov (A.V.), *8567*
- helical flow, modeling, turbulence, Yamamoto (K.), Hosokawa (I.), *8610*
- airfoil theory, conformal mapping, two dimensional flow, Prosnak (W.J.), Rokicki (J.), *8640*
- annular flow, cyclones, cylindrical bodies, internal flow, velocity profiles, vortex flow, Martynov (Yu.V.), *9523*
- empirical methods, plates, virtual mass, Payne (P.R.), *9543*
- compressible flow, numerical methods, shock waves, transonic flow, Rizzi (A.) eds., Viviand (H.), *9556, book*
- aerodynamic performance, airfoils, incompressible flow, Ando (S.), Lee (D.-H.), *9646*
- aerodynamic loads, axial compressors, axial turbines, incompressible flow, two dimensional flow, unsteady flow, Ispas (I.), Lucking (P.), *9671*
- hydrodynamic stability, taylor vortices, vorticity, Vladimirov (V.A.), *10409*
- aerodynamic loads, cylindrical bodies, incompressible flow, lift, Yarmitskii (A.G.), *10500*
- euler equations, numerical methods, spherical bodies, vortex lines, Dhanak (M.R.), *11361*
- axisymmetric flow, hydrodynamic stability, rotating fluids, Vladimirov (V.A.), Tarasov (V.F.), *11373*
- compressible flow, mathematical models, Ebin (D.G.), *11416*
- blunt bodies, compressible flow, finite difference methods, shock layer, Srivastava (B.N.), Werle (M.J.), (et al.), *11428*
- centrifugal compressors, compressible flow, streamlines, three dimensional flow, Bosman (C.), *11750*

Ioakimidis (N.), see Theocaris (P.S.), *1397*
Ioakimidis (N.I.), see Theocaris (P.S.), *478*
- collocation, computing techniques, elasticity, singular integral equations, Theocaris (P.S.), *4182*
- computing techniques, cracks, discontinuities, elasticity, *6455*
- cauchy integrals, computing techniques, integration, singularities, *8128*
- computing techniques, corners, fracture mechanics, singular integral equations, stress intensity factor, Theocaris (P.S.), *8419*

Ioannides (S.A.), beam columns, finite element methods, frames, Tarpy (T.S.) Jr., *2300*
Iodko (E.A.), evaporation, heat transfer, mass transfer, porous media, *10692*
Ioffe (L.Sh.), see Garger (V.I.), *2153*
ion generators, electro fluid dynamics, liquid metals, nonlinear waves, theory, Gabovich (M.D.), Poritskii (V.Ya.), *2889*
ionic flow, diagnostics, energy spectrum, laser plasma interaction, measurements (dynamic), Chowdhury (S.S.), Clement (R.M.), (et al.), *5687*
- charged particles, energy spectrum, laser plasma interaction, measurements (dynamic), Clement (R.M.), Davies (R.A.), (et al.), *5689*
- magneto fluid dynamics, power generation, steam, unsteady flow, Pozwolski (A.E.), *10751*
- three dimensional flow, unsteady flow, Powell (C.), *11804*
- dispersion relation, nonlinear characteristics, oscillations, plasma, relativity, Chian (A.C.-L.), *11834*

ionic propulsion, argon, electric propulsion, Ramsey (W.D.), *848*
- argon, thrusters, xenon, Wilbur (P.J.), Kaufman (H.R.), *5666*

ionization, detection, flames, spectral analysis, Nicholson (A.J.C.), Swingler (D.L.), *1750*
- chemical reactions, equilibrium, injection, plasma, Poissant (G.), Prudhomme (R.), *1779*
- flames (diffusion), reaction zone, Ahlheim (M.), Gunther (R.), *10718*

ionized gases, computing techniques, conductivity, shock waves, Makhmudov (A.A.), Popov (A.P.), *1613*
- focusing, laser plasma interaction, models, radiation pressure, Del Pizzo (V.), Luther-Davies (B.), *3901*
- acoustic waves, channel flow, propagation, shock waves, Levin (V.A.), *11811*

Ionochkina (L.I.), see Simkhovich (S.L.), *11809*
Iordanishvili (E.K.), see Gorodetskii (S.M.), *722*
Iordanskii (S.V.), see Bychkov (Yu.A.), *7871*
Iotti (R.C.) eds., piping systems, power plants, vibration, Bernstein (M.D.), *2327, book*
Irani (G.B.), see Gotwols (B.L.), *5485*
Iremonger (M.J.), beam columns, beams (variable cross section), buckling (variable section), finite difference methods, *5175*
Irie (T.), beams (curved), eigenvalues, vibration (forced), Yamada (G.), (et al.), *3361*
- membranes, plates, vibration (free), Yamada (G.), (et al.), *4422*
- frequencies, plates (rectangular), vibration, Yamada (G.), (et al.), *5212*
- beams (timoshenko), damping, vibration (free), Yamada (G.), (et al.), *6290*
- membrane theory, rayleigh ritz method, strings, vibration (free), Yoda (K.), *7387*

Irimiciuc (N.), see Mangeron (D.), *3085, book*
iron, fracture criteria, triaxial loading, Igaki (H.), Ikeda (K.), *1370*
- coatings, fatigue, life expectancy, probability, Kalmutskii (V.S.), Frunze (I.P.), *5286*
- inclusions, stress strain relationships, triaxial loading, yield condition, Igaki (H.), Ikeda (K.), (et al.), *5325*
- acoustic emission, dislocations, nondestructive tests, strain, Bassim (M.N.), Veillette (M.), *6463*
- alloys, bending, cyclic loading, shape factors, testing equipment, thermal fatigue, Pryakhin (V.A.), Ivanova (L.P.), *6474*

Irretier (H.), approximations, mindlin plates, plates (circular), vibration (free), *4428*
- see Bogacz (R.), *4527*
- blades, dynamic analysis, rotating disks, vibration (free), *9316*

irrigation, tubes (perforated), underground, Koroleva (O.A.), Korolev (A.V.), *821*
- laminar flow, reynolds number (small), Vorontsov (E.G.), Yakhno (O.M.), *4598*
- seepage, soils, Bruch (J.C.) Jr., *7009*
- power generation, pumps, wind turbines, Clark (R.N.), Nelson (V.), (et al.), *9667*

irrotational flow, inviscid fluid, singularities, uniform current, Dragos (L.), Homentcovschi (D.), *1502*
- axisymmetric flow, bodies of revolution, cavities, unsteady flow, Nesteruk (I.G.), *3630*
- currents, ship motion, slender bodies, Triantafyllou (M.S.), *4101*
- airfoils, fredholm equations, least squares, singularities, sources, Campbell (G.S.), *4587*
- flow obstructions, perturbations, two dimensional flow, upper atmosphere, wind, Blank (A.D.), *5395*
- air, siphons, streamlines, Ali (K.H.M.), Pateman (D.), *6613*
- complex variables, cylindrical bodies, two dimensional flow, walls, Petrila (T.), *6614*
- approximations (higher order), nozzles, supersonic flow, Ishii (R.), *6661*
- conformal mapping, plates, porous surfaces, walls, Prosnak (W.J.), Rokicki (J.), *8541*
- fredholm equations, ships, source distribution, Miloh (T.), *9015*
- annuli, compressible flow, pipe flow, rotating cylinders, swirl flow, Neuberger (A.W.), *9586*
- discharges, internal flow, orifices, weirs, Cranfield (R.R.), *10390*
- boundary integral methods, fredholm equations, free boundary, gates, Sohngen (B.), Bischoff (H.), *10401*
- axisymmetric flow, channel flow, channels (divided), divided flow, Konovalov (A.E.), *10437*
- ducts (curved), gravity, hodograph methods, Chow (W.L.), Chan (P.C.T.), *10438*
- asymptotic methods, ship resistance, slender bodies, wavemaking resistance, Adachi (H.), *10879*
- cylindrical bodies, gravity waves (surface), submerged bodies, unsteady flow, Chaplin (J.R.), *11633*
- averaging, bubble dynamics, two phase flow, Berdichevskii (A.L.), *12025*

Irschik (H.), boundary elements, green function, plates, Ziegler (F.), *7347*
Irvine (H.M.), dynamic stability, guyed structures, structural stability, towers, O'Sullivan (M.J.), *11118*
Irwin (A.W.), biodynamics, human body, perception thresholds, vibration, yawing, *7123*
Isaacs (L.T.), iterative methods, linear theory, piping systems, Mills (K.G.), *3597*
- finite element techniques, free boundary, seepage, *5862*

Isaacson (M.), see Sarpkaya (T.), *2543, book*
Isakhanov (G.V.), shells (of revolution), shells (stiffened), stress strain relationships, Gulyar (A.I.), (et al.), *3312*
Isay (W.H.), bubble dynamics, diffusion, saturation, stability, *4827*
Isayama (Y.), see Ueda (T.), *7832*
Isayev (A.I.), channel flow, cooling, injection molding, polymers, two dimensional flow, viscoelastic fluids, Hieber (C.A.), *6656*
Isbin (H.S.), critical flow, models, two phase flow, *1854*
isentropic processes, cauchy problem, hyperbolic equations, shock, wave equations, Hoff (D.), *2011*
- explosions, semi infinite media, shock waves, Singh (P.), *3723*
- existence theorems, magneto plasma dynamics, one dimensional flow, theory, Sulem (C.), Sulem (P.L.), *10733*

Ishai (O.), see Gali (S.), *8483*
Ishchenko (I.I.), alloys, fatigue, high cycle fatigue, high temperature, Golub (V.P.), (et al.), *6469*
Ishibashi (K.), see Matsumoto (Y.), *1597*
Ishida (M.), aeration, channels, particles, porous walls, two phase flow, Hatano (H.), (et al.), *4006*
- boundary layer, heat transfer, oscillatory flow, plates, unsteady state, Yamada (T.), *4608*
- fluidized beds, particle fluid flow, testing equipment, velocity profiles, Shirai (T.), (et al.), *8935*

Ishida (R.), see Takeuti (Y.), *8876*
Ishida (Y.), see Yamamoto (T.), *2341*
- see Yamamoto (T.), *5227*

Ishigai (S.), boiling, cooling, film cooling, impingement cooling, sprays, Nakanishi (S.), (et al.), *1664*
- boiling, critical heat flux, heat transfer, impact jets, impingement cooling, jets, water, Nakanishi (S.), (et al.), *3792*
- see Bergles (A.E.) eds., *4820, book*

Ishigaki (H.), measurements, roughness, skid, surface profiles, Kawaguchi (I.), *999*
Ishihara (K.), prediction, pressure drop, tube sheets, two phase flow, Palen (J.W.), (et al.), *1849*
- cyclic testing, sand, saturation, shear stress, Yamazaki (F.), *6379*

Ishihara (T.-O.), see Iwanaga (M.), *2985*
Ishii (M.), see Chen (W.L.), *5589*
Ishii (N.), biomathematics, detection, encephalographic data, kalman filters, stochastic processes, Iwata (A.), (et al.), *129*
Ishii (R.), axisymmetric flow, nozzles, numerical analysis, supersonic flow, *2652*
- approximations (higher order), irrotational flow, nozzles, supersonic flow, *6661*

Ishii (S.), see Tanaka (K.), *9847*
Ishii (T.), bubble dynamics, contamination, drag coefficient, two phase flow, Pei (D.C.T.), *6982*
- see Hua (T.N.), *12017*

Ishikawa (H.), life expectancy, reliability analysis, stochastic systems, weibull statistics, Tanimoto (T.), (et al.), *47*
- combined loading, cracks, finite element techniques, fracture, stress intensity factor, *85*
- creep, cylindrical bodies, stress relaxation, thermoelasticity (transient), *2974*

Ishikawa (K.), see Nakamura (I.), *3679*
Ishikawa (O.), see Koizumi (T.), *8871*
Ishikawa (T.), see Yamaguchi (A.), *2188*
Ishimova (A.V.), see Dymnikov (V.P.), *4070*
Ishinabe (M.), see Toi (Y.), *7365*
Ishizaki (T.), dynamic analysis, elastoplasticity, finite amplitude, imperfections, shells, Bathe (K.-J.), *7216*
Isida (M.), complex variables, cracks, rotating disks, *10296*
Isidori (A.), see Grasselli (O.M.), *11059*

Iskenderov (I.A.), see Dzhafarov (E.M.), *2155*
Ismagilov (R.Kh.), see Ziganshin (R.R.), *11831*
Ismail (K.A.R.), see Liu (C.Y.), *9901*
- see Liu (C.Y.), *11762*

isobaric processes, forecasting, meteorology (physical), Kurbanov (B.T.), *4073*
isolation, earthquake resistant structures, wind loads, Kelly (J.M.), Chitty (D.E.), *7046*
- failure, inertial guidance, statistical theory, Daly (K.C.), Gai (E.), (et al.), *7927*

isothermal processes, combustion (turbulent), convection (forced), impact jets, impingement, jets, thermal measurements, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*
- annular flow, conductivity, heat transfer, insulating materials (thermal), Shimomura (H.), Okamoto (Y.), (et al.), *765*
- collocation, condensation, curved surfaces, extended surfaces, Panchal (C.B.), Bell (K.J.), *807*
- blast waves, cylindrical waves, explosions, similarity methods, Lerche (I.), *11827*
- kinetic theory, numerical methods, plasma, waves, Musher (S.L.), *11836*

isotope tracers, electromagnetic loading, flow measurement, gases, liquids, vortex shedding, Scott (R.W.W.) ed., *7811, book*
isotopes, condensation, evaporation, excitation, lasers (gasdynamic), mixtures, Druzhinin (A.A.), Ptitsyn (G.A.), (et al.), *5612*
- nuclear power, space vehicles, steam power plants, Raab (B.), *6854*
- casting, ingots, multiphase media, solidification, Deryabina (G.N.), Ripp (A.G.), *9434*

Ispas (I.), aerodynamic loads, axial compressors, axial turbines, incompressible flow, inviscid fluid, two dimensional flow, unsteady flow, Lucking (P.), *9671*
Israeli (M.), see Neishlos (H.), *1604*
Israilov (M.Sh.), diffraction, elastic waves, wedges, *5245*
Issid (N.T.), see Paidoussis (M.P.), *10765*
Isupov (L.P.), bending, composite structures, deformation, fibers, layered media, stress concentration, *8223*
Itakura (T.), channel flow, free boundary, sediment transport, velocity profiles, Kishi (T.), *3606*

iterative methods, distributed systems, eigenvalue problems, inverse problems, vibration, Barcilon (V.), Turchetti (G.), *27*
- differential equations (ordinary), equations of motion, micropolar media, numerical methods, Anwar (M.), Guram (G.S.), *61*
- boundary value problems, elliptic equations, Benson (A.), Evans (D.J.), *62*
- computing techniques, large scale systems, newton method, nonlinear methods, Geradin (M.), Idelsohn (S.), (et al.), *64*
- composite materials, conduction (steady), finite difference methods, Charrier (J.M.), Gupta (R.), (et al.), *282*
- gradient techniques, matrices (sparse), newton method, Gambolati (G.), *1116*
- algorithms, convex programming, gradient techniques, Ilioi (G.), *1118*
- mathematical methods, nonlinear methods, Krawczyk (R.), *1120*
- elliptic equations, matrices (sparse), three dimensional formulation, Lipitakis (E.A.), Evans (D.J.), *1122*
- design (optimum), optimization, Obozov (V.I.), *1431*
- boltzmann equation, pade approximation, Elwakil (S.A.), El Batanoni (F.), (et al.), *1530*
- convex programming, games, Khachiyan (L.G.), Erlikh (A.I.), *2034*
- computing techniques, differential equations (partial), newton method, nonlinear methods, Carey (G.F.), Krishnan (R.), *2036*
- algorithms, nonlinear analysis, Kolyada (Yu.V.), Sigorskii (V.P.), *2040*
- approximations, convergence, integro differential equations, volterra equations, Vata (P.), *2051*
- navier stokes equation, numerical analysis, reynolds number (high), two dimensional flow, Cebeci (T.), Hirsh (R.S.), (et al.), *3130*
- finite element techniques, navier stokes equation, stream function, Dhatt (G.), Fomo (B.K.), (et al.), *3143*
- convergence, loads, radial loading, Gorodetskii (A.V.), *3273*
- earthquakes, inverse problems, layered media, Hawley (B.W.), Zandt (G.), (et al.), *3392*
- linear theory, piping systems, Isaacs (L.T.), Mills (K.G.), *3597*
- boundary value problems, differential equations (partial), Wenston (P.R.), *4162*
- approximation theory, compressible flow, difference equations, stability theory, Samarskii (A.A.), *4169*
- gradient techniques, matrices (sparse), Hageman (L.A.), Young (D.M.), *4177, book*
- boundary value problems, differential equations (ordinary), kinetics, Pennline (J.A.), *4178*
- algorithms, computing techniques, newton method, Herzberger (J.), *4185*
- algorithms, identification, Dudkin (L.M.), Kasparson (V.A.), *4214*
- correlation, estimation, filters, Simkin (M.M.), *4313*
- numerical methods, snap-through, Crisfield (M.A.), *4401*
- algorithms, convergence, optimal control, optimization, Allwright (J.C.), *4997*
- linear equations, matrices, relaxation methods, Hadjidimos (A.), *5009*
- convergence, frechet derivative, newton method, Groze (S.), *5010*
- elliptic equations, finite element techniques, linear equations, Bank (R.E.), *5023*
- algorithms, numerical methods, optimization, Adamenko (G.M.), *5059*
- functional analyis, geophysics, Oganesyan (S.M.), Starostenko (V.I.), *5881*
- linear equations, nonlinear systems, Wellford (L.C.) Jr., Vahdani (B.), *6108*
- boundary integral methods, computing techniques, differential equations (partial), finite difference methods, galerkin method, surveys, Noye (J.) ed., *7180, book*
- convergence, differentiation, parabolic equations, Heron (B.), *7183*
- computing techniques, fredholm equations, pade approximation, Adhikari (S.K.), *7185*
- approximations, computing techniques, differential equations (ordinary), Korner (E.), *7187*
- eigenvalue problems, matrix methods, mesh generation, newton method, Mccormick (S.F.), *7190*
- boundary value problems, convergence, newton method, Paumier (J.-C.), *7195*
- geometric nonlinearities, nonlinear analysis, structural analysis, Webster (R.L.), *7198*
- algorithms, market equilibrium, numerical methods, operations research, optimization, Ahn (B.H.), *7227*
- computing techniques, nonlinear structures, relaxation methods, structural analysis, Wellford (L.C.), Sen (H.), *8131*
- networks, watersheds, Divenot (A.), *8136*
- computing techniques, digital simulation, dirichlet problem, finite element techniques, Korneev (V.G.), Kuzmenko (V.G.), *8147*
- continuous systems, discrete systems, identification, least squares, stochastic systems, Vorobeychikov (S.E.), Konev (V.V.), *8163*
- large scale systems, optimal control, regulator problem, time optimal systems, Sarnovsky (J.), *8165*
- boundary layer (three dimensional), flow obstructions, separated flow, surface profiles, Sykes (R.I.), *8559*
- asymptotic methods, differential equations (ordinary), eigenvalue problems, Gogokhiya (V.Sh.), *9095*
- computing techniques, elastoplasticity, newton method, Atrek (E.), *9117*
- eigenvalue problems, vibration, Johnson (C.P.), Craig (R.R.) Jr., (et al.), *9120*
- elliptic equations, optimization, Tsurkov (V.I.), *10025*
- bearings (slider), elastoplasticity, finite element methods, lubrication (elastohydrodynamic), Curnier (A.R.), Taylor (R.L.), *10694*
- ill posed problems, stability theory, Ramm (A.G.), *10936*
- algorithms, convergence, identification, linear systems, Tsypkin (Y.Z.), Avedyan (E.D.), (et al.), *11098*

Ito (A.), binary flow, distillation, heat transfer, mass transfer, Asano (K.), *10666*
Ito (H.), see Shindo (Y.), *538*
- aerodynamic performance, discharge coefficients, discharges, flow measurement, nozzles, Watanabe (Y.), (et al.), *2656*
- see Kato (Y.), *6545*

Ito (S.), blades, film cooling, gas turbines, jets, Goldstein (R.J.), (et al.), *6850*
- aerodynamic performance, blades, film cooling, gas turbines, pressure drop, Eckert (E.R.G.), (et al.), *11743*

Ito (T.), see Suematsu (Y.), *11374*
- see Suematsu (Y.), *11537*

Ito (Y.M.), computing techniques, finite element methods, soil structure interaction, England (R.H.), (et al.), *968*
- composite materials, computing techniques, crack growth, finite element techniques, microcracks, Rosenblatt (M.), (et al.), *9418*

Itoh (A.), see Ujihashi (S.), *5221*
Itoh (N.), hydrodynamic stability, poiseuille flow, stability theory, three dimensional flow, *3701*
Itoh (Y.), see Fukumoto (Y.), *9285*
Itou (S.), couple stresses, crack branching, crack propagation, stress concentration, stress intensity factor, *2447*
Its (E.N.), reflection, refraction, surface waves, vertical contact, Yanovskaya (T.B.), *8958*
Ittmann (H.W.), see Stewart (T.J.), *3212*
Ivachnenko (A.G.), see Muller (J.-A.), *6101*
Ivakhnenko (A.G.), see Stone (R.), *149*
- algorithms, estimation, prediction, Stepashko (V.S.), (et al.), *2102*
- forecasting, meteorology (physical), weather forecasting, Rao (M.G.), *4067*

Ivakin (A.N.), see Volovov (V.I.), *5758*
- bottom irregularities, ocean bed, scattering, shallow water, underwater acoustics, Lysanov (Yu.P.), *11912*

Ivanitskaya (G.S.), see Yarema (S.Ya.), *4475*
Ivanov (A.G.), see Mogilev (V.A.), *8346*
- explosions, explosive loading, explosive solid interactions, impulsive propulsion, transient loading, Karpenko (G.Ya.), *9839*

Ivanov (A.P.), hamiltonian equations, resonance, second order analysis, stability theory, Sokolskii (A.G.), *4947*
Ivanov (A.V.), estimation, nonlinear methods, stochastics, Kozlov (O.M.), *10065*
Ivanov (B.P.), beam columns, elastic behavior, elastica, large displacement, Ilyukhin (A.A.), *2262*
Ivanov (L.B.), see Braginskiy (A.M.), *5593*
Ivanov (L.I.), boundary layer (atmospheric), boundary layer (thermal), boundary layer (turbulent), convection (forced), Ingel (L.Kh.), *4061*
Ivanov (M.I.), see Gerdzhikov (V.S.), *2007*
Ivanov (M.J.), compressible flow, numerical methods, shock waves, stability (numerical), supersonic flow, Kraiko (A.N.), *7692*

Ivanov (N.M.), ballistics (terminal), optimal control, planetary atmospheres, planetary entry, reentry, Martynov (A.I.), (et al.), *5713*
Ivanov (S.G.), force, rarefied gases, rotating bodies, Yanshin (A.M.), *11449*
Ivanov (V.A.), compressible flow, corners, discontinuities, transonic flow, Chernov (I.A.), *3638*
Ivanov (V.E.), calibration, transducers, underwater acoustics, velocity measurement, Kirshov (V.A.), *12011*
Ivanov (V.I.), see Kuranov (V.N.), *9412*
Ivanov (V.S.), see Evseev (V.N.), *11949*
Ivanov (V.V.), airplane performance, control, flight path, performance, Sirazetdinov (T.K.), *691*
Ivanov (Yu.A.), see Khoroshun (L.P.), *9327*
Ivanova (L.P.), see Pryakhin (V.A.), *6474*
Ivanova (V.S.), fracture toughness, steel, surface effect, Terentyev (V.F.), (et al.), *1416*
- crack propagation, deformation (plastic), high temperature, low cycle fatigue, Gintsler (Ya.), (et al.), *6415*

Ivanovskii (A.I.), ocean air interaction, resonance, rossby waves, tides, Krivolutskii (A.A.), *5941*
Ivanovskii (V.B.), algorithms, estimation, queue theory, *143*
Ivashchenko (B.P.), channel flow, eigenvalue problems, gravity waves, Nikitin (S.K.), *7765*
Ivashchenko (S.S.), see Sergeeva (V.B.), *6816*
Ivasyuk (V.V.), see Rusinko (K.N.), *5114*
Iversen (J.D.), drifting, snow, *5906*
Ivkin (A.M.), control, design, manipulators, Kudryashov, (et al.), *1159*
Ivlev (D.D.), see Berezhnoi (I.A.), *4350*
Ivlev (V.I.), dynamic properties, friction (sliding), vibration, *5190*
Ivleva (T.A.), see Chernenko (E.V.), *6841*
Ivleva (T.P.), combustion, flame propagation, wave equations, Merzhanov (A.G.), (et al.), *9764*
Ivnitskiy (V.A.), algorithms, laplace transform, queue theory, *4262*
Ivovich (V.A.), dynamic response, networks, perturbation methods, ropes, vibration (nonlinear), *3351*
Iwabuchi (A.), see Kayaba (T.), *4894*
Iwai (Y.), fracture, residual stresses, steel, surface effect, Arima (J.), *7292*
Iwai (Z.), identification, linear systems, observers, Mano (K.), (et al.), *2133*
Iwakuma (T.), micromechanisms, necking, plastic behavior, plasticity, shear bands, Nemat-Nasser (S.), *5111*
Iwamoto (J.), developing flow, impingement, jets, Deckker (B.E.L.), *10462*
Iwan (W.D.), see Grossmayer (R.L.), *2318*
- see Sergev (S.S.), *6286*
- see Yoder (P.J.), *8204*

Iwanaga (M.), averaging, reynolds stresses, suspensions, two phase flow, Ishihara (T.-O.), *2985*
Iwasaki (T.), see Tatsuoka (F.), *3419*
Iwasaki (Y.), hydrodynamic stability, rotating cylinders, rotational flow, stability theory, thin films, Hasegawa (E.), *5462*
Iwata (A.), see Ishii (N.), *129*
Iwata (K.), breakers, shallow water, spectra, surface waves, *3015*
Iwatsubo (T.), dynamic response, dynamic stability, rotating shafts, stability theory, vibration (forced), Kawai (R.), (et al.), *3372*
- critical speed, rotating disks, vibration (forced), *7402*
- dynamic stability, rotating shafts, vibration, Okaue (M.), (et al.), *11141*
- bearings (liquid lubricated), dynamic analysis, experimental mechanics, rotating bodies, stability theory, Kawai (R.), (et al.), *11144*

Iwaya (T.), see Sakai (T.), *7511*
Ixaru (L.G.), differential equations (ordinary), differential equations (partial), numerical analysis, perturbation theory, runge kutta method, *1112, book*
Iyengar (K.J.), see Anantha Ramu (S.), *408*
- see Ramu (S.A.), *2373*

Iyengar (N.G.R.), see Sharma (S.), *287*
- see Sharma (S.), *7342*

Iyengar (T.K.V.), see Lakshmana Rao (S.K.), *8487*
Iyer (K.M.), see Leissa (A.W.), *10213*
Iyer (M.S.), computing techniques, dynamic analysis, eigenvalues, mathematical methods, *11152*
Iyican (L.), cellular flow, closed conduit flow, convection (free), nusselt number, Witte (L.C.), (et al.), *1682*
- closed conduit flow, convection (free), heat transfer, mathematical models, spectral expansion method, Bayazitoglu (Y.), (et al.), *7839*

Izrael (Yu.A.), climatology, data acquisition, *4091*
Izrailovich (M.Ya.), nonlinear systems, optimal control, oscillations, periodic movements, van der pol's solution, Morozova (N.I.), *3188*
Izumi (K.), see Takamoto (M.), *8525*
Izumi (M.), beams (torsional), reinforced concrete, torsion, ultimate strength, *5353*
Izumi (Y.), aluminum alloys, crack propagation, griffith cracks, thermodynamics, Fine (M.E.), (et al.), *3441*

J

J-integral, crack growth, crack propagation, cyclic loading, fatigue, Leis (B.N.), Zahoor (A.), *468*
- brittle fracture, crack growth, Burns (S.J.), *1367*
- brittle fracture, crack growth, Lin (I.-H.), Hirth (J.P.), *1372*
- crack opening displacement, elastoplasticity, thermal loading, Aoki (S.), Kishimoto (K.), (et al.), *1374*
- crack growth, ductile fracture, path integrals, steel, Zahoor (A.), Abou-Sayed (I.S.), *1375*
- crack opening displacement, cracks, plasticity, stability, Kumar (V.), Shih (C.F.), *1381*
- crack growth, fracture, path integrals, Kishimoto (K.), Aoki (S.), (et al.), *1388*
- cracks, elastic behavior, finite difference methods, stress intensity factor, Vaikovskii (S.N.), Kurguzov (V.D.), *2432*
- crack propagation, finite difference methods, Early (P.W.), Burns (S.J.), *2439*
- crack growth, energy-release rate, plasticity, Holstein (T.), Schmitt (W.), *2445*
- crack growth, crack retardation, ductile fracture, fracture criteria, Woo (C.W.), Kuruppu (M.D.), *2453*
- crack growth, reliability, Georgiev (M.N.), Morozov (E.M.), *2462*
- fracture criteria, mixed mode fracture, unloading, Yoda (M.), *3458*
- ductile fracture, elastoplasticity, fracture, material testing, surveys, Landes (J.D.), Begley (J.A.), (et al.), *3460, book*
- crack opening displacement, deformation (plastic), Corman (D.E.), *3462*
- cracks, elastoplasticity, Paris (P.C.), Ernst (H.), (et al.), *3463*
- crack opening displacement, fracture mechanics, steel, toughness, Dahl (W.), *3503*
- crack opening displacement, steel, De Castro (P.M.S.T.), Spurrier (J.), (et al.), *4505*
- edge cracks, m integral, nondestructive tests, King (R.B.), Herrmann (G.), *5294*
- fracture mechanics, steel, Joyce (J.A.), Ernst (H.), (et al.), *5302*
- circumferential cracks, ductile fracture, pipes, stability theory, Zahoor (A.), Kanninen (M.F.), *5303*
- composite materials, fracture mechanics, laminates, strength, stress intensity factor, three dimensional formulation, Altus (E.), Rotem (A.), *5312*
- cracks, finite element techniques, Ranaweera (M.P.), Leckie (F.A.), *7514*
- crack opening displacement, elastoplasticity, fracture criteria, material testing, Havas (I.), Czoboly (E.), *7526*
- continuum mechanics, crack propagation, fracture mechanics, fracture toughness, Nguyen (Q.S.), *7529*
- crack growth, crack opening displacement, finite element techniques, fracture, microcracks, reinforced concrete, Petersson (P.-E.), *7539*
- crack growth, crack initiation, experimental mechanics, fracture mechanics, fracture toughness, Morozov (E.M.), *7572*
- acoustic measurements, flaw detection, microstructures, nondestructive tests, residual stresses, stress intensity factor, Kino (G.S.), Barnett (D.M.), (et al.), *7586*
- elastoviscoplasticity, fracture mechanics, shells (cylindrical), work hardening, yield condition, Carmignani (C.), Vitale (E.), *8151*
- cracks, energy release, fracture mechanics, mixed mode fracture, path integrals, Herrmann (A.G.), Herrmann (G.), *8388*
- bending, cracks, fracture criteria, pipelines, plasticity, Zahoor (A.), Kanninen (M.F.), *8400*
- crack opening displacement, elastoplasticity, fracture criteria, Willoughby (A.A.), Pratt (P.L.), (et al.), *8401*
- crack opening displacement, creep rupture, path integrals, Leckie (F.A.), Mcmeeking (R.M.), *8402*
- crack propagation, fracture mechanics, fracture toughness, Turner (C.E.), *8404*
- crack tip geometry, nondestructive tests, strain measurement, stresses, ultrasonics, King (R.B.), Herrmann (G.), (et al.), *8425*
- crack initiation, crack opening displacement, Smith (E.), *9402*
- crack growth, crack opening displacement, Xiao (Y.-G.), Huang (G.-H.), *10286*
- bending, cracks, material testing, pipes, stability theory, Wilkowski (G.M.), Zahoor (A.), (et al.), *10301*

Jaberolansar (H.), approximation theory, continuum mechanics, finite difference methods, lattices, Peddieson (J.) Jr., *9252*

Jackiewicz (M.), design (optimum), monte carlo analysis, trusses, *506*

Jackson (C.P.), computer programming, finite element techniques, gaussian integration, matrices, mesh generation, *4191*

Jackson (J.E.) Jr., fluid-structure interaction, nonlinear analysis, underwater acoustics, Cost (T.L.), *1606*

Jackson (J.G.) Jr., compressibility, experimental results, loading rate, sand, Ehrgott (J.Q.), (et al.), *4465*

Jackson (M.C.), fatigue, shafts, stress concentration, turbines, Umans (S.D.), *4483*

Jackson (R.J.), see Chan (D.P.), *4346*

Jacob (K.), airfoils, separation, subsonic flow, *6095*

Jacob (K.A.), anisotropy, composite materials, photoelasticity, stress analysis, *5141*

Jacobs (E.W.), see Humphrey (J.A.C.), *10585*

Jacobs (H.R.), see Kodres (C.A.), *3834*

Jacobsen (M.J.), see Kays (J.L.), *3927*
- see Newhall (B.K.), *5728*
- see Newhall (B.K.), *11904*

Jaeger (J.H.), bones, experimental methods, mechanical properties, Merckx (D.), (et al.), *9047*

Jaeger (L.G.), see Bakht (B.), *10364*

Jaeger (T.A.) eds., nuclear reactors, probability theory, seismic loading, soil structure interaction, Boley (B.A.), *1325, book*
- dynamic response, reactor structures, seismic loading, Boley (B.A.), *1463, book*
- analysis, dynamic analysis, failure, reactor structures, Boley (B.A.), *1464, book*
- containment, dynamic loads, reactor structures, structural analysis, Boley (B.A.), *1465, book*
- laser plasma interaction, materials properties, nuclear fusion, power generation, thermal loading, Boley (B.A.), *1781, book*
- fluid-structure interaction, mechanics, nuclear reactors, pressure vessels, vibration (forced), Boley (B.A.), *3565, book*
- modeling, nuclear reactors, reactor structures, Boley (B.A.), *6548, book*
- mechanics, modeling, reactor structures, structural analysis, Boley (B.A.), *7618, book*

Jaffre (J.), convection, finite element techniques, flood flow, *8947*

Jahanmir (S.), abrasion, friction (sliding), lubrication (boundary), wear, *9947*

Jahn (K.-D.), dynamic properties, experimental mechanics, vibration, *6284*

Jain (A.K.), buckling, hysteresis, multistory frames, Goel (S.C.), (et al.), *3339*
- airplane structures, eccentrically braced frames, frames, seismic loading, Goel (S.C.), *5891*

Jain (D.L.), see Goel (G.C.), *4803*

Jain (M.K.), dynamic stability, mathematical methods, nonlinear mechanics, splines, *4149*

Jain (R.K.), panels, pressure distribution, transonic flow, wing body combinations, Redeker (G.), (et al.), *2741*
- see Kochar (G.T.), *2891*
- boundary value problems, dust, initial value problems, stability, uniqueness, Prabha (S.), *7961*
- articulated surfaces, currents, fluid-structure interaction, nonlinear analysis, offshore structures, Kirk (C.L.), *8627*

Jain (S.C.), cooling, cooling ponds, heat transfer, thermal diffusion, *5904*
- bed load, piers, scour, sediment transport, Fischer (E.E.), *6601*
- bridges, cylindrical bodies, piers, scour, *9518*

Jain (S.K.), see Shankar (R.), *11826*

Jain (V.K.), finite element techniques, machining (electrochemical), tools, Pandey (P.C.), *3429*

Jaini (C.K.C.), algorithms, linkages, mechanisms, synthesis, Rao (A.C.), *4550*

Jakovenko (A.), channel flow, noncircular pipes, viscoplasticity, *11507*

Jakubowski (S.), see Walczak (W.), *332*

Jakus (K.), ceramics, fracture mechanics, glass, life expectancy, random loading, Ritter (J.E.) Jr., *2458*

Jaleel (A.), see Aziz (A.), *772*

Jaluria (Y.), see Ramachandran (N.), *769*
- see Appaiaswamy (A.V.), *3686*
- convection, dissipation, heat addition, laminar flow, velocity profiles, *8681*

Jame (Y.-W.), freezing, heat transfer, mass transfer, porous media, Norum (D.I.), *9900*

James (B.W.), see Brand (G.F.), *3903*

James (D.D.), see Joudi (K.A.), *7828*

James (I.N.), see Gibbon (J.D.), *4653*
- boundary layer (atmospheric), ekman layer, geostrophic flow, rotating fluids, *8990*

James (L.A.), alloys, crack growth, fatigue, *4476*

James (R.D.), see Fosdick (R.L.), *2216*
- beams (curved), beams (elastic), buckling, columns, postbuckling behavior, *6243*

Jamet (P.), see Bonnerot (R.), *3820*
- conduction (unsteady), convergence, crank-nicolson scheme, mesh generation, stability theory, *4181*

Jami (A.), diffraction, elliptic equations, finite element techniques, hydrodynamics, infinite medium, Polyzakis (M.), *6103*

Jana (R.N.), see Seth (G.S.), *11812*

Janach (W.), abrasion, experimental methods, rocks, schmidt hammer, Mermingod (A.), *10264*

Janakiraman (P.A.), see Lakshminarayanan (P.A.), *1761*

Janata (J.), convection, heat transfer (combined modes), radiant interchange, *8753*

Janeschitz-Kriegl (H.), see Van Aken (J.A.), *5384*

Janetzke (D.C.), see Kaza (K.R.V.), *866*

Janezic (D.), see Borstnik (B.), *8903*

Janigro (A.), see Stecco (S.S.), *2358*

Janin (G.), see Bond (V.R.), *3919*

Jankowski (D.F.), see Takeuchi (D.I.), *6677*

Jankowski (J.), computing techniques, corrosion, materials properties, Juchniewicz (R.), *8381*

Janowitz (G.S.), channel flow, flow obstructions, free boundary, stratified flow, two dimensional flow, *8532*

Janszky (J.), dislocations, dynamic properties, *5522*

Jarchow (F.), bearings (journal), bearings (roller), friction, gear trains, transmissions (planetary), Theissen (J.), *2566*

- dynamic loads, gear trains, runge kutta method, transmissions (planetary), Vonderschmidt (R.), *3575*

Jaric (J.), continuum theory, granular media, thermoelasticity, Golubovic (Z.), *4000*

- acceleration waves, constitutive equations, granular media, Rankovic (S.), *5098*

Jarzebski (A.B.), convergence, developing flow, ducts (variable area), power law fluids, velocity profiles, Wilkinson (W.L.), *10443*

Jaswon (M.A.), biharmonic equation, differential equations (partial), elasticity (linear), Shidfar (A.), (et al.), *7272*

Javadpour (S.H.), see Williams (E.W.), *2646*

Javed (M.A.), aerodynamic loads, rolling motion, sideslip, vortex lines, wings, Hancock (G.J.), *2727*

Jawad (M.H.), see Armstrong (W.P.), *5805*

Jaworski (A.R.), boundary elements, composite materials, conduction (steady), inclusions, *932*

Jay (B.), beams, finite difference methods, structural analysis, *1445*

Jayaraman (H.B.), cable supported structures, curved surfaces, finite element techniques, nonlinear structures, Knudson (W.C.), *9144*

Jayatilaka (A. De S.), brittle materials, compression, concrete, tests, ultimate strength, Nanayakkara (V.K.N.), *7563*

Jeandel (D.), see Cambon (C.), *9604*

Jeary (A.P.), see Severn (R.T.), *7608*

Jeffers (J.), see Micklow (J.), *7781*

Jefferson (R.J.), see Johns (B.), *9828*

Jefferson (T.R.), see Scott (C.H.), *6136*

Jeffrey (A.), fourier transform, multiple scales, oscillations, Kawahara (T.), *9111*

- channels, flow irregularities, gravity waves (surface), submerged bodies, Mvungi (J.), *11676*

Jeffrey (D.J.), cylindrical bodies, stokes flow, two dimensional flow, walls, Onishi (Y.), *572*

- see Savage (S.B.), *12062*

Jeffries (C.), see Deckker (B.E.L.), *7693*

Jemelka (P.), see Stussi (U.W.), *2710*

Jena (G.), see Rath (R.S.), *4617*

Jena (S.K.), boundary layer, convection (free), polar fluids, similarity methods, Mathur (M.N.), *1976*

Jendrzejczyk (J.A.), see Chen (S.S.), *4662*

- see Chen (S.S.), *11647*

Jenkins (J.T.), contact stresses, tires, wheels, *1458*

- beams (torsional), elastic bodies, rods, torsion, *2220*

Jenkins (P.E.), see Oler (J.W.), *5452*

Jenkins (W.M.), see Crawford (A.B.), *503*

Jenner (A.), materials processing, surface flaws, thermoplasticity, upset forging, Bai (Y.), (et al.), *4496*

Jensen (F.B.), ocean, sound propagation, underwater acoustics, Kuperman (W.A.), *6911*

- ocean, shallow water, sound fields, sound propagation, *11899*

Jensen (O.K.), convection, diffusion, weighted residual methods, Finlayson (B.A.), *10694*

Jenssen (N.A.), see Balchen (J.G.), *6147*

Jentsch (L.), contact problems, elasticity (three dimensional), green function, half space, *7261*

Jessel (M.J.M.), acoustics, energy methods, noise abatement, *11995*

Jeswani (M.L.), electric spark discharge, machining (electrochemical), water, *3428*

jet boundaries, interfaces, layered media, magneto fluid dynamics, transport phenomena, Bashtovoi (V.G.), Krakov (M.S.), *9794*

- boundary layer (control), laminar mixing, magneto fluid dynamics, walled structures, Kiryushchenko (E.V.), Sheryazdanov (G.B.), *11813*

jet engines, acoustics, noise, sound generation, supersonic flow, Zhmulin (E.M.), Munin (A.G.), (et al.), *910*

- control, design, multivariable systems, turbofan engines, Taiwo (O.), *2179*
- gas turbines, multivariable systems, optimal control, Dehoff (R.L.), Hall (W.E.) Jr., *2186*
- noise, noise abatement, turbofan engines, Fujii (S.), Nishiwaki (H.), (et al.), *3961*
- noise abatement, sound propagation, wings, Wang (M.E.), *4770*
- fans, noise, Sofrin (T.G.), Mathews (D.C.), *4773*
- noise, noise abatement, supersonic flow, Clauss (J.S.) Jr., Wright (B.R.), (et al.), *4805*
- noise, noise abatement, trailing edge, wall jets, Joshi (M.C.), Yu (J.C.), *4806*
- blades, finite element techniques, impact, solid solid interface, Brown (K.W.), Krahula (J.L.), *7211*
- energy conservation, fuels, gas turbines, noise abatement, Gal-Or (B.) ed., *7805, book*
- acoustic waves, airplane structures, numerical methods, scattering, Bayliss (A.), *7942*
- aerodynamic interference, afterbodies, airplanes, wind tunnels, Fenning (A.E.), Lucas (E.J.), *8642*
- airplanes, noise abatement, Parthasarathy (S.P.), Cuffel (R.F.), (et al.), *9852*
- sound generation, sound propagation, Rice (E.J.), Heidelberg (L.J.), *11929*
- shock waves, sound generation, supersonic flow, Norum (T.D.), Seiner (J.M.), *11956*
- flight, sound generation, turbulent flow, Obermeier (F.), *11969*
- flight tests, noise abatement, Fitzsimmons (R.D.), Mckinnon (R.A.), (et al.), *11993*

jet flaps, annuli, incompressible flow, singular integral equations, vortices, wings, Belotserkovskii (S.M.), Lifanov (I.K.), *10496*

- aerodynamic performance, airplanes, numerical methods, Akentev (V.G.), Gulyaev (V.V.), *10513*

jet propulsion, aerodynamic interference, lift, wings, Maarsingh (R.A.), *2735*

jet pumps, amplification, pumps, Tippetts (J.R.), *221*

jet streams, condensation, plates, Balakleyevskiy (Yu.I.), *1726*

- atmospheric circulation, coasts, Philander (S.G.H.), *4959*
- atmospheric circulation, kelvin-helmholtz instability, turbulence (geophysical), Klostermeyer (J.), Ruster (R.), *5933*
- experimental methods, finite element techniques, Van Thiel (M.), Levatin (J.), *6367*
- fluidized beds, gas solid interface, Klimenko (Yu.G.), Rabinovich (M.I.), (et al.), *7016*

Jetley (S.K.), see Bhattacharyya (S.K.), *5992*

jets, cutting, rocks, water, Rehbinder (G.), *431*

- arch dams, damping, hydraulic jump, radiating flow, Petrillo (A.), Ranieri (M.), (et al.), *561*
- molecular beams, nozzles, supersonic flow, Abraham (O.), Binn (J.H.), (et al.), *623*
- free jets, pulsejets, Lai (J.C.S.), Simmons (J.M.), *628*
- aerodynamics, counterflow, finite difference methods, Peck (R.E.), *630*
- fluid injection, helium, penetration, supersonic flow, Vlagov (V.V.), Masyakin (N.E.), (et al.), *631*
- hydrodynamic stability, liquids, surface tension, Bogy (D.B.), *633*
- counterflow, hydrodynamic stability, liquids, Entov (V.M.), Yarin (A.L.), *636*
- hydrodynamic stability, mathematical models, two dimensional flow, Morris (P.J.), *637*
- engines, near ground effects, vtol, Lummus (J.R.), *687*
- combustion (turbulent), convection (forced), impact jets, impingement, isothermal processes, thermal measurements, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*
- cooling, heat transfer, impact jets, impingement cooling, turbomachinery, Hrycak (P.), *729*
- convection (forced), engines, heat transfer, pipe flow, swirl flow, Caton (J.A.), Heywood (J.B.), *735*
- buoyant flow, plumes, thermal plumes, Ogino (F.), Takeuchi (H.), (et al.), *751*
- crossflow, heat transfer, impingement cooling, Florschuetz (L.W.), Truman (C.R.), (et al.), *762*
- combustion, flames, interaction, schlieren methods, transition, Yule (A.J.), Chigier (N.A.), (et al.), *841*
- expansion, impingement, stability, Shahaf (M.), Goldman (Y.), (et al.), *842*
- fluidized beds, granular media, two phase flow, Buevich (Yu.A.), Kolesnikova (N.A.), (et al.), *935*
- cavitation, polymers, two phase flow, Hoyt (J.W.), Taylor (J.J.), *946*
- erosion, penetration, water, Walters (W.P.), Scott (B.R.), *1011*
- polymers, thin films, viscoelastic fluids, Entov (V.M.), Kestenboim (Kh.S.), (et al.), *1487*
- cellular flow, experimental results, nozzles, underexpanded jets, Borisov (Yu.Ya.), Podolskii (S.L.), *1569*
- axisymmetric flow, turbulent mixing, Navoznov (O.I.), Pavelev (A.A.), *1572*
- coherent structure, compressible flow, experimental results, noise (aerodynamic), turbulence, Armstrong (R.R.) Jr., *1580*
- finite difference methods, turbulence, turbulence model, Leschziner (M.A.), Rodi (W.), *1581*
- experimental results, shear flow, suppression, turbulence, Zaman (K.B.M.Q.), Hussain (A.K.M.F.), *1582*
- laser doppler velocimeters, spectral analysis, velocity measurement, Roberts (J.B.), Downie (J.), (et al.), *1645*
- compressible flow, noise, pressure measurement, Hoglund (L.E.), Siddon (T.E.), *1649*
- convection, porous walls, Soundalgekar (V.M.), Vighnesam (N.V.), (et al.), *1676*
- flames (diffusion), hydrogen, Kennedy (I.M.), Kent (J.H.), *1744*
- incompressible flow, inviscid fluid, starting, unsteady flow, Kraemer (K.), *2583*
- cavitation inception, hydraulic structures, vapor pressure, Bruschin (J.), *2588*
- bed load, erosion, sediment transport, shear stress, Chatterjee (S.S.), Ghosh (S.N.), *2591*
- cavitation flow, separated flow, Gurevich (M.I.), *2657, book*
- developing flow, velocity profiles, Rankin (G.W.), Sridhar (K.), *2659*
- channels (closed), return flow, Sallam (T.M.), Kaji (M.), (et al.), *2660*
- laminar flow, supersonic flow, Myshenkov (V.I.), *2662*
- carbon dioxide, crossflow, helium, Borisov (V.N.), Broev (V.V.), (et al.), *2664*
- crossflow, injection, Khan (Z.A.), Whitelaw (J.H.), *2665*
- acoustic waves, waves, Thwaites (S.), Fletcher (N.H.), *2669*
- fire control, trajectories, Hatton (A.P.), Osborne (M.J.), *2670*
- temperature, turbulence, Lau (J.C.), *2672*
- edge effects, vortex rings, Ko (N.W.M.), *2673*
- axisymmetric flow, elliptic equations, Megahed (I.E.A.), Elghobashi (S.E.), *2675*
- feedback, impingement, Ho (C.-M.), Nosseir (N.S.), *2677*
- boundary layer, coherent structure, pipe flow, turbulence (structure), Cantwell (B.J.), *2688*

- turbulence, turbulence (structure), turbulence model, Goldschmidt (V.W.), Young (M.F.), (et al.), *2690*
- diffusion, stratified flow, turbulence, Hofer (K.), Hutter (K.), *2696*
- laser doppler velocimeters, three dimensional flow, turbulence, Hjertager (B.H.), Magnussen (B.F.), *2765*
- aerodynamic excitation, eddies, noise (aerodynamic), shear flow, turbulence, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- compressible flow, numerical methods, supersonic flow, Akimov (G.A.), Sobkolov (B.N.), *3639*
- decay, similarity methods, Middleton (D.), *3682*
- orifices, perturbation methods, Geer (J.P.), Strikwerda (J.C.), *3686*
- asymptotic methods, immiscible fluids, Eliseev (V.I.), Sukhikh (L.I.), (et al.), *3687*
- interaction, turbulent flow, two dimensional flow, Hoch (J.), Jiji (L.M.), *3688*
- buoyant flow, flow reversal, Mcdougall (T.J.), *3689*
- counterflow, similarity methods, supersonic flow, Kalinin (V.M.), Melbard (A.M.), *3691*
- axisymmetric flow, galerkin method, swell, Omodei (B.J.), *3692*
- acceleration waves, axial flow, capillary waves, Ingebo (R.D.), *3694*
- annular flow, vortices, wakes, Ko (N.W.M.), *3695*
- axisymmetric flow, diagnostics, optical techniques, Santoro (R.J.), Semerjian (H.G.), (et al.), *3762*
- boiling, critical heat flux, heat transfer, impact jets, impingement cooling, water, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- charged particles, fog, nozzles, precipitation, survey, Frost (W.), Collins (F.G.), (et al.), *3893*
- channel flow, free boundary, mixing, velocity measurement, weirs, Naib (S.K.A.), *4576*
- exhaust gases, numerical methods, plumes, shock waves, supersonic flow, Dash (S.M.), Thorpe (R.D.), *4590*
- compressible flow, mathematical models, nozzles, plumes, Kraiko (A.N.), Shelomovskii (V.V.), *4591*
- axisymmetric flow, transition, Cantwell (B.J.), *4631*
- axisymmetric flow, swirl flow, Epikhin (V.E.), *4632*
- excitation, oscillating bodies, Simmons (J.M.), Lai (J.C.S.), (et al.), *4633*
- fluidics, interaction, Dohta (S.), Ohsaka (K.), (et al.), *4634*
- pressure gradient, wakes, Antonia (R.A.), PhanThien (N.), *4635*
- currents, oceanography, Mcwilliams (J.C.), *4873*
- free boundary, incompressible flow, two dimensional flow, Alt (H.W.), Caffarelli (L.A.), (et al.), *4977*
- finite difference methods, impingement, inviscid fluid, plates, stagnation point, Rubel (A.), *5394*
- axisymmetric flow, compressible flow, mathematical models, supersonic flow, Grabitz (G.), *5414*
- chemical reactions, compressible flow, nonequilibrium flow, numerical methods, supersonic flow, Kireev (V.I.), Pirumov (U.G.), *5418*
- reynolds number, velocity profiles, Antonia (R.A.), Chambers (A.J.), (et al.), *5450*
- axisymmetric flow, coherent structure, spark discharge, Sokolov (M.), Kleis (S.J.), (et al.), *5451*
- interfaces, turbulent flow, Oler (J.W.), Jenkins (P.E.), (et al.), *5452*
- arrays, diffusers, diffusion, mixing, Lee (J.H.W.), *5454*
- coaxial jets, entrance region, subsonic flow, Ko (N.W.M.), Au (H.), *5455*
- excitation, experimental results, hydrodynamic stability, turbulence (structure), Hussain (A.K.M.F.), Zaman (K.B.M.Q.), *5461*
- combustion, turbulent mixing, Buriko (Yu.Ya.), Lebedev (A.B.), *5631*
- combustion, electrical properties, flames (diffusion), Kidin (N.I.), Makhviladze (G.M.), *5633*
- combustion chambers, gas turbines, mixing, Spiridonov (Yu.A.), Premet (E.I.), (et al.), *5637*
- sound fields, sound propagation, Fletcher (N.H.), Thwaites (S.), *5768*
- acoustic waves, impedance, interface phenomena, sound propagation, turbulence (geophysical), Daigle (G.A.), *5784*
- collision models, drops, Segal (R.B.), Gaysinskiy (Yu.F.), *5819*
- extrusion, non newtonian flow, plastic flow, Kaithia (N.L.), *6576*
- non newtonian flow, suspensions, Entov (V.M.), Kordonskii (V.I.), (et al.), *6586*
- laminar flow, stick-slip, swell, velocity profiles, Trogdon (S.A.), Joseph (D.D.), *6660*
- entrainment, plumes, Schneider (W.), *6664*
- non newtonian flow, poiseuille flow, Naghdi (P.M.), *6665*
- plumes, turbulent flow, List (E.J.), *6666*
- additives, drag reduction, Hoyt (J.W.), Taylor (J.J.), (et al.), *6669*
- vortex rings, vortices, Schneider (P.E.M.), *6670*
- diffusers, shallow water, Lee (J.H.), Jirka (G.H.), *6671*
- developing flow, turbulent flow, velocity profiles, Laryushkin (M.A.), Dvoinishnikov (V.A.), *6672*
- aerodynamics, combustion chambers, combustors, mixing, Grigorenko (P.P.), Spiridonov (Yu.A.), (et al.), *6844*
- blades, film cooling, gas turbines, Ito (S.), Goldstein (R.J.), (et al.), *6860*
- lubricants (liquid), non newtonian flow, polymers, squeeze films, Oliver (D.R.), Shahidullah (M.), *7103*
- drag reduction, polymers, slots, viscoelasticity, Fruman (D.H.), Gallvel (P.), *7667*
- compressible flow, drag, nozzles, numerical methods, supersonic flow, Mikhail (A.G.), Hankey (W.L.), (et al.), *7688*
- base flow, compressible flow, supersonic flow, Wagner (B.), White (R.A.), *7689*
- aerosols, experimental results, nozzles, Hagele (J.), *7728*
- slots, turbulent flow, Marsters (G.F.), Fotheringham (J.), *7733*
- atomized liquids, turbulent flow, two phase flow, unsteady flow, Lebedev (O.N.), Solonenko (O.P.), *7734*
- mixing layers, supersonic flow, turbulent flow, Karpman (I.M.), Traskovskii (V.D.), *7737*
- mathematical models, turbulent flow, Kazachkov (I.V.), *7739*
- coherent structure, multiple scales, turbulence, Mankbadi (R.), Liu (J.T.C.), *7752*
- free shear layer, turbulence, turbulence model, Ahmadi (G.), *7753*
- noise, sound generation, Schaffer (M.), Hancy (J.P.), *7934*
- discharges, hydraulic instruments, orifices, reynolds number (high), Akers (A.), *8510*
- orifices, reservoirs, viscous buckling, Munson (B.R.), *8529*
- axisymmetric flow, boundary layer, impact jets, impingement, plates, Pamadi (B.N.), Belov (I.A.), *8540*
- compressible flow, mixing, numerical methods, Lukerchenko (N.N.), *8545*
- axisymmetric flow, compressible flow, flow obstructions, impingement, shock waves, supersonic flow, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- liquids, nonlinear theory, Kiselev (O.M.), Kothyar (L.M.), *8594, book*
- digital simulation, turbulent flow, Edwards (A.V.J.), Morfey (C.L.), *8598*
- impingement, wall jets, Kotansky (D.R.), Glaze (L.W.), *8599*
- crossflow, scale effects, Rajaratnam (N.), Gangadharaiah (T.), *8601*
- buoyancy, plumes, turbulence, Bruyatsku (E.V.), *8616*
- nuclear reactors, pipe flow, tube bundles, Krebs (L.), Bremhorst (K.), (et al.), *8725*
- diffusers, mixing, plumes, Sorrell (F.Y.), Smith (B.W.), *9593*
- axisymmetric flow, self excitation, Hasan (M.A.Z.), Hussain (A.K.M.F.), *9595*
- mixing layers, vorticity, Martinez-Val (R.), *9597*
- axisymmetric flow, turbulence, turbulent mixing, Long (M.B.), Chu (B.T.), *9605*
- aerodynamic interference, base pressure, blunt bodies, wakes, Gai (S.L.), Kapoor (K.), *9957*
- aerodynamic interference, flight (unsteady), ground effect, moving surfaces, vtol, Kamman (J.H.), Hall (C.L.), (et al.), *9668*
- boundary layer, flames, plates, Gateau (P.), Puechberty (D.), (et al.), *9758*
- combustion (submerged), immiscible fluids, Sukhov (G.S.), Yarin (L.P.), *9776*
- liquid metals, magneto fluid dynamics, stabilization, theory, Martynov (S.I.), Taktarov (N.G.), *9793*
- acoustics, edge effects, impingement, Holger (D.K.), Wilson (T.A.), (et al.), *9848*
- aeration, free boundary, gravity waves, weirs, Rogala (R.), *10392*
- cavities, compressible flow, heating, pressure change, resonance, supersonic flow, Kuptsov (V.M.), Filippov (K.N.), *10417*
- crossflow, entrainment, Rajaratnam (N.), Gangadharaiah (T.), *10452*
- fluid injection, generation, oscillations, Favre-Marinet (M.), Binder (G.), (et al.), *10456*
- diffusion, stratification, turbulent flow, Hofer (K.), Hutter (K.), *10457*
- control, decay, Davis (M.R.), *10461*
- developing flow, impingement, Iwamoto (J.), Deckker (B.E.L.), *10462*
- heat transfer, mass transfer, turbulence, turbulent flow, Mills (A.F.), Kim (S.), (et al.), *10473*
- concentration, mixing, particle fluid flow, scattered light, Long (M.B.), Chu (B.T.), (et al.), *10539*
- evaporation, heat transfer, impingement, mass transfer, navier stokes equation, Mujumdar (A.S.), Li (Y.-K.), (et al.), *10665*
- gas liquid interaction, mass transfer, wakes, Karlsson (H.T.), Aberg (S.), (et al.), *10686*
- centrifugation, layered media, magneto plasma dynamics, rotating fluids, Levin (V.B.), *10741*
- decomposition, experimental methods, interfaces, magneto fluid dynamics, Arkhipenko (V.I.), Barkov (Yu.D.), *10745*
- flow irregularities, noise abatement, sound generation, Shivashankara (B.N.), Bhat (W.V.), *10795*
- pressure measurement, pulsatile flow, spherical bodies, unsteady flow, Kovasznay (L.S.G.), Tani (I.), (et al.), *11381*
- compressible flow, dimensional analysis, impingement, plates, Gerasimov (Yu.I.), *11399*
- annular flow, exit, gravity, nozzles, Tuck (E.O.), *11484*
- liquid liquid interface, mixing, pipe flow, Fitzgerald (S.D.), Holley (E.R.), *11492*
- axisymmetric flow, impingement, particle dynamics, turbulent flow, Korobko (V.I.), Malyi (I.N.), (et al.), *11512*
- combustors, design, gas turbines, Novick (A.S.), Arvin (J.R.), (et al.), *11513*
- axisymmetric flow, entrainment, mixing, two dimensional flow, Vatsa (V.N.), Werle (M.J.), (et al.), *11517*
- capillary flow, hydrodynamic stability, liquids, Filyand (L.V.), *11531*
- compressible flow, turbulent flow, Sivirkin (V.F.), *11543*
- eddies, experimental methods, shear flow, turbulence (structure), turbulent flow, Mumford (J.C.), *11545*
- drops, film flow, hydrodynamic stability, viscous flow, Abramov (Yu.I.), *11582*

- transforms, vortices, wakes, Ko (N.W.M.), Leung (K.C.), *11955*
- acoustic properties, thermal effects, Kantola (R.A.), *11962*

Jeuck (P.R.) III, see Zvirin (Y.), *6811*
Jezequel (L.), beams, moving loads, *5150*
Jezso (K.), shells (cylindrical), shells (long), stress analysis, *9268*
Jha (P.K.), see Singh (P.N.), *5070, book*
Jhaveri (B.), cellular motions, monte carlo analysis, rayleigh benard instability, thermal excitation, transient effects, transition flow, Homsy (G.M.), *8709*
Jiang (F.-R.), boundary layer, boundary value problems, elliptic equations, perturbation theory, singular perturbations, *9108*
Jiji (L.M.), see Hoch (J.), *3688*

- see Palaszewski (S.J.), *8911*

Jimbo (M.), differential equations (ordinary), linear equations, mathematical methods, monodromy deformation, Miwa (T.), (et al.), *7160*
Jimenez (J.), free jets, laminar flow, viscoelastic fluids, Daguenet (M.), (et al.), *8595*
Jimma (T.), combined loading, dislocations, plastic waves, Inoue (H.), (et al.), *4445*
Jin (F.S.), anisotropic media, elasticity (nonhomogeneous), nonhomogeneous media, *5095*
Jinno (H.), see Miyata (N.), *8219*
Jirka (G.H.), cooling, cooling ponds, heat transfer, Watanabe (M.), *5925*

- see Lee (J.H.), *6671*

Jirousek (J.), beams (curved), finite element techniques, isoparametric elements, plates (stiffened), shells (thick), stiffened structures, *7212*
Jofriet (J.C.), bolted joints, connections, contact stresses, design, flanges, Sze (Y.), (et al.), *7635*
Johann (W.), see Siekmann (J.), *9877*
Johansson (A.V.), see Greenspan (H.P.), *10450*
Johns (A.I.), see Scott (A.C.), *6754*
Johns (B.), beaches, breakers, surf, surface waves, Jefferson (R.J.), *9928*
Johns (K.C.), beams, dynamic behavior, reinforced concrete, stiffness, Belanger (M.D.), *5351*
Johnson (C.D.), dynamic analysis, linear systems, stability theory, *11056*
Johnson (C.M.), coding, computer aided design, condensers, numerical methods, optimization, Vanderplaats (G.N.), (et al.), *10625*
Johnson (C.P.), eigenvalue problems, iterative methods, vibration, Craig (R.R.) Jr., (et al.), *9120*
Johnson (C.R.) Jr., adaptive systems, flexible bodies, modal control, space vehicle structures, *8849*
Johnson (D.A.), airfoils, boundary layer (turbulent), laser doppler velocimeters, transonic flow, Bachalo (W.D.), (et al.), *684*
Johnson (D.B.), see Huston (J.C.), *4546*
Johnson (E.A.), see Huck (R.J.), *6920*

- see Huck (R.J.), *8960*

Johnson (E.R.), eddies, stratified flow, vortices, *978*

- baroclinic waves, stratified flow, *5937*
- see Plaut (R.H.), *7406*

Johnson (G.C.), acoustics, continuum theory, elastoplasticity, *8328*

- acoustic measurements, acoustoelasticity, deformation (plastic), nondestructive tests, residual stresses, *10316*

Johnson (H.M.), see Allison (J.S.), *4252*
Johnson (J.H.), see Carpenter (K.), *1764*
Johnson (J.J.), see Benda (B.J.), *8965*
Johnson (J.N.), see Duffey (T.A.), *7420*
Johnson (K.L.), see Greenwood (J.A.), *10696*
Johnson (M.C.), boundary layer (thermal), heat transfer, rotating disks, stanton number, turbulent flow, *2803*
Johnson (M.W.), see Widera (G.E.O.), *289*

- bones, ceramics, piezoelectrics, Williams (W.S.), (et al.), *6008*
- bones, electroelasticity, materials properties, piezoelectrics, Chakkalakal (D.A.), (et al.), *9051*

Johnson (M.W.) Jr., micromechanisms, polymers, rheology, viscoelastic fluids, Segalman (D.), *5386*
Johnson (R.C.) Jr., aerodynamic loads, drag, vegetation, wind loads, wind tunnels (environmental), wood, Ramey (G.E.), (et al.), *9862*
Johnson (R.E.), film flow, spherical bodies, stokes flow, surface tension, *7668*
Johnson (R.K.), see Brunson (B.A.), *7430*
Johnson (R.L.), see Marloff (R.H.), *2411*
Johnson (R.P.), beams (composite), cracking, reinforced concrete, shrinkage, slabs, Allison (R.W.), *2265*
Johnson (R.S.), see Mollendorf (J.C.), *9599*
Johnson (T.D.) Jr., see Rao (D.M.), *9952*
Johnson (T.R.), boilers, combustors, heat exchangers, magneto plasma dynamics, open loop systems, Berry (G.F.), (et al.), *5680*
Johnson (W.), folds, plastic behavior, sheet metal, Yu (T.X.), *434*

- see Ghosh (S.K.), *3296*
- see Das Talukder (N.K.), *3425*
- impact, plates, rods, Sengupta (A.K.), (et al.), *7435*
- piercing, punch problems, tubes, Reid (S.R.), (et al.), *9429*
- see Bai (Y.L.), *11662*

Johnson (W.S.), see Dvorak (G.J.), *283*
Johnsson (C.-A.), design, hull propeller interaction, propellers (marine), vibration (flow induced), *9009*
Johnston (A.M.), cycles, heat exchangers, solar energy, thermodynamic processes, O'Sullivan (C.H.), *4724*
Johnston (G.W.), dynamic analysis, rigid bodies, rotating bodies, *4143*
Johnston (J.P.), see Kerschen (E.J.), *5773*

- see Kerschen (E.J.), *5777*
- see Eaton (J.K.), *9568*

Johnston (M.H.), see Owen (R.B.), *10659*
Johnstone (R.M.), adaptive systems, control, model reference systems, stability theory, Shah (S.L.), (et al.), *11096*
Johri (A.K.), rayleigh problem, shear flow, unsteady flow, viscoelastic fluids, Singhal (R.K.), *4568*
joints, fracture, mining, photography, rocks, Hagan (T.O.), *426*

- rocks, scale effects, shear strength, Barton (N.), Bandis (S.), *429*
- bolted joints, connections, structural analysis, Richard (R.M.), Gillett (P.E.), (et al.), *525*
- offshore structures, photoelasticity, tubes, Fessler (H.), Little (W.J.G.), *1390*
- ablators, arcjets, insulating materials (thermal), reentry, space shuttle, Brewer (W.D.), Pittman (C.M.), (et al.), *1723*
- beams, floors, spliced joints, wood structures, Soltis (L.A.), *3297*
- connected bodies, contact stresses, machine elements, thermoelasticity, Attia (M.H.), Kops (L.), *3969*
- deformation, fracture, pore pressure, rocks, Dhowian (A.W.), *5264*
- human body, lubrication (boundary), lubrication (elastohydrodynamic), lubrication (hydrostatic), Mamell (P.), White (R.K.), *5996*
- axial loading, failure, shells (cylindrical), Bushnell (D.), Holmes (A.M.C.), (et al.), *6259*
- dynamic stability, stability theory, vibration (torsional), Kotera (T.), *6280*
- beams (intersecting), elastic waves, impact, Desmond (T.P.), *6325*
- rocks, statistical theory, stereological interpretation, Warburton (P.M.), *7451*
- rocks, statistical theory, stereological interpretation, Warburton (P.M.), *7452*
- annular flow, cables, cooling, electrical components, thermal effects, Abdel Aziz (M.M.), Riege (H.), *7845*
- bolted joints, design, plasticity, riveted joints, Surtees (J.O.), Gildersleeve (C.P.), (et al.), *8482*
- acoustic waves, elastic waves, structural elements, transmission, Rosenhouse (G.), Ertel (H.), (et al.), *8857*
- experimental results, plates (circular), shells (cylindrical), Szoki (J.), *9272*
- elastic behavior, models, rocks, Gerrard (C.M.), *9366*
- bed thickness, fracture, joint spacing, models, rocks, Ladeira (F.L.), Price (N.J.), *9371*
- limit analysis, rocks, wedges, Chan (H.C.), Einstein (H.), *9372*
- buildings, foundations, piles, rock mechanics, shear, Dight (P.M.), Chiu (H.K.), *9485*
- adhesives, bending, composite materials, shear stress, stress analysis, Yucaoglu (U.), Updike (D.P.), *9488*
- cartilage, human body, lubrication (hydrodynamic), squeeze films, viscoelasticity, Manohar (K.), Nigam (K.M.), *9958*
- connections, design (optimum), mathematical programming, steel, Douty (R.), *10354*
- biological joints, human body, linkages, Kinzel (G.L.), *10379*
- joint spacing, rocks, Beyer (F.), *11182*

Jonas (J.J.), see G'Sell (C.), *2235*
Jonas (P.R.), annular flow, rotating fluids, thermal instability, variable fluid properties, *5557*
Jones (A.R.), see Bayvel (L.P.), *8088, book*
Jones (A.V.), cavitation, containment, cooling, damage, nuclear reactors, *8517*
Jones (B.), convergence, series, transforms, *10040*
Jones (C.B.), air conditioning, cooling, radiant interchange, solar collectors, Smetana (F.O.), *1722*
Jones (D.J.), axisymmetric flow, bodies of revolution, fredholm equations, least squares, singularities, source distribution, *7681*
Jones (D.L.), see Yang (J.N.), *6197*
Jones (D.P.), lungs, respiratory system, spirometry, volumetric meters, O'Connor (S.A.), (et al.), *1962*
Jones (E.), asymptotic behavior, boundary layer, boundary value problems, *2640*
Jones (H.L.), design (optimum), floating bodies, mooring, Nelson (J.K.) Jr., *10343*
Jones (H.W.), acoustic measurements, noise (traffic), noise abatement, sound propagation, Stredulinsky (D.C.), (et al.), *1822*
Jones (J.), see Sritharan (T.), *3498*
Jones (J.R.), see Backhouse (C.), *7253*
Jones (N.), see Gomes De Oliveira (J.), *407*

- see Tooth (A.S.), *11336*

Jones (O.C.) Jr. ed., heat transfer, nuclear power, nuclear reactors, safety, *6810*
Jones (R.), crack opening displacement, crack tip geometry, finite element techniques, patching, Callinan (R.J.), *473*

- airplane structures, composite materials, patching, residual stresses, thermal effects, Callinan (R.J.), *2980*

Jones (R.E.), acoustic measurements, noise abatement, sandwich construction, *911*

- membranes, mesh generation, nonlinear characteristics, plates, shells, Vos (R.G.), *5027*

Jones (R.M.), bending, bimodulus materials, computing techniques, extension, laminates, Morgan (H.S.), *4358*
Jones (R.R.K.), digital simulation, noise (traffic), noise abatement, sound generation, Hothersall (D.C.), (et al.), *1812*
Jones (S.M.), calibration, impulse, sound fields, transducers (pressure), ultrasonics, Carson (P.L.), (et al.), *7946*
Jones (T.B.), augmentation, electro fluid dynamics, heat transfer, liquids, *5542*
Jones (W.V.), see Hunter (S.D.), *5717*
Jonsson (I.G.), see Christoffersen (J.B.), *6697*
• see Christoffersen (J.B.), *9626*
Joos (F.M.), see Glicksman (L.R.), *10842*
Joosten (G.E.H.), see Molag (M.), *944*
Jordaan (A.M.), see Yavin (Y.), *11075*
Jordinson (R.), axisymmetric flow, contraction, ducts, two dimensional flow, Rodger (J.G.), *3574*
Josberger (E.G.), see Huppert (H.E.), *9926*
Joseph (D.D.), see Trogdon (S.A.), *6660*
Joseph (P.S.), ocean waves, spectra, swell, wind-wave interaction, Kawai (S.), (et al.), *12073*
Joshi (M.C.), jet engines, noise, noise abatement, trailing edge, wall jets, Yu (J.C.), *4806*
Joshi (S.D.), heat transfer, laminar flow, pipe flow, pseudoplastic fluids, Bergles (A.E.), *7826*
• heat transfer, laminar flow, non newtonian flow, nusselt number, pipe flow, power law fluids, rheology, Bergles (A.E.), *10682*
Joshi (S.M.), control, damping, gyrodynamics, gyroscopic stabilization, space vehicle structures, stabilization, Groom (N.J.), *7415*
• damping, optimal control, space frames, space structures, space vehicle structures, stability theory, Groom (N.J.), *8850*
Joslyn (H.D.), see Dring (R.P.), *8656*
Jospin (R.J.), see Feijoo (R.A.), *6235*
Jost (G.S.), airplane structures, fatigue, life expectancy, statistical design, Costolloe (S.P.), *1408*
Jost (H.P.), energy conservation, friction, lubrication, tribology, wear, Schofield (J.), *3980*
Jotaki (T.), see Tomita (Y.), *1839*
Jou (D.), see Pavon (D.), *3767*
Jouanna (P.), see Saix (C.), *3995*
Joudi (K.A.), contamination, nucleate boiling, pool boiling, James (D.D.), *7828*
Joulain (P.), burning rate, convection (forced), heat transfer, mass transfer, solids, *10663*
Joulin (G.), flames (diffusion), hydrodynamic stability, thermal diffusion, thermal instability, Mitani (T.), *11783*
Jovanovic (D.), see Muller (G.), *5259*
Jovanovic (J.), approximations, boundary layer, perturbation methods, Askovic (R.), *4597*
Jury (E.I.), automatic control, digital control, sampled data systems, *135*
Jusem (J.C.), see Barcilon (A.), *7677*
Jutras (R.R.), axial compressors, blades, cascades, flutter, testing equipment, Stallone (M.J.), (et al.), *10764*
Juza (J.), constitutive equations, equations of state, high pressure, water, Sifner (O.), (et al.), *5521*
Joyce (J.A.), fracture mechanics, j-integral, steel, Ernst (H.), (et al.), *5302*
Joyce (T.M.), dissipation, ocean air interaction, turbulence (geophysical), *8983*
Joyce (W.B.), absorption, reverberation, series expansion, *6932*
Ju (F.), see Bennett (J.G.), *8747*
Ju (F.D.), see Bennett (J.G.), *11658*
Juang (J.N.), control, dynamics, space vehicles, spinning bodies, Balas (M.J.), *8852*
Juchniewicz (R.), see Jankowski (J.), *8381*
Judge (G.W.), knees, mechanical design, prosthetic devices, Fisher (L.), *1957*
Judy (J.), see Toridis (T.G.), *4188*
Jumarie (G.), mathematical models, modeling, pattern recognition, relativity, *104*
jump conditions, optimal control, state space techniques, Utkin (V.I.), Yang (K.D.), *133*
• estimation, linear systems, observers, Caglayan (A.K.), *1144*
• design, gauss-poisson processes, linear systems, stochastic control, Segall (A.), *1154*
• continuum mechanics, moving surfaces, singular waves, waves, Beda (G.), *4127*
• algorithms, optimal control, Ashchepkov (L.T.), Badam (U.), *4275*
• continuum mechanics, moving surfaces, singular waves, Kraiko (A.N.), *4929*
• elasticity (nonlinear), fluids, shock waves, Ting (T.C.T.), *4930*
• discontinuities, maximum principle, optimal control, Getz (W.M.), Martin (D.H.), *6139*
junctions, slabs, sound propagation, stochastic processes, transmission, vibration, Wohle (W.), Beckmann (T.), (et al.), *6894*
• inserts, shells (shallow), shells (spherical), stress analysis, Varga (K.), *9269*
• modes, plates, sound propagation, vibration, Craven (P.G.), Gibbs (B.M.), *11947*
Juneja (B.L.), see Bhandari (N.C.), *7396*
Jung (G.), see Basilico (C.), *6775*
Junger (M.C.), acoustic waves, bodies of revolution, cylindrical bodies, scattering, *7940*
• acoustic waves, cavities, elastic bodies, porous media, propagation, *11922*
Junkins (J.L.), attitude control, maneuverability, optimal control, Turner (J.D.), *7824*
Jurina (L.), see Gioda (G.), *9918*

K

Kabamba (P.T.), algorithms, large scale systems, modal analysis, model reduction, *4210*

Kabanov (A.S.), atmospheric circulation, eddies, meteorology (physical), Shmerlin (B.Ya.), *1901*

Kabanov (V.V.), pressurized components, shells (cylindrical), shells (nonlinear), stability theory, Zheleznov (L.P.), *11112*

Kabbaj (A.), channels, friction factor, perturbation methods, tidal waves, Le Provost (C.), *11610*

Kabelevskii (M.G.), see Getsov (L.B.), *4817*

Kachalov (A.P.), acoustic waves, scattering, shells, *3937*

Kachanov (L.), crack growth, creep, damage, life expectancy, *7497*

Kachurina (L.R.), see Gruza (G.V.), *4085*

Kaczkowski (Z.), boundary value problems, elastic foundations, plates (anisotropic), plates (nonhomogeneous), *7332*

Kaczmarek (H.), see Chaboche (J.-L.), *7482*

Kaczmarek (J.), failure, holes, mining, plastic behavior, tunnels, *8155*

Kadic (A.), continuum mechanics, disclinations, dislocations, micromechanics, *6036*

Kadotani (K.), electrical properties, laminates, mechanical properties, Aki (F.), (et al.), *10132*

Kadyshnikov (V.M.), atmospheric circulation, hydrodynamic stability, oscillations, stratification, *3029*

Kafarov (V.V.), algorithms, computing techniques, matrices (sparse), Meshalkin (V.P.), (et al.), *5005*

Kafri (O.), see Stricker (J.), *5512*

Kaftanoglu (B.), see Erden (A.), *3430*

Kaganovich (S.L.), modes, optimization, pontryagin's extremal, sliding, *2129*

Kagawa (T.), piles, seismic loading, soil structure interaction, Kraft (L.M.) Jr., *9919*

Kagawa (Y.), circuits, finite element techniques, sound fields, Yamabuchi (T.), *1758*

Kage (M.), see Nisitani (H.), *6422*

Kagiwada (H.), see Hess (J.), *8175*

Kago (T.), see Kato (Y.), *12068*

Kahrib (E.), see Besserdich (H.), *824*

Kaibyshev (O.A.), alloys, deformation, grain boundaries, plasticity, superplastics, Valiev (R.Z.), *4515*

Kailath (T.), estimation, least squares, state space techniques, statistical control, stochastic processes, *2025*

Kaimal (M.R.), blood flow, compressional waves, flexible walls, pulsatile flow, viscoelastic fluids, *6020*

Kairento (A.-L.), biomechanics, gait, human body, Hellen (G.), *7110*

Kaiser (E.W.), combustion, emissions, hydrocarbons, oil films, spark ignition engines, Lorusso (J.A.), (et al.), *7882*

Kaiser (P.K.), models, rocks, strength, time dependence, Morgenstern (N.R.), *6402*

- creep, deformation, rock mechanics, time dependence, tunnels, Morgenstern (N.R.), *10365*

Kajdas (C.), friction (sliding), lubricants, lubrication (boundary), Nita (J.), (et al.), *7080*

Kaji (M.), see Sallam (T.M.), *2660*

- boilers, flow reversal, furnaces, models, visualization, Sallam (T.M.), (et al.), *2764*

Kakabadze (D.P.), adaptive systems, algorithms, discrete systems, Kubintsev (G.M.), (et al.), *4312*

Kakac (S.) eds., design criteria, heat exchangers, heat exchangers (multipass), radiant interchange, two phase flow, Bergles (A.E.), (et al.), *2825, book*

Kakarala (C.R.), buoyant flow, convection, heat transfer, pipe flow, supercritical flow, turbulent flow, Thomas (L.C.), *3790*

Kalaba (R.), analytical methods, computing techniques, eigenvalues, matrix methods, Spingarn (K.), (et al.), *20*

- algorithms, constraints, numerical methods, optimal control, regulator problem, Spingarn (K.), *5054*
- eigenvalues, matrices, nonsymmetric matrices, optimization, stability theory, variational methods, Spingarn (K.), (et al.), *6078*
- discrete systems, estimation, kalman filters, nonlinear theory, Tesfatsion (L.), *11067*

Kalachev (M.G.), estimation, filters, nonlinear methods, nonlinear systems, Nikonov (V.G.), *3161*

Kalachinskii (S.F.), see Zakharov (V.M.), *5959*

Kalachnikov (A.A.), geomechanics, spherical bodies, vibration (torsional), *7022*

Kalaidzhan (S.E.), creep, material testing, semiconductors, stress relaxation, testing equipment, Krivoruchko (S.P.), (et al.), *496*

Kalam (M.A.), anisotropic media, cylindrical bodies, rayleigh ritz method, thermoelasticity (steady), *4819*

Kalashnikov (V.V.), cybernetics, markov processes, mathematical methods, *2024*

Kalb (C.E.), counterflow, tubes, two phase flow, Smith (J.K.) Jr., *4012*

Kaldas (M.M.), plates (rectangular), rayleigh ritz method, vibration (free), Dickinson (S.M.), *2333*

- buckling, plates (rectangular), rayleigh ritz method, vibration (free), Dickinson (S.M.), *8307*

Kalenkovich (E.E.), finite difference methods, forecasting, weather forecasting, *989*

Kaleps (I.), see Burns (M.L.), *9049*

Kalinchuk (V.V.), elastic waves, layered media, prestressed structures, Poliakova (I.B.), *400*

Kalinin (E.K.), see Berlin (I.I.), *1671*

Kalinin (V.M.), counterflow, jets, similarity methods, supersonic flow, Melbard (A.M.), *3691*

Kalinin (V.S.), see Voveris (A.V.), *8296*

Kalinin (V.V.), see Chernyak (V.G.), *11443*

Kalinina (S.V.), see Alimpiyev (V.I.), *3671*

Kalinovskii (Yu.V.), conduction (heat), integral methods, two component flow, *7856*

Kalis (Kh.E.), boundary layer, electrical conductivity, magneto fluid dynamics, numerical analysis, vortex flow, Kolesnikov (Yu.B.), *9786*

- analytical methods, electrical conductivity, magneto fluid dynamics, velocity profiles, vortex flow, Kolesnikov (Yu.B.), *11832*

Kaliski (S.), compressional waves, cylindrical waves, explosions, nuclear fusion, plasma, *2902*

Kaliszky (S.), see Heinloo (M.), *10349*

Kalita (W.), moving media, plane flow, polymers, porous walls, Lubonski (J.), *8561*

- annuli, laminar flow, moving surfaces, porous walls, Szaniawski (A.), *9584*

Kalkwijk (J.P.T.), bends, numerical methods, rivers, secondary flow, shallow water, De Vriend (H.J.), *1494*

Kallay (N.), machinability, metallurgy, particles, steel, surface effect, Matijevic (E.), *552*

Kallen (E.), dissipation, hydrodynamic stability, Wiin-Nielsen (A.C.), *8987*

kalman filters, design, estimation, tracking, Weiss (H.), Moore (J.B.), *119*

- biomathematics, detection, encephalographic data, stochastic processes, Ishii (N.), Iwata (A.), (et al.), *129*
- algorithms, discrete systems, Simkin (M.M.), *181*
- geophysics, linearization, navigation, Dmitriev (S.P.), Shimelevich (L.I.), *184*
- estimation, navigation, space vehicles, Madrid (G.A.), Bierman (G.J.), *194*
- dynamic effects, nonlinear systems, Yun (C.-B.), Shinozuka (M.), *513*
- estimation, nonlinear systems, quasilinearization, stochastic processes, Wagdi (M.N.), *2098*
- detection, faults, reliability analysis, Clark (R.N.), Setzer (W.), *2099*
- calibration, electrostatic gyro, estimation, gyroscopes, mathematical models, navigation, strapdown systems, Blanchard (R.L.), *2162*
- estimation, filters, identification, Leondes (C.T.), Siu (T.K.), *4218*
- algorithms, discrete systems, identification, linear systems, stochastic systems, Konishi (K.), Inouchi (K.), (et al.), *4219*
- filters, stability theory, tikhonov-correct problem, Podchukayev (V.A.), *4293*
- anchors, optimal control, ship maneuvers, ships, Balchen (J.G.), Jenssen (N.A.), (et al.), *6147*
- design, filters, optimization, wiener-hopf technique, Melnikov (B.G.), *9180*
- digital simulation, estimation, martingales, Moek (G.), *10034*
- inertial guidance, model reduction, navigation, Bar-Itzhack (I.Y.), *10083*
- discrete systems, estimation, nonlinear theory, Kalaba (R.), Tesfatsion (L.), *11067*
- algorithms, phased array, sensitivity, Cooke (C.C.), *11079*

Kalmutskii (V.S.), coatings, fatigue, iron, life expectancy, probability, Frunze (I.P.), *5285*

- bimetallic materials, coatings, machine elements, probability theory, reliability, strength, *7600*

Kalmykov (G.I.), statistical mechanics, thermodynamic functions, thermodynamic processes, *6751*

Kalner (D.A.), dynamic loads, steel, tensile strength, tests, Basin (F.I.), *3497*

Kalnin (P.P.), see Kokoshvili (S.M.), *1193*

Kalnin (V.M.), hydrodynamics, modeling, propellants, pumps, rockets, Shterstannikov (V.A.), *2872*

Kaloni (P.N.), channel flow, cosserat fluids, hamel flow, micropolar media, polar fluids, Kamel (M.T.), *550*

Kalpakci (B.), emulsions, fluid mechanics, permeability, porous media, shear, surface profiles, surfactants, Klaus (E.E.), (et al.), *9887*

Kalsi (M.S.), film thickness, friction (solid fluid), lubrication (elastohydrodynamic), seals, *9962*

Kalthia (N.L.), extrusion, jets, non newtonian flow, plastic flow, *6576*

Kalumuck (K.M.), fluid-structure interaction, shells (fluid-filled), vibration, Huber (P.W.), *7771*

Kalva (S.P.), bubble dynamics, shock tubes, shock waves, Zvirin (Y.), *2991*

Kalyuzhnyi (I.L.), groundwater, porous media, soils, Pavlova (K.K.), *5899*

Kalyuzhnyy (G.V.), see Alekseychik (M.I.), *6142*

Kamachi (M.), dispersion, gravity waves (surface), oscillatory flow, reynolds number (small), ripples, viscous flow, Honji (H.), *5473*

Kamala (V.), bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), reynolds equation, stiffness, *1943*

Kamat (M.P.), differential equations (ordinary), energy methods, integration, nonlinear structures, structural analysis, Hayduk (R.J.), *1181*

- geometric nonlinearities, minimization, newton method, nonlinear analysis, structural analysis, Watson (L.T.), (et al.), *7188*
- buckling, dynamic response, nonlinear analysis, snap-through, structural analysis, Hayduk (R.J.), *10362*

Kambe (R.), orr sommerfeld equation, shear flow, turbulence (homogeneous), Doi (M.), (et al.), *648*
Kambe (S.-I.), bending, bridges (box girder), torsion, *520*
Kambe (T.), scattering, sound, vortex rings, Oo (U.M.), *11963*
Kamel (M.), see Watson (N.), *2869*
- combustion chambers, diesel engines, fuel economy, heat transfer, injection systems, Watson (N.), *11797*

Kamel (M.T.), see Kaloni (P.N.), *550*
Kamenyarzh (Ya.A.), constitutive equations, existence theorems, plasticity, yield criteria, *267*
Kameswara Rao (C.V.S.), damping, dynamic properties, random loading, *2319*
Kameyama (E.), see Kamiya (N.), *3992*
Kamildzhanov (A.Kh.), reflection, solar collectors, solar radiation, *10636*
Kamimoto (G.), see Ono (K.), *5691*
Kaminer (A.A.), aerodynamic interference, blades, cascades, damping, oscillating bodies, separated flow, turbomachinery, Dunaev (A.V.), (et al.), *8833*
Kaminski (G.), see Ross (E.L.), *10312*
Kaminskii (A.A.), crack growth, dugdale model, fracture mechanics, griffith cracks, survey, viscoelastic materials, *5301*
- crack growth, dugdale model, polymers, viscoelastic materials, *8410*

Kamiwano (M.), laminar flow, optical techniques, particle dynamics, particle fluid flow, velocity measurement, vessels, Motoyoshi (T.), (et al.), *7813*
Kamiya (N.), cylindrical bodies, deformation (finite), thermoelasticity (steady), Kameyama (E.), *3992*
Kamiyama (S.), bubbly flow, cavitation inception, choked flow, sodium, water, Yamasaki (T.), *11753*
Kamle (S.), see Doyle (J.F.), *5317*
Kamm (R.D.), see Thirsk (R.B.), *1954*
Kamman (J.H.), aerodynamic interference, flight (unsteady), ground effect, jets, moving surfaces, vtol, Hall (C.L.), (et al.), *9668*
Kammeyer (P.C.), periodic orbits, restricted three body problem, stability theory, *9813*
Kamotani (Y.), convection, heat, internal flow, space vehicles, vibration, Prasad (A.), (et al.), *2606*
Kampfen (Y.), see Mulhaupt (B.), *3772*
- crushing, crystals, impact, Tobler (W.), *12056*

Kamtekar (A.G.), beams, elastoplasticity, plates, *3525*
Kan (C.L.), buildings, seismic loading, torsion, Peter (Y.S.), (et al.), *4848*
Kan (H.P.), see Ratwani (M.M.), *10130*
Kan (K.), see Aso (K.), *11659*
Kan (N.Z.), see Kuang (V.Z.), *2878*
Kan (S.N.), bending, buckling, shells (cylindrical), shells (stiffened), Kaplan (Yu. I.), (et al.), *9292*
Kan (T.-K.), see Stoll (R.D.), *11907*
Kana (D.D.), dynamic response, seismic loading, structural analysis, vibration, *393*
- nuclear power, nuclear reactors, seismic loading, *10727*

Kanamori (H.), see Kikuchi (M.), *9908*
Kanarachos (A.), convection, finite element methods (hybrid), least squares, viscous flow, *3144*
- automobiles, design, exhaust gases, internal combustion engines, optimization, Seifert (H.), *4564*
- boundary layer, convection, diffusion, numerical methods, *11764*

Kanarskiy (M.V.), boundary layer (turbulent), coatings, compliant materials, flow measurement, Teslo (A.P.), *7701*
Kanatani (H.), see Kanba (T.), *6244*
Kanatani (K.-I.), continuum mechanics, granular media, mass transfer, *5823*
- continuum mechanics, granular media, mass transfer, *5825*

Kanaun (S.K.), contact problems, shells (cylindrical), stress concentration, structural support, Elkovskaya (T.M.), *1237*
Kanayama (Y.), see Shikida (M.), *2501*
Kanba (T.), collapse, columns, failure, framed structures, structural analysis, welded structures, Kanatani (H.), (et al.), *6244*
Kandaswamy (P.), see Eltayeb (I.A.), *5935*
Kane (R.S.), see Cho (S.M.), *1687*
Kane (T.R.), see Chen (J.), *3923*
- algorithms, computing techniques, equations of motion, orbit mechanics, space vehicle structures, space vehicles, Levinson (D.A.), *7916*

Kaneko (A.), see Matsunaga (N.), *602*
- oscillatory flow, ripples, sand, shape, *2382*

Kaneko (I.), constraints, design (optimum), displacement, elastoplasticity, optimization, Maier (G.), *3515*
Kaneko (K.), differentiation, hardening, hardening (kinematic), incremental analysis, plasticity, *3267*
Kanemoto (T.), boundary layer, interference, wakes, Toyokura (T.), (et al.), *3683*
Kaneta (K.), fatigue, seismic loading, welded structures, Kohzu (I.), *7045*
Kang (J.Z.), design (optimum), *11321*
Kang (S.-W.), boundary layer, combustion (turbulent), computing techniques, Levatin (J.L.), *7710*
Kania (L.), see Dziurski (A.), *9977*
Kanninen (M.F.), see Zahoor (A.), *5303*
- see Zahoor (A.), *8400*
- see Hahn (G.T.) eds., *8415, book*

Kanno (T.), see Okabe (H.), *10893*
Kano (H.), see Nishimura (T.), *5041*
Kano (M.), heat transfer (atmospheric), measurements, oceanography, temperature, Miyauchi (M.), (et al.), *1909*
Kanoh (H.), see Terasaka (H.), *10618*
Kanok-Nukulchai (W.), finite element techniques, large displacement, shells (nonlinear), Taylor (R.L.), (et al.), *1240*
Kanok-Nukulchai (W.), diffusion, elastic bodies, finite element techniques, porous media, Suaris (V.W.), *7997*
Kanovich (M.Z.), see Roginskii (S.L.), *7307*
Kansa (E.J.), coal, combustion, dust, models, pyrolysis, Perlee (H.E.), *8800*
- combustion, compressible flow, numerical methods, subsonic flow, *11423*

Kant (R.), immiscible fluids, plates (parallel), pulsatile flow, rarefied gases, *7696*
- acceleration, hall effect, laplace transform, magneto fluid dynamics, porous surfaces, *8819*

Kant (T.), bending (elastic), finite difference methods, plates (simply supported), *6233*
Kantola (R.A.), acoustic properties, jets, thermal effects, *11962*
Kanunnikov (I.P.), blades, gas turbines, spectral analysis, vibration, Sidorenko (M.K.), *5216*
Kanury (A.M.), see Holve (D.J.), *10717*
Kanwal (R.P.), see Datta (S.), *246*
Kao (B.G.), see Fosdick (R.L.), *1484*
Kao (R.), collapse, elastoplasticity, imperfections, shells (plastic), shells (spherical), *3322*
- buckling (large amplitude), imperfections, plastic behavior, shells (spherical), *6260*
- buckling (nonlinear), dynamic behavior, imperfections, shells (spherical), *6266*

Kao (T.K.), diesel engines, heat sources, modeling, pistons, thermal diffusion, Wallace (F.J.), *8805*
Kao (T.W.), coriolis forces, currents, oceanography, *10865*
Kao (Y.C.), see Goldman (A.), *6794*
Kao (Y.K.), see Atluri (R.), *5044*
Kaper (H.G.), boltzmann equation, carleman equation, initial value problems, kinetic theory, nonlinear analysis, Leaf (G.K.), *4972*
Kapila (A.K.), dirichlet problem, kinetics, spherical bodies, Matkowsky (B.J.), (et al.), *2852*
- catalyzed ignition, dynamics, kinetics, *2859*
- chemical kinetics, chemical reactions, cylindrical bodies, Matkowsky (B.J.), *7878*

Kapitanova (T.P.), see Pinus (N.Z.), *12076*
Kaplan (M.D.), boron, fibers, propagation, torsion, ultrasonics, vibration, Veremeenko (S.V.), *6482*
Kaplan (Yu. I.), see Kan (S.N.), *9292*
Kaplun (A.B.), see Kuliev (V.D.), *7486*
Kapoor (K.), see Gai (S.L.), *9657*
Kapur (A.D.), see Grover (A.S.), *4434*
Kapur (V.K.), see Yadav (J.S.), *9030*
Kapusta (A.B.), cylindrical bodies, duct flow, magneto fluid dynamics, pumps, theory, Shamota (V.P.), *2894*
- channel flow, helical flow, magneto fluid dynamics, pumps, two dimensional flow, Zibold (A.F.), (et al.), *10756*
- channel flow, drag coefficient, helical flow, magneto fluid dynamics, pumps, Likhacheva (A.I.), (et al.), *11808*

Kapustin (V.N.), aerosols, electric effects, scattering, Zagainov (V.A.), (et al.), *4833*
Kar (M.K.), friction (sliding), heat transfer (direct contact), polymers, wear, Bahadur (S.), *5973*
Kar (R.C.), beams (cantilever), beams (variable cross section), nonconservative systems, structural stability, *5176*
- beams (variable cross section), follower forces, structural stability, viscoelastic materials, *6267*

Karabin (M.E.), see Schwirian (R.E.), *10071*
Karabutov (A.A.), see Gusev (V.E.), *11964*
Karadeniz (H.), see Altinisik (D.), *11649*
Karadi (G.M.), numerical methods, porous surfaces, seepage, De Miguel (E.), (et al.), *7982*
Karahan (M.E.), birefringence, bottom irregularities, boundary layer, separation, visualization, Peterson (A.W.), *6598*
Karakin (A.V.), geophysics, porous media, tectonics, viscous flow, Lobkovskii (L.I.), *8931*
Karamanlidis (D.), finite element methods (hybrid), frames, nonlinear analysis, structural stability, *3334*
Karamysheva (A.I.), see Miropolskii (Z.L.), *4648*
Karapetian (A.V.), dynamic stability, kinematics, mathematical methods, *4938*
Karapetian (K.S.), compression, concrete, saturation, strength, tension, Kotikian (R.A.), (et al.), *7566*
Karasev (A.A.), see Trubitsyn (A.P.), *8007*
Karasev (S.N.), contact problems, elastic foundations, plates (circular), singular integral equations, *252*
Karashima (K.), aerodynamic heating, blunt bodies, chemical reactions, fluid injection, Nakahashi (K.), *1733*

K

• see Yamamoto (Y.), *9635*

Karasudhi (P.), see Niumpradit (B.), *2385*

• columns, plates (rectangular), slabs, structural analysis, waffle construction, Hovichitr (I.), (et al.), *8241*

Karavaev (V.N.), see Klein (G.K.), *10259*

Karavai (M.F.), analytical methods, mathematical models, reliability analysis, statically indeterminate structures, Sogomonyan (E.S.), *3177*

Karchkov (V.A.), see Lushchaev (G.A.), *7822*

Kard (P.), bessel functions, layered media, one dimensional waves, wave equations, *4163*

Kareem (A.), loads, torsion, wind loads, *515*

Karihaloo (B.L.), complex variables, cracks, edge dislocations, kinked crack, mixed mode loading, singular integral equations, *4500*

• beam columns, bending, design (optimum), optimization, Parbery (R.D.), *4523*

• see Parbery (R.D.), *4528*

• beam columns, design (minimum weight), simply supported structures, *7597*

• beams, design (minimum weight), design (optimum), vibration, Parbery (R.D.), *8441*

• design (minimum weight), design (optimum), eigenvalues, simply supported structures, Parbery (R.D.), *10347*

Karimbaev (T.D.), shells (long), shells (outer), shells (sandwich), structural stability, Zhumabaev (M.Zh.), (et al.), *1254*

• computing techniques, convergence, laplace transform, Nozhnitskii (Yu.A.), *6093*

Karimov (A.I.), see Koltunov (M.A.), *10181*

Karimov (A.U.), see Kurbatkin (G.P.), *4072*

Karimov (I.K.), couette flow, heat transfer, magneto fluid dynamics, plates (parallel), theory, Ryadno (A.A.), *11810*

Karimov (S.N.), see Narzullaev (B.N.), *6426*

Karius (D.), dissipation, experimental mechanics, friction, vibration (forced), *4408*

Karlin (A.S.), see Wallis (G.B.), *1843*

Karlsen (L.K.), aerodynamics, cables, dynamic analysis, nonlinear analysis, towing cables, *1215*

Karlsson (H.T.), gas liquid interaction, jets, mass transfer, wakes, Aberg (S.), (et al.), *10686*

Karlsson (K.R.), numerical methods, porous walls, transonic flow, wind tunnels, Sedin (Y.C.-J.), *1520*

Karmel (A.), see Sweet (L.M.), *6056*

Karnaukhov (V.G.), see Gumenyuk (B.P.), *1188*

• constitutive equations, equations of state, thermodynamic properties, Senchenkov (I.K.), *3771*

• see Gumenyuk (B.P.), *5802*

Karnikova (I.), see Djubek (J.), *1446*

Karnopp (D.), drives, hydraulic machinery, optimal control, transducers, *4554*

• bond graphs, control, nonlinear theory, simulation, *6122*

Karp (A.H.), atmosphere, numerical methods, planetary atmospheres, radiation, *7065*

Karpenko (G.Ya.), see Ivanov (A.G.), *9839*

Karpenko (L.N.), see Boiko (A.V.), *6458*

Karpenko (V.A.), see Aleksandrov (V.M.), *244*

Karpenko (V.V.), acoustic waves, cylindrical bodies, diffraction, *6933*

Karpinskaya (N.N.), algorithms, computing techniques, convex block programming, mathematical programming, *158*

Karpman (I.M.), jets, mixing layers, supersonic flow, turbulent flow, Traskovskii (V.D.), *7737*

Karpov (N.I.), approximation methods, beams (elastic), boundary value problems, elasticity (linear), plates, *7329*

Karpov (V.S.), balancing, bearings (gas lubricated), bearings (spherical), lubricants (gas), rotors, Prokulevich (L.A.), *9973*

Karpp (R.R.), see Duffey (T.A.), *9422*

Karppi (R.A.J.), cracking, elastoplasticity, finite element techniques, stress concentration, welding, Toyoda (M.), (et al.), *2461*

Karpuzov (D.S.), see Genchev (Zh.D.), *657*

Kartashov (E.M.), brittle fracture, crack propagation, microcracks, Bartenev (G.M.), *9400*

Kartashov (G.G.), see Kuznetsov (N.D.), *8305*

• see Kuznetsov (N.D.), *11137*

Kartvelishvili (V.M.), numerical methods, optimization, reinforced bodies, stiffened structures, Mironov (A.A.), (et al.), *11325*

Karvatskii (L.M.), see Koval (V.P.), *6423*

Karvinen (R.), convection, heat transfer, transient effects, *732*

Karzhikhov (A.V.), boundary value problems, initial value problems, inviscid fluid, penetration, unsteady flow, Ragulin (V.V.), *2598*

Kasahara (A.), see Lordi (N.J.), *9929*

Kasano (H.), beams (flexural), cylindrical bodies, elasticity (three dimensional), Oshima (H.), (et al.), *3230*

Kasatkin (B.A.), half space, nondestructive tests, piezoelectric devices, transducers, ultrasonics, Pavin (N.Ya.), *6485*

Kase (S.), filaments, fluid injection, power law fluids, viscoelastic fluids, Nakajima (T.), *548*

Kashevskii (B.E.), ferrous metals, interaction, liquid metals, magneto fluid dynamics, torque, *11816*

Kashkarov (V.P.), see Artyukh (L.Yu.), *5415*

• see Zakarin (E.A.), *9779*

Kasiak (M.), cylindrical waves, elastic bodies, free boundary, reflection, Wlodarczyk (E.), *6354*

Kaspar (J.), photography, schlieren methods, visualization, *8668*

Kasparson (V.A.), see Dudkin (L.M.), *4214*

Kasparyan (S.G.), see Aldushin (A.P.), *7881*

Kassir (M.K.), crack propagation, elasticity (three dimensional), stress intensity factor, *465*

Kassoy (D.R.), chemical kinetics, detonation, detonative ignition, explosions, thermal explosions, Poland (J.), *9824*

• detonation, detonative ignition, explosions, thermal explosions, Poland (J.), *11893*

Kast (W.), friction factor, heat transfer, mass flow, mass transfer, *5625*

Kastelic (J.), collagen, composite materials, stress strain relationships, tendons, Palley (I.), (et al.), *7106*

Kastens (K.A.), see Mudie (J.D.), *5963*

Kasuba (R.), damping, design, dynamic loads, gears (spur), runge kutta method, stiffness, Evans (J.W.), *8471*

Katagiri (M.), convection (free), cylindrical bodies, laminar flow, transient effects, Pop (I.), *3800*

Kataya (M.), see Mori (S.), *3835*

Katayama (T.), boundary layer (turbulent), flow measurement, wind generation, wind tunnels (environmental), Gotoh (S.), (et al.), *4603*

Kate (J.M.), field tests, nonhomogeneous soils, swell, Katti (R.K.), *6376*

Katelkin (A.S.), cauchy problem, compressible flow, numerical methods, unsteady flow, Mikhailov (V.V.), *11412*

Kathiresan (K.), see Atluri (S.N.), *9463*

Katinas (V.I.), crossflow, spectra, tube bundles, vortex shedding, Markevicius (A.A.), (et al.), *6706*

• crossflow, statistical design, tube bundles, vibration (flow induced), viscous flow, Lukosevicius (K.K.), (et al.), *10767*

Katkovnik (V.Ya.), algorithms, estimation, mathematical programming, optimization, stochastic processes, Kheisin (V.E.), *2138*

Katkovskii (L.V.), see Kruglov (V.I.), *5588*

Kato (K.), see Hanaki (K.), *1344*

• mechanical properties, metals, rolling, Saito (Y.), (et al.), *5278*

Kato (S.), cooling towers, imperfections, reinforced concrete, shells, stress analysis, Yokoo (Y.), *3552*

• see Kato (T.), *6182*

• bearings (unlubricated), friction (sliding), friction (solid solid), lubricants (solid), lubrication (boundary), Yamaguchi (K.), (et al.), *9018*

Kato (T.), see Hori (Y.), *4897*

• contact stresses, deformation (plastic), roughness, Kato (S.), (et al.), *6182*

Kato (Y.), cranes, structural stability, trucks, Ito (H.), *6545*

• fluidized beds, heat transfer, multiphase flow, Uchida (K.), (et al.), *9896*

• fluidized beds, heat transfer (combined modes), multiphase flow, packed beds, Kago (T.), (et al.), *12068*

Katoch (D.C.), see Banerjee (M.B.), *10467*

Katona (M.G.), constitutive equations, creep, elastoviscoplasticity, viscoelastic materials, viscoplasticity, *8195*

Kats (A.), filters, geomechanics, Shubik (B.M.), *5888*

Kats (A.V.), experimental methods, ocean waves, spectra, Spevak (I.S.), *11582*

Kats (I.Ya.), filters, identification, minimax techniques, Kurzhanskii (A.B.), *2141*

Kats (S.A.), noise, seismic waves, spectral analysis, Ptetsov (S.N.), *4034*

Katsaros (K.B.), boundary layer (thermal), heat transfer (atmospheric), *12074*

Katsikadelis (J.T.), see Kounadis (A.N.), *2911*

Katsumata (M.), earthquakes, focal point, initiation, Yoshida (A.), *9910*

Katsyuba (O.A.), see Zhdanov (A.I.), *3181*

Katti (C.P.), see Chawla (M.M.), *57*

Katti (R.K.), see Kate (J.M.), *6376*

Katto (Y.), boiling, convection (forced), critical heat flux, water, *744*

• boiling, convection (forced), critical heat flux, critical region, *745*

• boiling, convection (forced), critical heat flux, critical region, nucleate boiling, *746*

• boiling, channel flow, critical heat flux, *4701*

• annular flow, convection (forced), cooling, critical heat flux, tube bundles, *7833*

Katz (J.), see Corsiglia (V.R.), *3731*

Katzenbach (R.), dams, displacement, earth dams, settlements, Breth (H.), *521*

Katzir (S.), see Hermesh (R.), *1795*

Kaufman (B.), orbit mechanics, perturbation methods, restricted three body problem, *3918*

Kaufman (C.), see Unni (S.), *5741*

Kaufman (H.), see Travassos (R.), *9185*

Kaufman (H.R.), see Wilbur (P.J.), *5666*

Kaufman (J.G.), containment, fracture mechanics, lng tankers, natural gas, tanks, Bucci (R.J.), (et al.), *1349*

Kaufman (W.B.), heat pipes, space vehicles, Tower (L.K.), *5601*

Kaul (M.K.), dynamic response, floating bodies, ship structures, *9460*

Kaup (D.J.), nonlinear analysis, resonance, scattering, three wave resonance, wave interactions, *10482*

Kausel (E.), see Ushijima (R.), *8017*

Kavlakan (M.V.), elastic foundations, elasticity (linear), half space, Mikhailov (A.M.), *5075*
Kawabuchi (M.), see Sato (J.), *2955*
Kawagoe (S.), see Matsuo (K.), *2763*
Kawaguchi (I.), see Ishigaki (H.), *999*
Kawaguchi (K.), numerical analysis, rolling, wrapping, *1343*
Kawaguchi (T.), algorithms, mathematical programming, multiprocessor systems, queue theory, Nakano (H.), (et al.), *2152*
Kawahara (M.), bottom irregularities, finite element techniques, ocean air interaction, shallow water, surge, Nakazawa (S.), (et al.), *3023*
• estuaries, finite element techniques, liquid liquid interface, tides, Morihira (M.), (et al.), *11609*
Kawahara (T.), see Jeffrey (A.), *9111*
Kawai (R.), see Iwatsubo (T.), *3372*
• see Nakagawa (N.), *5238*
• see Iwatsubo (T.), *11144*
Kawai (S.), hydrodynamic stability, ocean air interaction, shear flow, surface waves, wind-wave interaction, *4857*
• see Joseph (P.S.), *12073*
Kawai (T.), barriers, diffraction, sound, sound fields, *11968*
Kawakami (F.), acoustics, decay, energy methods, reverberation, Yamaguchi (K.), *11931*
Kawakami (T.), cavities, cylindrical bodies, stress analysis, Nakahara (I.), (et al.), *2212*
Kawakita (K.), bearings (ball), design, experimental methods, hall effect, Halling (J.), *4113*
Kawamura (H.), see Seki (M.), *5553*
• see Tanaka (H.), *10571*
Kawamura (K.), see Matsuo (M.), *6394*
Kawamura (M.), harmonic analysis, sampling, special functions, walsh functions, Tanaka (S.), *2022*
Kawano (O.), see Kondo (Y.), *2354*
Kawase (Y.), creeping flow, drag, non newtonian flow, porous surfaces, power law fluids, Ulbrecht (J.J.), *4567*
• bubble dynamics, non newtonian flow, transition, Ulbrecht (J.J.), *7964*
• drag, mass transfer, non newtonian flow, two phase flow, Ulbrecht (J.J.), *12022*
Kawata (K.) eds., cermets, composite materials, composite structures, fatigue, fracture, materials properties, metallic composites, surveys, Akasaka (T.), *5122, book*
Kawazuishi (K.), see Morooka (S.), *5846*
Kayaba (T.), fretting, hardness, oxidation, steel, wear, Iwabuchi (A.), *4894*
Kayama (A.), launching, propulsion, space vehicles, systems, Takenaka (Y.), *10728*
Kays (J.L.), moving sources, ocean, sound propagation, underwater acoustics, Jacobson (M.J.), (et al.), *3927*
Kays (W.M.), see Crawford (M.E.), *726*
• see Ligrani (P.M.), *7824*
Kayuk (Ya.F.), boundary value problems, finite amplitude, perturbation methods, plates, series expansion, Alekseeva (M.K.), *4991*
• nonlinear theory, plates (circular), quasilinearization, Khizhnyak (V.K.), *7345*
• cosserat solids, micromechanics, plates, shells, Zhukovskii (A.P.), *11116*
Kaza (K.R.V.), computer aided design, dynamic stresses, mathematical models, wind turbines, Janetzke (D.C.), *866*
Kazachkov (I.V.), jets, mathematical models, turbulent flow, *7739*
Kazakevich (V.V.), adaptive systems, continuous systems, control, design, discrete systems, Shcherbina (Yu.V.), *3205*
Kazakia (J.Y.), closed conduit flow, cylindrical bodies, non newtonian flow, Rivlin (R.S.), *8485*
Kazakov (I.E.), estimation, identification, stochastic processes, stochastic systems, *4266*
Kazakov (V.A.), thermal properties, thermodynamic properties, thermodynamics (nonequilibrium), *10549*
Kazankov (Yu.V.), casting, channel flow, film flow, non newtonian flow, plates (parallel), polymers, squeeze films, Pervushin (V.E.), *9709*
Kazarinoff (N.D.), see Hassard (B.D.), *21, book*
Kazaryan (V.A.), convection, energy storage, heat transfer (combined modes), hydrocarbons, reservoirs, storage, transient effects, underground storage, Myznikova (B.I.), (et al.), *10586*
Kazemi (H.), oil removal, reservoir engineering, simulation, Merrill (L.S.), *2994*
Kazhikhov (A.V.), see Solonnikov (V.A.), *3076*
• duct flow, inviscid fluid, vortex flow, *8567*
Kazi (M.H.), see Niazy (A.), *4453*
Ke (T.S.), see Wang (Z.G.), *8429*
Keairns (D.L.), see Hamm (J.R.), *10623*
Keane (M.J.), see Sweet (L.M.), *2189*
Keating (P.N.), adaptive systems, arrays, error, frequency domain techniques, *3955*
Kececioglu (I.), collapse, compressional waves, ducts (variable area), flexible walls, supercritical flow, Mcclurken (M.E.), (et al.), *11608*
Keck (H.), cascades, fluid mechanics, potential flow, turbomachinery, *2077*
• see Haas (W.), *7801*
Kecs (W.), constitutive equations, relaxing media, viscoelasticity, *258*
Keefe (D.H.), acoustic measurements, impedance, Benade (A.H.), *3972*
Keefer (D.L.), computer aided manufacturing, decision theory, nonlinear programming, Kirkwood (C.W.), *2199*
Keer (L.M.), see Cheng (H.S.) eds., *996, book*
• boundary value problems, contact problems, plates (simply supported), Mak (A.F.), *8239*
• see Meade (K.P.), *9346*
Kehl (K.), design, dynamic analysis, wind turbines, Keim (W.), (et al.), *5696*
Keife (H.), see Stahlberg (U.), *7462*
• deformation (plastic), heat treatment, pressure, void closure, void fraction, Stahlberg (U.), *8359*
Keim (W.), see Kehl (K.), *5696*
Kein (V.M.), algorithms, linear systems, numerical methods, optimal control, suboptimal control, Parikov (A.N.), (et al.), *7243*
Keler (M.), design, kinematics, mechanisms (spatial), optimization, *4562*
Keler (M.L.), dynamics, linkages, mechanisms (spatial), screws, vector methods, Beran (M.A.), *7626*
• beams, deformable bodies, kinematics, Beran (M.A.), *10138*
Kelkel (K.), beams (timoshenko), elasticity (three dimensional), shear loading, shearing coefficient, *295*
Keller (J.B.), see Caflisch (R.E.), *6973*
• bubble dynamics, contact problems, oscillations, *7966*
• see Vanden-Broeck (J.-M.), *8907*
Keller (J.J.), boundary layer, nonlinear waves, tubes, *2722*
• dispersion relation, flow irregularities, surface waves, vortices, Escudier (M.P.), *11583*
Keller (J.L.), richardson number, shear layer, turbulence (clear air), turbulence (geophysical), Haines (P.A.), *10478*
Keller (J.O.), combustion (turbulent), combustion instability, combustors, flashback, Vaneveld (L.), (et al.), *9754*
Keller (J.U.), constitutive equations, thermodynamic processes, thermodynamic properties, thermodynamics (nonequilibrium), Hess (S.), *10545*
Kelley (C.T.), see Siewert (C.E.), *1103*
Kelly (A.), see Chou (T.-W.), *8227*
Kelly (D.W.), bounded variables, computing techniques, elasticity, finite element methods, *3135*
• anisotropy, convection (free), diffusion, galerkin method, Nakazawa (S.), (et al.), *8786*
Kelly (J.M.), earthquake resistant structures, isolation, wind loads, Chitty (D.E.), *7046*
Kelly (R.E.), radiant interchange, radiation, thermodynamics, *3766*
Kelly (W.E.), erosion, soils, Gularte (R.C.), *9353*
Kelly (W.L.) IV, see Meredith (B.D.), *3129*
Kelmans (G.K.), algorithms, nonlinear systems, optimization, process control, Poznyak (A.S.), (et al.), *4324*
kelvin waves, asymptotic methods, flow irregularities, ocean waves, reflection, wave generation, Haines (C.R.), *1603*
• baroclinic waves, bottom irregularities, internal waves, Chao (S.-Y.), *8976*
• coasts, eddy viscosity, ekman layer, oceanography, Mofjeld (H.O.), *8978*
kelvin-helmholtz instability, atmospheric circulation, jet streams, turbulence (geophysical), Klostermeyer (J.), Ruster (R.), *5933*
• atmospheric circulation, eddies, gravity waves (internal), Klostermeyer (J.), *5934*
• magneto fluid dynamics, porous media, streams, Sharma (R.C.), Singh (H.), (et al.), *7901*
• numerical methods, shear flow, vorticity, Shoucri (M.M.), *11391*
Kemblowski (Z.), constitutive equations, plastic flow, power law fluids, thixotropic media, Petera (J.), *1483*
• friction factor, materials possessing memory, non newtonian flow, pipe flow, thixotropic media, Petera (J.), *11504*
Kemper (Y.), friction drives, nutation, traction, transmissions, *1470*
Kenchington (J.M.), see Parzonka (W.), *10823*
Kendall (K.), adhesives, composite materials, concrete, dislocations, interface phenomena, *9487*
Kendall (L.A.), see Sheikh (A.K.), *1346*
Kendig (R.P.), barriers, diffraction, plane waves, *11972*
Kendzera (A.V.), see Savaryenskiy (Ye.F.), *7021*
Kenefic (R.), functional equations, noise (random), stochastic processes, volterra series, Nuttall (A.), (et al.), *2026*
Kenig (K.E.), conduction (unsteady), perturbation theory, rods, Korostelev (A.P.), *3120*
Kennedy (I.M.), flames (diffusion), hydrogen, jets, Kent (J.H.), *1744*
Kennedy (J.B.), bridges, elastic behavior, prestressed concrete, slabs, waffle slabs, El-Sebakhy (I.S.), *2530*
Kennedy (J.F.), see Sturm (T.W.), *5924*
Kennedy (L.A.), see Driscoll (R.J.), *11542*
Kennell (C.G.), see Plotkin (A.), *5490*
Kenner (V.H.), see Knauss (W.G.), *9057*
Kenny (R.A.), damage, dynamic analysis, fatigue, random excitation, structural analysis, Chandra (S.), *3445*
Kent (J.H.), see Kennedy (I.M.), *1744*
Kenter (C.J.), see Lindenberg (J.), *8513*
Kenzhibaev (A.T.), forecasting, meteorology, precipitation, weather forecasting, Petrichenko (I.A.), *12082*

kepler orbits, central force field, orbit mechanics, variational methods, Aleksandrov (Yu.S.), *870*
- hamiltonian equations, n body problems, periodic orbits, restricted three body problem, Meyer (K.R.), *1786*
- lambert's problem, orbit mechanics, orbits, trajectories, Sun (F.T.), *2923*
- equations of motion, hamiltonian equations, mathematical methods, transformation, Leach (P.G.L.), *6064*
- mean anomaly, orbit mechanics, probability theory, Serafin (R.A.), *6875*
- circumnavigation, coordinate systems, dynamic analysis, separation of variables, Broucke (R.), *8839*
- galactic system, planetary theory, stability theory, Szebehely (V.), *8844*
- special functions, three body problem, variational methods, Waldvogel (J.), *9814*

Keramidas (G.A.), convection, diffusion, finite element techniques, *1139*
- conduction (heat), finite element techniques, transient effects, variable thermal properties, *2821*

Keren (G.), see Epstein (Y.), *7124*
Kerlick (G.D.), airfoils, compressible flow, finite difference methods, transonic flow, unsteady flow, Nixon (D.), *5417*
Kerlin (R.L.), beams (cantilever), damping, experimental mechanics, vibration (free), *6288*
Kern (C.D.), see Pepper (D.W.), *3028*
Kern (G.), lyapunov's functions, rigid bodies, spinning bodies, stabilization, *8097*
Kern (J.), see Schrey (H.-G.), *3840*
- approximation methods, design criteria, extended surfaces, fins, heat exchangers, *8757*

Kerr (A.D.), beams, foundations, moving loads, *9263*
Kerr (J.H.), see Ferguson (R.J.), *6557*
Kerr (R.M.), see Nelkin (M.), *5469*
Kerr (T.H.), detection, failure, gyroscopes, reliability analysis, *2096*
Kerrick (W.), see Bhagat (P.K.), *6011*
Kerschen (E.J.), compressible flow, hydrodynamic stability, perturbations, two dimensional flow, Balsa (T.F.), *5459*
- ducts, modes, pipes, sound propagation, vibration, Johnston (J.P.), *5773*
- ducts, modes, noise, sound propagation, Johnston (J.P.), *5777*

Kerzhenkov (A.G.), see Aronov (B.M.), *11747*
Kesavan (H.K.), see Savage (G.J.), *8137*
Keskar (D.A.), airplane performance, digital control, flight loads, sampled data systems, Sister (G.L.), *1626*
- see Wells (W.R.), *11735*

Keskinen (R.P.), fluid-structure interaction, matrix methods, piping systems, vibration (flow induced), *11600*
Kessler (R.), see Oertel (H.), *1513*
- channels, design criteria, generators, magneto plasma dynamics, open loop systems, *5681*

Kesten (A.S.), combustors, gas turbines, mathematical models, pyrolysis, soot formation, Sangiovanni (J.J.), (et al.), *3871*
Kestenboim (Kh.S.), see Entov (V.M.), *1487*
Kestin (J.), entropy, thermodynamic processes, thermodynamics, thermodynamics (irreversible), *716, book*
- see Bataille (J.), *720*
- disks, viscometry, water, Shankland (J.R.), *8666*
- calibration, disks, oscillating bodies, viscometry, Shankland (I.R.), *9675*

Ketelaars (C.E.J.), see White (D.N.), *6024*
Keuninga (R.), see Crochet (M.J.), *8488*
Keviczky (L.), adaptive systems, digital control, furnaces, glass furnace, identification, process control, Haber (R.), (et al.), *206*
Kevorkian (J.), asymptotic methods, differential equations (partial), nonlinear mechanics, orbit mechanics, perturbation methods, Cole (J.D.), *3111, book*
Kevorkov (L.R.), see Tikhonenko (L.K.), *941*
Kezdi (A.), field tests, penetration, soils, Mlynarek (Z.), *7442*
Khabarov (G.S.), free boundary, potential flow, spherical bodies, *3634*
Khabeev (N.S.), see Nigmatulin (R.I.), *12031*
Khabeyev (N.S.), see Nigmatulin (R.I.), *1847*
Khabibullin (I.L.), see Verigin (N.N.), *5853*
- see Verigin (N.N.), *10691*

Khabibullin (M.G.), dimensional analysis, landing devices, turbojet engines, Nesterov (E.D.), (et al.), *5661*
Khachay (O.A.), see Kormiltsev (V.V.), *8921*
Khachiyan (L.G.), convex programming, games, iterative methods, Erlikh (A.I.), *2034*
Khader (M.S.), boundary integral method, conduction (heat), conduction (steady), green function, integral methods, variable thermal properties, Hanna (M.C.), *2818*
- duct flow, integral methods, laminar flow, *5442*

Khafagy (S.), see Baz (A.), *219*
Khalaf (F.), blasting, indentation, rocks, Abouzeid (A.Z.M.), *7449*
Khalatov (A.A.), see Shchukin (V.K.), *11547*
Khaletzky (D.), see Huffenus (J.), *4999*
Khalifa (A.M.A.), blood flow, experimental results, laser doppler velocimeters, stenoses, Giddens (D.P.), *9062*
Khalil (M.F.), bearings (spherical), bubbly flow, lubrication (hydrostatic), Rhodes (E.), *5990*
Khalil (T.B.), biomaterials, bones, frequencies, impact, material testing, Viano (D.C.), (et al.), *1961*
Khan (M.A.), see Shoji (T.), *5307*
- elastoplasticity, fracture mechanics, nuclear radiation, nuclear reactors, pressure vessels, radiation effects, Shoji (T.), (et al.), *5370*
- acoustic emission, cleavage, fracture toughness, microcracks, stability, Shoji (T.), (et al.), *7558*
- see Takahashi (H.), *10281*

Khan (M.R.), constraints, design (minimum weight), frequencies, optimization, Willmert (K.D.), *11318*
Khan (O.F.), see Tetsuo (N.), *11420*
Khan (S.I.), discharges, drainage, finite difference methods, hydrographs, mathematical models, storage, Takagi (F.), (et al.), *6599*
Khan (Z.A.), crossflow, injection, jets, Whitelaw (J.H.), *2665*
Khandhadia (P.S.), chemical reactions, coal, heat addition, liquefaction, rheology, Forsyth (T.H.), (et al.), *6769*
Khandoker (J.U.), see Humar (J.L.), *6531*
Khandwawala (A.I.), digital simulation, mathematical models, numerical methods, regenerators, Chawla (O.P.), *72*
- see Asif (S.A.), *7868*
- see Chawla (O.P.), *9733*

Khanov (A.M.), composite materials, explosive welding, welding, Yakovlev (I.V.), *6569*
Kharatyan (S.L.), see Arutyunyan (A.B.), *9747*
Kharchenko (A.P.), existence theorems, plasma, rarefied gases, statistical theory, vlasov equation, *11835*
Kharchenko (S.I.), see Sokolov (A.A.), *1898*
Kharchenko (V.K.), algorithms, computer programming, mechanical properties, stress strain relationships, testing equipment, Gnuchii (Yu.B.), (et al.), *7562*
Kharchev (V.N.), algorithms, identification, mathematical models, *2147*
Khare (A.K.), compression, design (minimum weight), springs, *4553*
Kharimonov (A.M.), see Vasenev (L.G.), *1624*
Kharin (B.E.), ducts (variable area), heat transfer, navier stokes equation, sudden expansion, viscous flow, Dvortsov (V.N.), *3784*
Kharitonov (D.F.), see Kiselevskii (V.N.), *7553*
Kharitonov (M.A.), see Zakharin (F.M.), *8101*
Kharitonova (A.N.), bonded joints, contact problems, diffusion bonding, elastoplasticity, half space, Sergeev (A.V.), (et al.), *4565*
Khasanova (M.Kh.), periodic orbits, perturbation theory, planetary satellites, *7918*
Khasmamedov (F.I.), design, process control, regulator problem, time lag, *2169*
Khatiashvili (G.M.), cylindrical bodies, elasticity (three dimensional), saint venant principle, torsion, *7259*
Khatib-Rahbar (M.), dynamics, modeling, nuclear reactors, transient effects, Cady (K.B.), *2873*
Khatwani (K.J.), algorithms, continued fraction method, linear systems, model reduction, state space techniques, Tiwari (R.K.), (et al.), *3155*
Kheisin (V.E.), see Katkovnik (V.Ya.), *2138*
Khenkin (M.Z.), multivariable systems, newton method, penalty function, *3124*
Khermanis (E.Kh.), algorithms, hilbert transfer, realization, *2095*
Khibnik (A.I.), see Berezovskaia (F.S.), *8282*
Khider (M.A.), see Abdel-Gaid (M.A.), *6645*
Khidr (M.A.), see Abdel-Gaid (M.A.), *1528*
- couette flow, heat transfer, kinetic theory, porous surfaces, rarefied gases, Abdel-Gaid (M.A.), *11454*

Khiet (T.), acoustic waves, nonlinear theory, plasma, stability theory, wave energy, Abdel-Gawad (H.), *9803*
Khilchevskii (V.V.), dissipation, experimental mechanics, materials properties, vibration, Vasilevich (D.I.), *4418*
- bending, dissipation, rods, stresses (normal), vibration (torsional), Vasilevich (D.I.), *5208*

Khimunin (A.S.), see Lvova (E.A.), *6937*
Khizhnyak (V.K.), see Kayuk (Ya.F.), *7345*
Khiznyak (N.A.), see Aleksandrova (A.A.), *10749*
Khlopkov (Yu.I.), axisymmetric flow, compressible flow, drag, hypersonic flow, supersonic flow, *11402*
Khlopovskii (Yu.N.), see Temnov (I.I.), *3536*
Khodyko (Yu.V.), molecular theory, radiating flow, spectral analysis, Vitkin (E.I.), (et al.), *5587*
Khodzhaev (K.Sh.), asymptotic methods, averaging, nonlinear mechanics, oscillations, Shatalov (S.D.), *4990*
- see Mirkina (A.S.), *9112*

Kholmatov (T.), elasticity (nonlinear), existence theorems, uniqueness, *6156*
Kholoptsev (V.V.), beams (thin section), shear loading, shells (cylindrical), thin walled structures, warping, *4373*
Khomeriki (T.L.), see Shishigin (M.I.), *223*
Khonichev (V.I.), engines, magneto fluid dynamics, marine engineering, propulsion, superfluids, Yakovlev (V.I.), *9787*
Khoo (P.S.), see Murray (N.W.), *10186*
Khorolskii (V.M.), see Vytchikov (Yu.S.), *3988*
Khoroshilov (V.S.), artificial satellites, dynamic analysis, oscillations, solar arrays, space vehicle structures, *11336*

Khoroshun (L.P.), buckling, shells (orthotropic), shells (sandwich), structural stability, Koshevoi (I.K.), *2306*
- constitutive equations, elastic bodies, mixture theories, multiphase media, nonhomogeneous media, *4131*
- laminates, layered media, shear, shells (sandwich), thermal stresses, thermoelasticity, Babich (D.V.), *6953*
- composite materials, plastics, shells (cylindrical), shells (plastic), Strelchenko (I.G.), *7341*
- plates, shells, stability theory, *7357*
- dynamic analysis, harmonic waves, plates (sandwich), shells (sandwich), Ivanov (Yu.A.), *9327*

Khorunzhii (V.I.), see Klepikov (S.N.), *5361*
Khoshgoftaar (M.R.), see Bathe (K.-J.), *1870*
Khosla (P.K.), see Rubin (S.G.), *4588*
- finite difference methods, transonic flow, variational methods, Rubin (S.G.), *6084*

Khot (N.S.), see Satyamurthy (K.), *6252*
Khramov (A.N.), continental drift, displacement, earth, magnetic field, paleomagnetism, *8002*
Khristova (Ya.), creep, deformation, polymer concrete, polymers, *9451*
Khrushch (V.K.), see Belyaev (N.M.), *4585*
Khrustalev (B.A.), see Filimonov (S.S.), *5569*
Khudak (Yu.I.), see Glasko (V.B.), *4451*
Khudyaev (S.I.), see Pribytkova (K.V.), *8705*
Khue (L.N.), dynamic response, pendulums, vibration (nonlinear), vibration (parametric), *6275*
Khusid (B.M.), see Benderskaya (S.L.), *9583*
- see Shulman (Z.P.), *9708*

Khuzhaev (A.), see Artikov (T.U.), *86*
Khvorostyanov (V.I.), see Buikov (M.V.), *12077*
Kiang (M.T.), see Tam (K.K.), *10697*
Kibardin (V.M.), algorithms, numerical methods, optimization, *2121*
Kichigin (A.M.), see Tolubinskii (V.I.), *2795*
Kida (S.), inviscid fluid, shear flow, velocity profiles, vortex flow, *8528*
- filaments, motion, nonlinear analysis, vortex flow, vortex lines, *9522*

Kida (T.), aerodynamics, elliptical bodies, lifting surfaces, three dimensional flow, wings, *4668*
Kidin (N.I.), combustion, electrical properties, flames (diffusion), jets, Makhviladze (G.M.), *5633*
kidneys, biomechanics, modeling, viscous flow, Radhakrishnamacharya (G.), Chandra (P.), (et al.), *4119*
Kielczynski (P.), half space, nonhomogeneous media, propagation, sh waves, *10230*
Kienappel (K.), see Geissler (W.), *8539*
Kiener (G.), beams, stiffness matrix, wood structures, *8228*
Kieres (K.C.), see Carman (R.W.), *532*
Kihlman (T.), see Granhall (A.), *6282*
Kiiko (I.A.), fluid-structure interaction, hydraulic shock, plates, transforms, Nemkova (L.N.), *11666*
Kikkawa (S.), eddy viscosity, film cooling, fluid injection, injection, mixing length theory, Fujii (M.), *1666*
Kikuchi (K.), see Matsushita (O.), *2342*
Kikuchi (M.), deconvolution, inversion, processing, seismic waves, Kanamori (H.), *9908*
Kikuchi (N.), see Okabe (M.), *5022*
Kikuchi (T.), roughness, snow, wind tunnels, *7959*
Kikuyama (K.), conical flow, diffusers, rotating bodies, visualization, Murakami (M.), (et al.), *9591*
Kilchinskaya (G.A.), acoustics, gases, sound generation, thermal effects, vibration (self excited), Protsenko (O.P.), *11920*
Kilkeev (R.Sh.), see Frolov (D.I.), *10319*
Killeen (J.), see Schnack (D.), *9791*
Killworth (P.D.), baroclinic instability, hydrodynamic stability, oceanography, rotating fluids, stratified flow, *5919*
Kim (A.K.), cooling, nuclear reactors, rewetting, transition boiling, Lee (Y.), *1714*
Kim (A.V.), see Dubrovskaya (L.I.), *11410*
Kim (B.K.), adaptive systems, design, optimal control, time lag, time optimal systems, Bien (Z.), *11073*
- algorithms, linear programming, regulator problem, suboptimal control, time delay systems, Bien (Z.), *11088*

Kim (C.H.), damping, heaving, ship motion, surface effect, virtual mass, Tsakonas (S.), *9014*
Kim (H.C.), composite materials, fatigue, glass fibers, high cycle fatigue, life expectancy, Ebert (L.J.), *1209*
Kim (K.H.), boundary layer, radiating flow, scattering, stagnation point, Ozisik (M.N.), *8744*
Kim (M.D.), compressible flow, hypersonic flow, numerical methods, streamlines, three dimensional flow, viscous effects, Thareja (R.R.), (et al.), *7691*
Kim (S.), inlets, viscoelastic fluids, viscous flow, *5102*
- see Mills (A.F.), *10473*

Kim (T.D.), see Mcgill (D.J.), *1981*
Kimbrell (J.E.), four bar linkage, kinematics, linkages, machine design, mechanisms (planes), Hunt (K.H.), *4558*
- four bar linkage, kinematics, mechanisms (planes), Hunt (K.H.), *8478*

Kimoto (K.), coaxial jets, combustion, flames (turbulent), Shiraishi (I.), (et al.), *3861*
Kimura (H.), control, linear systems, multivariable systems, pole placement, regulator problem, *4209*
Kimura (K.), dynamic response, nonlinear mechanics, random excitation, vibration (random), Sakata (M.), *4405*
Kimura (S.), cellular motions, circulation, counterflow, duct flow, Bejan (A.), *9703*
Kinelev (V.G.), bubbly flow, dynamic effects, liquid fuels, liquid vapor mixture, longitudinal stability, rockets, Shkapov (P.M.), *11801*
Kinelovskii (S.A.), buckling, collapse, experimental mechanics, explosive loading, pipes, *8466*
kinematics, dynamic analysis, lagrange equations, mathematical methods, Schrapel (H.D.), *7*
- dynamic analysis, mathematical methods, Brunk (G.), *9*
- analogies, pedal curve, Drabek (K.), *34*
- biomechanics, frequency domain techniques, gait, Cappozzo (A.), *1033*
- biological joints, biomechanics, shoulder, Engin (A.E.), *1036*
- biomechanics, heart, strain analysis, Meier (G.D.), Ziskin (M.C.), (et al.), *1037*
- biomechanics, experimental mechanics, photography, Miller (N.R.), Shapiro (R.), (et al.), *1046*
- continuum mechanics, lagrangian formulation, thermodynamics (nonequilibrium), Rougee (P.), *1049*
- airplanes, dynamic analysis, Hitch (H.), *1059*
- curvature, dynamic analysis, mathematical methods, Veldkamp (G.R.), *1060*
- compression, crystals, metals, Havner (K.S.), *1204*
- mechanisms, statically indeterminate structures, synthesis, Kozhevnikov (S.N.), *1466, book*
- continuum mechanics, functional analyis, Misicu (M.), *1967*
- dynamic analysis, mathematical methods, moving media, Mcgill (D.J.), Kim (T.D.), *1981*
- dynamic analysis, relativity, Asanov (G.S.), *1990*
- contact stresses, fatigue, gear teeth, surface profiles, wear, Huston (R.L.), Coy (J.J.), *2558*
- acceleration, biomechanics, human body, Voge (V.M.), *3056*
- biodynamics, experimental methods, human body, Alexander (M.J.L.), Colbourne (J.), *3057*
- dynamic analysis, mathematical methods, Bottema (O.), Veldkamp (G.R.), *3080*
- dynamic properties, vibration (free), Buculei (M.), Marghitu (D.), (et al.), *3081*
- linkages, mechanisms (planes), Kothari (M.), Rao (A.C.), *3083*
- dynamic properties, mechanisms, Meyer Zur Capellen (W.), Meyer Zur Capellen (F.), *3084*
- dynamic analysis, gyrodynamics, hamiltonian equations, Tsopa (M.P.), *3086*
- mechanisms, rigid bodies, Pekarek (F.), *3087*
- deformation (plastic), plasticity, strain analysis, Lubarda (V.A.), Lee (E.H.), *3258*
- manipulators, mechanisms (planes), mechanisms (spatial), robotics, Duffy (J.), *3568, book*
- algorithms, design, force, mechanisms, transmission, Sutherland (G.H.), *3569*
- linkages, mechanisms (planes), synthesis, Erdman (A.G.), *3578*
- linkages, mechanisms (spatial), Nitescu (P.N.), *3579*
- graphical methods, linkages, mechanisms (spatial), Nitescu (P.N.), *3580*
- manipulators, robotics, structural support, Nitescu (P.N.), *4141*
- four bar linkage, linkages, machine design, mechanisms (planes), Kimbrell (J.E.), Hunt (K.H.), *4558*
- closure, linkages, mechanisms (spatial), robotics, Sticher (F.), *4559*
- design, four bar linkage, linkages, mechanisms, Hain (K.), *4560*
- design, mechanisms (spatial), optimization, Keler (M.), *4562*
- biological joints, gait, muscles, Boccardi (S.), Pedotti (A.), (et al.), *4910*
- dynamic analysis, mathematical methods, Nayak (J.H.), Roth (B.), *4932*
- dynamic analysis, mathematical methods, Hsia (L.M.), Yang (A.T.), *4933*
- manipulators, robotics, Nitescu (P.N.), *4934*
- manipulators, robotics, Nitescu (P.N.), *4935*
- dynamic analysis, rigid bodies, Falk (S.), *4936*
- dynamic analysis, spatial mechanisms, structural elements, Nitescu (P.N.), *4937*
- dynamic stability, mathematical methods, Karapetian (A.V.), *4938*
- dynamic analysis, lagrange equations, GonzalezGascon (F.), *4939*
- dynamic response, railroads, steering, Bell (C.E.), Hedrick (J.K.), *4940*
- dynamic response, railroads, wheels, De Pater (A.D.), *4941*
- dynamic analysis, mechanisms (planes), Williams (R.J.), Rupprecht (S.), *4942*
- design (minimum weight), frames, limit design, optimization, Brousse (P.), *5345*
- chains, networks, theory, Davies (T.H.), *5373*
- four bar linkage, linkages, mechanisms (planes), synthesis, Sun (J.W.H.), Waldron (K.J.), *5375*
- design, four bar linkage, mechanisms (planes), Hain (K.), *5376*
- two phase flow, Bocheva (M.), *5405*
- maneuverability, quaternions, space vehicles, Mayo (R.A.), *5715*
- human body, motion, simulation, Dapena (J.), *6009*
- dynamic analysis, human body, Dainis (A.), *6010*
- continuum theory, relativity, rheology, Huilgol (R.R.), *6038*

- geometrical properties, manipulators, robotics, Sugimoto (K.), Duffy (J.), *6048*
- mathematical methods, rigid bodies, Freudenstein (F.), Primose (E.J.F.), *6049*
- dynamic analysis, finite element methods, structural elements, Van Der Werff (K.), *6050*
- curvature, differential geometry, mechanical analysis, mechanisms, motion, three dimensional formulation, Mccarthy (J.M.), Roth (B.), *6061*
- constitutive equations, continuum mechanics, elasticity (nonlinear), Casey (J.), Naghdi (P.M.), *6158*
- elastic bodies, elastodynamics, optimization, Atanackovic (T.M.), *6166*
- extrusion, torsion (plastic), Soos (E.), Teodosiu (C.), (et al.), *6408*
- burmester configuration, four bar linkage, mechanisms, Watanabe (K.), *6554*
- constant velocity couplings, shafts, splines, transmissions, Davoli (P.), *6556*
- gear trains, transmissions, Ferguson (R.J.), Kerr (J.H.), *6557*
- dynamic analysis, four bar linkage, linkages, mechanisms (spatial), Oranescu (A.), Bocioaca (R.), *6560*
- couplings, four bar linkage, linkages, mechanisms (planes), Hunt (K.H.), Fichter (E.F.), *6562*
- biomechanics, bones, spine, stiffness, stress strain relationships, Laborde (J.M.), Burstein (A.H.), (et al.), *7104*
- mathematical models, mechanisms (planes), Wunderlich (W.), *7145*
- continuum mechanics, deformation, functional analyis, motion, Roj (J.), *8084*
- dynamic analysis, rigid bodies, Laub (A.J.), Shiflett (G.R.), *8093*
- linkages, mechanisms (spatial), screws, Ohwovoriole (M.S.), Roth (B.), *8094*
- articulated vehicles, sliding, slipping, vehicles, wheels, Dudzinski (P.), *8096*
- elastic behavior, equations of motion, lagrange multiplier, mechanisms, Blejwas (T.E.), *8100*
- balancing, four bar linkage, kinetics, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *8475*
- four bar linkage, mechanisms (planes), Kimbrell (J.E.), Hunt (K.H.), *8478*
- cams, design, robotics, synthesis, Tsai (Y.C.), Soni (A.H.), *8479*
- biological joints, experimental methods, human body, Chao (E.Y.S.), *9048*
- mathematical models, mechanical systems, rigid bodies, Lotstedt (P.), *9083*
- manipulators, mechanisms (spatial), optimization, robotics, Benati (M.), Morasso (P.), (et al.), *9084*
- mechanisms (spatial), robotics, Osman (M.O.M.), Bahgat (B.M.), (et al.), *9085*
- mathematical methods, mechanisms, motion, De Sa (S.), Roth (B.), *9091*
- mathematical methods, matrix methods, mechanisms, motion, De Sa (S.), Roth (B.), *9092*
- design, gears, Colbourne (J.R.), *9470*
- cutting, design, gears, Mitome (K.), *9471*
- computing techniques, mathematical methods, optimization, state space techniques, Sohoni (V.), Haug (E.J.), *10006*
- beams, deformable bodies, Keier (M.L.), Beran (M.A.), *10138*
- cams, design, optimization, Berzak (N.), *10371*
- linkages, mechanisms, synthesis, Yu Hon-Cheung, Baker (J.E.), *10380*
- bearings (roller), dynamic response, Savage (M.), Loewenthal (S.H.), *10929*
- four bar linkage, linkages, mechanisms, Baker (J.E.), *11341*
- algorithms, linkages, mechanisms, Garcia De Jalon (J.), Serna (M.A.), (et al.), *11342*

kinetic theory, bgk model, mathematical methods, matrix methods, riemann-hilbert problem, Siewert (C.E.), Kelley (C.T.), *1103*
- composite materials, fracture mechanics, statistical mechanics, three dimensional formulation, Tamuzh (V.P.), *1359*
- cylindrical bodies, rarefied flow, rarefied gases, Abdel-Gaid (M.A.), Khidr (M.A.), (et al.), *1528*
- boltzmann equation, Virchenko (Yu.P.), Laskin (N.V.), *1650*
- fokker-planck equation, mathematical methods, thermodynamics, Meyer (J.), Schroter (J.), *4958*
- boltzmann equation, carleman equation, initial value problems, nonlinear analysis, Kaper (H.G.), Leaf (G.K.), *4972*
- crack propagation, dynamic fracture, Krausz (A.S.), *5309*
- boltzmann equation, combustion, mathematical models, Makashev (N.K.), *5634*
- crack propagation, dynamic analysis, stress corrosion, Krausz (A.S.), Mshana (J.), (et al.), *6453*
- chemical reactions, deflagration, nonlinear waves, transport phenomena, Abouseif (G.E.), Toong (T.Y.), *6708*
- boltzmann equation, diffusion, evolution equations, statistical mechanics, Brunnschweiler (A.), *7164*
- boltzmann equation, conduction, enskog fluid, pressure, viscoelasticity (dynamic), viscosity, Schmidt (G.), Kohler (W.E.), (et al.), *7819*
- compressible flow, rarefied gases, Fisher (S.S.) ed., *8554, book*
- binary flow, conduction (heat), conductivity, gases, mixtures, multicomponent flow, Assael (M.J.), Wakeham (W.A.), (et al.), *8675*
- drag, hydrodynamics, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11439*
- boltzmann equation, gases, particles, Chen (M.), *11440*
- bgk model, gases, shock waves, Narusawa (U.), *11441*
- channel flow, pressure, Chernyak (V.G.), Kalinin (V.V.), (et al.), *11443*
- cylindrical bodies, drag, hydrodynamics, spherical bodies, Van Beijeren (H.), Dorfman (J.R.), *11453*
- couette flow, heat transfer, porous surfaces, rarefied gases, Khidr (M.A.), Abdel-Gaid (M.A.), *11454*
- isothermal processes, numerical methods, plasma, waves, Musher (S.L.), *11836*

kinetic theory (relativistic), electric effects, plasma, theory, vlasov equation, Milantev (V.P.), *9800*

kinetics, flames (diffusion), hydrogen, Allison (R.A.), Clarke (J.F.), *1741*
- combustion, flame propagation, thermodynamics, vessels, Babkin (V.S.), Babushok (V.I.), (et al.), *1742*
- friction, optimization, torque, Bellomo (N.), Monaco (R.), *2556*
- condensation (dropwise), multiphase flow, saturation, supersaturation, Bazarov (S.M.), Shpenzer (G.G.), *2845*
- dirichlet problem, spherical bodies, Kapila (A.K.), Matkowsky (B.J.), (et al.), *2852*
- catalyzed ignition, dynamics, Kapila (A.K.), *2859*
- boundary value problems, differential equations (ordinary), iterative methods, Pennline (J.A.), *4178*
- drops, evaporation, mass transfer, numerical analysis, Larina (I.N.), Rykov (V.A.), *4726*
- chemical reactions, combustion, explosions, ignition, Bowen (J.R.), Manson (N.), (et al.), *4734, book*
- brittle fracture, plasticity, Stepanov (W.A.), Shpeizman (V.V.), *6442*
- combustion, oxidation, porous media, Chernenko (E.V.), Ivleva (T.A.), (et al.), *6841*
- flames (diffusion), thermal effects, Matalon (M.), Ludford (G.S.S.), *7879*
- balancing, four bar linkage, kinematics, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *8475*
- coalescence, condensation (dropwise), models, Srivastava (R.C.), Passarelli (R.E.), *8773*
- acoustic emission, crack propagation, nucleation, Kuranov (V.N.), Ivanov (V.I.), (et al.), *9412*
- films, ignition, metals, particles, Arutyunyan (A.B.), Kharatyan (S.L.), (et al.), *9747*
- films, ignition, metals, particles, Grigorev (Yu.M.), Safaneev (D.Z.), *9748*
- flames (diffusion), mathematical models, Allison (R.A.), Clarke (J.F.), *9751*
- diffusion, evaporation, models, Petersen (I.F.), *10648*
- diffusion, particles, stokes flow, Polyanin (A.D.), Sergeev (Yu.A.), *10680*
- freezing, soils, Danielyan (Yu.S.), Yanitskii (P.A.), *11774*
- flames (diffusion), ignition, laminar mixing, Law (C.K.), Law (H.K.), *11780*

King (D.F.), particle fluid flow, spouted beds, two phase flow, Harrison (D.), *5847*
- fluidized beds, high viscosity, pressure, Mitchell (F.R.G.), (et al.), *8934*

King (R.), see Every (M.J.), *10488*

King (R.B.), edge cracks, j-integral, m integral, nondestructive tests, Herrmann (G.), *5294*
- crack tip geometry, j-integral, nondestructive tests, strain measurement, stresses, ultrasonics, Herrmann (G.), (et al.), *8425*

Kinh (N.V.), piezoelectrics, sound generation, vibration, wave generation, Pajewski (W.), *5783*

Kinloch (A.J.), adhesives, bonded joints, fracture energy, fracture mechanics, Shaw (S.J.), *542*
- adhesives, aluminum alloys, bonded joints, failure, Smart (N.R.), *2572*

Kinney (W.A.), acoustic waves, caustics, ocean, sound propagation, Pierce (A.D.), *3943*

Kino (G.S.), acoustic measurements, flaw detection, j-integral, microstructures, nondestructive tests, residual stresses, stress intensity factor, Barnett (D.M.), (et al.), *7586*

Kinoshita (H.), see Yokota (T.), *966*

Kinoshita (T.), compressible flow, spray flow, two phase flow, *4020*

Kinoshita (Y.), see Muto (T.), *8574*

Kinra (V.K.), composite materials, elastic waves, propagation, random media, shear waves, Anand (A.), *10235*

Kinsella (F.H.), see Childs (T.H.C.), *1929*

Kintner (E.C.), control, fiber optics, gyroscopes, polarization, *3223*

Kinzel (G.L.), biological joints, human body, joints, linkages, *10379*

Kiparenko (G.F.), discharges, high pressure, measurements, plasma, walled structures, Kozyukov (A.V.), *5690*

Kipnis (L.A.), boundary value problems, edge cracks, wedges, *240*

Kipp (M.E.), see Grady (D.E.), *6399*
- see Grady (D.E.), *7551*
- crack initiation, fracture, fracture mechanics, strain rate, Grady (D.E.), (et al.), *9382*

Kirby (B.R.), aluminum alloys, crack growth, low cycle fatigue, material testing, stress intensity factor, vacuum, Beevers (C.J.), *7484*

Kirby (J.T.) Jr., beaches, currents, surface waves, Dalrymple (R.A.), (et al.), *4853*

Kirchanov (V.G.), see Nevolin (V.G.), *6966*

Kirdyashkin (A.G.), see Berdnikov (V.S.), *8727*

Kireev (V.I.), chemical reactions, compressible flow, jets, nonequilibrium flow, numerical methods, supersonic flow, Pirumov (U.G.), *5418*

Kirichok (I.F.), see Borisyuk (A.I.), *5222*

Kirillov (V.A.), catalysts, chemically reactive flow, film boiling, Ogarkov (B.L.), *5545*

Kiriushin (V.V.), magneto fluid dynamics, nonlinear characteristics, rotating fluids, spherical bodies, vessels, *858*

Kirk (C.L.), see Etok (E.U.), *3556*
- dynamic analysis, dynamic response, marine risers, modal analysis, ocean, vibration (forced), Etok (E.U.), (et al.), *6291*

• see Jain (R.K.), *8627*

Kirk (J.), electron beams, modes, numerical methods, plasma, turbulence (mechanisms), Weiland (J.), *865*

Kirkgoz (M.S.), beaches, gravity waves (breaking), nonlinear analysis, *11591*

Kirko (G.E.), gravity, liquid gas mixture, magneto fluid dynamics, separation, *2895*

Kirko (V.I.), compression, explosive forming, materials processing, plasma, projectiles, *7903*

Kirkwood (C.W.), see Keefer (D.L.), *2199*

Kirsch (U.), design (optimum), optimization, series expansion, structural analysis, *502*

• design (optimum), linear programming, trusses, *6512*

• see Somekh (E.), *9439*

Kirshov (V.A.), see Ivanov (V.E.), *12011*

Kirshtein (G.Kh.), calibration, flow measurement, liquid metals, magneto fluid dynamics, meteorology, Kvasnevskii (I.P.), *11833*

Kiryushchenko (E.V.), boundary layer (control), jet boundaries, laminar mixing, magneto fluid dynamics, walled structures, Sheryazdanov (G.B.), *11813*

Kiryushin (V.V.), equilibrium, free boundary, interface phenomena, layered media, magneto fluid dynamics, Chung Za Bin, *10744*

Kisban (S.), membrane theory, shells (membrane), shells (of revolution), *1232*

Kiselev (O.M.), jets, liquids, nonlinear theory, Kotlyar (L.M.), *8594, book*

Kiselev (O.V.), catalyzed ignition, combustion, combustion (catalytic), granular media, mathematical models, packed beds, reactive systems, Matros (Yu.Sh.), *9753*

Kiselevskii (V.N.), nuclear radiation, steel, strain, tension, Kharitonov (D.F.), (et al.), *7553*

Kiselyev (M.I.), equipment, geomechanics, gravity, gravity variometers, measurements, Kuzivanov (V.A.), *5872*

Kishan (H.), analytical methods, couette flow, magneto fluid dynamics, plates (parallel), two dimensional flow, Sharma (G.C.), *1772*

Kishi (T.), see Itakura (T.), *3606*

Kishida (M.), see Hanzawa (H.), *6451*

Kishimoto (K.), dynamic behavior, impact, stress intensity factor, Aoki (S.), (et al.), *471*

• flames, measurements, pneumatic components, temperature, *845*

• see Aoki (S.), *1374*

• crack growth, fracture, j-integral, path integrals, Aoki (S.), (et al.), *1388*

• see Aoki (S.), *3476*

Kisilowski (J.), see Chudzikiewicz (A.), *387*

Kiske (S.), boundary layer (turbulent), channel flow, preston tubes, shear stress, walls, Vasanta Ram (V.), (et al.), *4599*

Kiskin (A.B.), see Zarko (V.E.), *10706*

Kislov (A.G.), see Chikhladze (E.D.), *8298*

Kislykh (V.I.), see Volchkov (E.P.), *10542*

• film flow, pressure distribution, velocity profiles, vortex flow, Smulski (I.I.), *10543*

Kiss (L.), optical techniques, refraction, schlieren methods, thermography, *3774*

Kit (E.), channels, mixing layers, screens, turbulence, wind, Berent (E.), (et al.), *559*

Kita (R.), see Betzina (M.D.), *7790*

Kita (Y.), eddy viscosity, pipelines, turbulent flow, unsteady flow, Adachi (Y.), (et al.), *3667*

• abrasion, chip formation, cutting, grinding, tool wear, Ido (M.), (et al.), *9377*

Kitaal (M.K.), see Ranga Raju (K.G.), *558*

Kitabayashi (K.), atmosphere, blunt bodies, froude number, stagnation point, stratified flow, *11386*

Kitagawa (H.), anisotropy, elastic constants, rolling, steel, *256*

Kitago (S.), see Mitachi (T.), *414*

Kitaigorodskii (S.A.), boundary layer (turbulent), buoyancy, entrainment, stratified flow, *7068*

Kitajima (J.), see Mori (K.), *8806*

Kitamura (Y.), approximations, dynamic properties, foundations, stiffness, Sakurai (S.), *1284*

Kitano (Y.), see Kubo (S.), *581*

Kitayner (A.G.), mixtures, multicomponent flow, Markeyev (B.M.), *4595*

Kitchens (C.W.) Jr., flow obstructions, navier stokes equation, three dimensional flow, vorticity, Gerber (N.), (et al.), *7711*

Kitching (R.), bending, bends, pipes, shells (cylindrical), tubes, Zarrabi (K.), (et al.), *1241*

• cracks, failure, pressurized pipes, shells (cylindrical), Zarrabi (K.), *6221*

Kitipornchai (S.), beam columns, beams, design criteria, floors, Trahair (N.S.), *2293*

Kitney (R.I.), see Linkens (D.A.), *7154*

Kito (O.), see Murakami (M.), *3755*

• see Murakami (M.), *3756*

Kitovich (V.V.), computer memories, design, optimization, Porotskii (S.M.), (et al.), *2107*

Kitsunai (Y.), crack growth, fatigue, grain size, microstructures, steel, *5284*

Kittl (P.), beams, brittle fracture, failure, probability, weibull statistics, Camilo (G.M.), *6443*

• cements, copper, interface cracks, stochastics, weibull statistics, Galleguillos (E.), *8225*

Kittler (J.), design, learning systems, pattern recognition, *9174*

Kiuchi (M.), forming, pipes, rolling, wrinkling, Shintani (K.), (et al.), *9374*

Kiureghian (A.D.), dynamic response, noise, noise (random), random excitation, *517*

Kivganov (A.F.), atmospheric circulation, geostrophic flow, meteorology (physical), Mokhanti (U.Ch.), *1904*

Kivisto (A.), see Liiri (O.), *1480*

Klya (M.), see Arie (M.), *4600*

• separated flow, simulation, strouhal number, vortex flow, Arie (M.), *4609*

• mixing layers, turbulence, turbulence model, vortices, Arie (M.), (et al.), *4651*

• boundary layer, dilute solutions, polymers, Arie (M.), (et al.), *8499*

Kiyasbeili (T.N.), dynamic response, rods, shear stress, vibration, wave equations, *5207*

Kiyota (M.), see Yoshimura (T.), *3204*

Kjaerland (O.), see Dahle (E.A.), *5964*

Kjer (T.), ferrography, lubricants (liquid), lubrication, particles, wear, *9949*

Klaiber (T.), see Siebert (H.), *9192*

Klamecki (B.E.), entropy, strain energy, thermodynamics, wear, *8054*

Klapchuk (O.V.), see Elin (N.N.), *4013*

Klaus (E.E.), see So (B.Y.C.), *5989*

• see Kalpakci (B.), *9687*

Klee (K.-D.), cylindrical bodies, impact, plastic flow, Wriggers (P.), *5248*

Klega (V.), linear systems, random excitation, stochastic processes, stochastic systems, *111*

Kleiber (M.), error, estimation, finite element techniques, mesh generation, structural analysis, *5028*

Kleimann (H.), see Brissaud (M.), *11163*

Klein (A.), aerodynamic performance, conical flow, diffusers, surveys, *5444*

• developing flow, pipe flow, surveys, turbulent flow, *8571*

Klein (C.), acoustic measurements, impedance, layered media, Cops (A.), *909*

Klein (G.K.), biaxial loading, design, piles, reinforced concrete, Karavaev (V.N.), *10259*

Klein (S.A.), radiant interchange, radiation properties, solar collectors, Theilacker (J.C.), *779*

Kleinemeier (B.), see Bruller (O.S.), *1191*

Kleinman (R.E.), see Angell (T.S.), *10019*

Kleinstreuer (C.), computer programming, finite element techniques, fluid mechanics, mesh generation, triangular elements, Holdeman (J.T.), *7220*

Kleis (S.J.), see Sokolov (M.), *5451*

• coherent structure, shear flow, sound flow interaction, turbulence, turbulence (structure), Hussain (A.K.M.F.), (et al.), *10470*

Klemp (J.B.), atmospheric circulation, cloud physics, clouds, storms, Wilhelmson (R.B.), *4885*

Klepikov (S.N.), buildings, cushioning materials, foundations, stress analysis, structural support, thermoplasticity, Khorunzhii (V.I.), *5361*

Klepikova (N.V.), see Borzilov (V.A.), *1905*

Kleszczewski (Z.), acoustic measurements, diffraction, lasers, sound fields, sound propagation, transducers, *1827*

• acoustic properties, acousto-optical phenomena, materials properties, optical techniques, *8869*

Kletin (V.A.), algorithms, extremal trees, graph theory, *2108*

Klie (W.), boundary value problems, deformation (finite), plasticity, variational methods, *265*

Kligman (R.L.), absorption, sound propagation, surface waves, *2361*

• composite materials, damping capacity, inclusions, viscoelastic materials, Madigosky (W.M.), (et al.), *9341*

Kliman (V.), see Bily (M.), *5330*

Klimas (P.C.), see Schatzle (P.R.), *10518*

• aerodynamic interference, aerodynamics, airfoils, blades, rotors, wind turbines, *10520*

Klimenko (V.V.), film boiling, galilei number, hydrodynamic stability, nusselt number, reynolds analogy, *7829*

Klimenko (V.Yu.), crystals, shock waves, solid mechanics, Dremin (A.N.), *4931*

Klimenko (Yu.G.), fluidized beds, gas solid interface, jet streams, Rabinovich (M.I.), (et al.), *7016*

Klimenov (V.V.), see Nepershin (R.I.), *1213*

Klimkin (V.F.), interferometry, laser plasma interaction, measurements (dynamic), schlieren methods, unsteady flow, Pikalov (V.V.), *5694*

Klinck (J.M.), internal waves, ocean air interaction, rotating fluids, stratified flow, Pietrafesa (L.J.), (et al.), *9938*

Klingenberg (R.), damping, dynamic behavior, elastomers, *8278*

Kloeden (P.E.), see Bennett (A.F.), *1913*

Kloos (K.H.), creep, cyclic testing, fatigue, low cycle fatigue, turbines, Granacher (J.), (et al.), *5282*

Klopotov (I.D.), see Gorev (B.V.), *7457*

Kloss (R.A.), see Emmerling (F.A.), *5218*

Klostermeyer (J.), atmospheric circulation, jet streams, kelvin-helmholtz instability, turbulence (geophysical), Ruster (R.), *5933*

• atmospheric circulation, eddies, gravity waves (internal), kelvin-helmholtz instability, *5934*

Klotter (K.), dynamic analysis, vibration, vibration (nonlinear), *5189, book*

Kluwick (A.), characteristic methods, hyperbolic equations, unsteady flow, waves, *4964*

Klyachko (L.A.), atomization, centrifugation, liquids, *4017*
Klyatskin (V.I.), see Babkin (G.I.), *6345*
- see Babkin (G.I.), *6346*

Klykov (V.E.), salt dissolution, soils, stefan problem, transport mechanisms, Kulagin (V.L.), (et al.), *4466*
Klyukin (A.A.), experimental methods, layered media, magneto fluid dynamics, rotating fluids, stabilization, Kolesnikov (Yu.B.), (et al.), *10742*
Kmetty (P.), see Haber (R.), *118*
Knapp (H.), see Harmens (A.), *717*
Knapton (J.), see Barber (S.D.), *3417*
- see Andam (K.A.), *10353*

Knauss (W.G.), experimental methods, shadowgraphic methods, tension, tissues, Kenner (V.H.), *9057*
knees, biological joints, biomechanics, tendons, Piziali (R.L.), Seering (W.P.), (et al.), *1946*
- biological joints, biomechanics, tendons, Seering (W.P.), Piziali (R.L.), (et al.), *1947*
- mechanical design, prosthetic devices, Judge (G.W.), Fisher (L.), *1957*
- plasticity, prosthetic devices, wear, Walker (P.S.), Ben-Dov (M.), (et al.), *4921*
- bones, fracture, impact, injuries, Viano (D.C.), Stalnaker (R.L.), *9050*

Knight (B.W.), see Sirovich (L.), *10030*
- eigenvalue problems, group theory, mathematical methods, operators, transforms, Sirovich (L.), *10035*

Knight (D.), see Visbal (M.), *7683*
Knight (D.D.), aerodynamics, compressible flow, inlet flow, numerical methods, supersonic flow, *2623*
Knisely (C.), see Rockwell (D.), *2683*
Knobloch (E.), boussinesq equation, convection, diffusion, nonlinear analysis, Proctor (M.R.E.), *8531*
knocking, control, internal combustion engines, pressure measurement, spark ignition, Randall (D.W.), Powell (J.D.), *5653*
Knoll (G.), bearings (journal), lubrication (hydrodynamic), reynolds equation (lubrication), Peeken (H.), (et al.), *3146*
Knothe (K.), dynamic analysis, lagrange multiplier, many body systems, railroads, Mauer (L.), *2351*
Knott (G.F.), cylindrical bodies, ducts, pressure measurement, wave loads, wavemakers, Flower (J.O.), *1636*
- energy dissipators, oscillatory flow, pipe exit, pipe flow, wave engines, Flower (J.O.), *8588*

Knott (J.F.), see Livesey (V.B.), *2408*
Knott (P.R.), acoustics, aerodynamic excitation, noise, nozzles, Blozy (J.T.), (et al.), *2944*
Knowles (J.K.), see Horgan (C.O.), *8181*
- crack opening displacement, elasticity (nonlinear), finite amplitude, nonlinear analysis, *9405*

Knudsen (J.G.), see Somerscales (E.F.C.) eds., *5597, book*
Knudson (W.C.), see Jayaraman (H.B.), *9144*
Ko (F.), dynamic loads, glass fibers, materials processing, textiles, Bruner, (et al.), *6200*
Ko (H.-Y.), see Berends (B.E.), *6391*
Ko (N.W.M.), see Ho (K.K.), *710*
- edge effects, jets, vortex rings, *2673*
- annular flow, jets, vortices, wakes, *3695*
- coaxial jets, entrance region, jets, subsonic flow, Au (H.), *5455*
- jets, transforms, vortices, wakes, Leung (K.C.), *11955*

Ko (P.L.), fretting, heat exchangers, tube bundles, vibration (flow induced), Rogers (R.J.), *11624*
Ko (S.-H.), acoustic waves, baffles, flexural waves, vibration, Sherman (C.H.), *915*
- baffles, barriers, flexural waves, viscoelastic materials, wave absorbers, *4764*
- see Strawderman (W.A.), *4767*
- ducts, eigenvalue problems, sound propagation, *8861*

Koba (A.L.), boiling, capillary flow, convection (forced), critical heat flux, Kozhelupenko (Yu.D.), (et al.), *10574*
Kobayashi (A.S.), see Betser (A.A.), *10302*
Kobayashi (H.), crack growth, elastoplasticity, fatigue, fractographic tests, Sibuya (E.), (et al.), *7481*
- cascades, secondary flow, visualization, Mizutani (M.), *8592*

Kobayashi (M.), elastic constants, fibers, glass, thermal effects, Fujisawa (T.), (et al.), *2491*
- differential equations (ordinary), dynamics, glass, materials processing, melting, Hujisawa (T.), (et al.), *3424*

Kobayashi (R.), finite difference methods, hydrodynamic stability, taylor-gortler instability, wall jets, Fujisawa (N.), *1577*
- boundary layer, conical bodies, hydrodynamic stability, rotating bodies, *9601*
- see Kohama (Y.), *11527*

Kobayashi (S.), see Oh (S.I.), *2399*
- anisotropic media, boundary integral methods, elasticity (linear), green function, half space, Nishimura (N.), *4344*
- see Yamamoto (Y.), *5486*
- see Daiguji (H.), *11385*

Kobelev (V.V.), see Banichuk (N.V.), *11322*
Kobets (V.I.), see Bovt (A.N.), *9838*
Kobiyama (M.), convection, heat transfer (combined modes), monte carlo analysis, plates (parallel), radiation, Taniguchi (H.), (et al.), *783*
Koblasz (A.J.), biomathematics, diagnostics, electroretinogram, eyes, nonlinear analysis, *4923*
Kobrunov (A.I.), earth, gravity, gravity anomalies, optimization, *5887*
Kobzunenko (A.G.), see Neizvestnyy (A.I.), *4832*
Koch (C.C.), axial compressors, blades, pressure change, stalling, *7806*
Kochar (G.T.), gravity, magneto fluid dynamics, stability theory, theory, waves, Jain (R.K.), *2891*
Kochetkov (E.S.), algorithms, linear systems, queue theory, *153*
Kochetov (D.A.), see Golderman (M.A.), *4459*
Kochetov (V.T.), deformation, low cycle fatigue, measurements, Erofeev (V.I.), (et al.), *1414*
Kocks (U.F.), see Mecking (H.), *7289*
Kocman (M.G.), see Cornwell (L.W.), *5018*
Koczy (L.), creep, fibers, rheology, textiles, Fulop (I.), *5137*
Kodama (S.), buckling (torsional), postbuckling behavior, pressurized pipes, shells (cylindrical), Otomo (K.), (et al.), *8258*
- see Kusuoka (H.), *9196*

Kodama (Y.), see Fukano (T.), *905*
- see Fukano (T.), *4765*

Kodera (Y.), see Imafuku (I.), *79*
Kodnyanko (V.A.), see Shatokhin (S.N.), *9969*
Kodres (C.A.), energy conversion, evaporation, geothermal energy, heat exchangers, Jacobs (H.R.), (et al.), *3834*
Koerner (R.M.), see Lord (A.E.) Jr., *5255*
- acoustic emission, experimental methods, monitoring, rocks, Mccabe (W.M.), (et al.), *10265*

Koga (J.), diffusion coefficient, mixing, mixtures, particulate flow, Yamaguchi (K.), (et al.), *10561*
Kogan (E.A.), conveyors, dynamic response, particle dynamics, vibration (forced), *3342*
- deformation, experimental mechanics, pipelines, thermal loading, Zlodeev (V.P.), *11333*

Kogan (G.A.), blades, heat transfer, rotating bodies, slots, turbomachinery, Dergach (A.A.), *7842*
Kogan (M.N.), see Galkin (V.S.), *11446*
Kogan (V.A.), blood flow, circulation, heart, *7116*
Kogan (V.G.), conduction, low temperature properties, multiphase media, superconductors, *5531*
Kogan (V.R.), see Brailovskaya (V.A.), *8784*
Kogo (H.), see Hirata (H.), *2192*
Koh (A.-S.), see Abdel-Ghaffar (A.M.), *1880*
Kohama (Y.), boundary layer, curved surfaces, heat transfer, hydrodynamic stability, taylor instability, Kobayashi (R.), *11527*
Kohler (H.), holography, interferometry, lasers, metrology, surfaces, vibration, *7552*
Kohler (W.E.), ocean, sound propagation, underwater acoustics, *5726*
- see Chow (P.L.) eds., *6043, book*
- see Schmidt (G.), *7819*

Kohler-Jobin (M.-T.), eigenvalues, helmholtz equation, inequalities, isoperimetric inequalities, *7163*
Kohli (D.), see Singh (Y.P.), *6561*
Kohli (S.), see Blokhra (R.L.), *10943*
Kohn (E.), see Wachter (J.), *8658*
Kohn (R.E.), air pollution, control, linear programming, mathematical models, optimization, *10094, book*
Kohzu (I.), see Kaneta (K.), *7045*
Koike (Y.), see Nishitani (T.), *2466*
Koizumi (T.), see Shibuya (T.), *3457*
- see Shibuya (T.), *4460*
- cylindrical bodies, thermal stresses, thermoelasticity (transient), Ishikawa (O.), (et al.), *8871*
- see Shibuya (T.), *10293*

Kojima (E.), ducts, fluid conveyance, pumps, sound generation, Nagakura (H.), *11957*
Kojima (H.), buckling, electromagnetic loading, electromechanical components, transformer windings, Miyata (H.), (et al.), *6249*
Kojima (N.), plates (circular), sound generation, vibration, Ikoma (K.), (et al.), *11948*
Kokorev (L.S.), conduction, contact problems, solid solid interface, thermal contact resistance, Shelagin (Yu.N.), (et al.), *3818*
Kokoshvili (S.M.), materials properties, polymers, strain rate, viscoelasticity (dynamic), Kalnin (P.P.), *1193*
Kokotov (V.M.), see Aladzhev (B.M.), *2144*
Kokotovic (P.V.), see Allemong (J.J.), *8157*
Kokusho (T.), cyclic testing, soils, triaxial tests, *6381*
Kolar (P.), see Benes (J.), *2196*
Kolbe (W.), flames (diffusion), flames (turbulent), models, Kollmann (W.), *1746*
Kolerus (J.), acoustic emission, generation, nondestructive tests, propagation, *9424*
Kolesnichenko (A.F.), free jets, melting, phase changes, shielded arc welding, *6570*

Kolesnichenko (E.G.), chemically reactive flow, compressible flow, nonequilibrium flow, similarity methods, *11422*
Kolesnik (I.A.), elastoplasticity, flexure, plastic behavior, shells (cylindrical), shells (shallow), Troshin (V.G.), *4372*
Kolesnik (V.I.), see Zavgorodnii (P.F.), *2847*
Kolesnikov (A.K.), see Eremin (E.A.), *6785*
Kolesnikov (A.V.), see Tsoi (N.G.), *7621*
• see Ginevskii (A.S.), *11387*
Kolesnikov (I.Yu.), bending, plates (anisotropic), plates (rectangular), plates (sandwich), *9274*
• see Shalashilin (V.I.), *11149*
Kolesnikov (N.N.), see Koziov (V.V.), *29*
Kolesnikov (P.M.), drops, radiant interchange, scattering, Cess (R.D.), *5582*
Kolesnikov (Yu.B.), see Kalis (Kh.E.), *9786*
• see Klyukin (A.A.), *10742*
• see Kalis (Kh.E.), *11832*
Kolesnikova (E.N.), see Drobyshevski (E.M.), *6961*
Kolesnikova (N.A.), see Buevich (Yu.A.), *935*
Kolesnikova (T.V.), see Bondal (G.V.), *9395*
Kolesov (V.V.), buoyancy, couette flow, hydrodynamic stability, stability curve, *1576*
• buoyancy, couette flow, hydrodynamic stability, *3698*
Kolesov (Yu.S.), averaging, time lag, vibration (nonlinear), *8281*
Kolias (S.), cement stabilized soils, compression, concrete, dynamic testing, elastic constants, soils, statics, tension, Williams (R.I.T.), *9427*
Kolkman (H.J.), aluminum alloys, copper, crystals, deformation (plastic), dislocations, plasticity, *10336*
Koller (R.), computer aided design, gear teeth, Esser (H.), *9484*
Kollmann (F.G.), elastoplasticity, interference fits, machine design, rotating bodies, *9467*
Kollmann (W.), see Kolbe (W.), *1746*
Kolm (H.H.), see O'Neill (G.K.), *2874*
Kolmanovskii (V.B.), algorithms, optimal control, stochastic systems, suboptimal control, *3195*
• optimal control, stochastic control, stochastic systems, time optimal systems, Maizenberg (T.L.), *9173*
Kolobashkin (V.M.), see Egorov (V.A.), *9833*
Kolodziej (J.A.), filtration, laminar flow, porous media, resistance, tube bundles, *5437*
Kolokolchikov (V.V.), nonlinear materials, porous media, viscoelastic materials, wedges, *8194*
Kolonits (F.), contact problems, flash temperature, gears, temperature, *4904*
Kolos (A.V.), asymptotic behavior, elasticity (nonlinear), plates (nonhomogeneous), *8252*
Kolos (V.P.), cooling, hydrodynamic stability, thermal instability, Sorokin (V.N.), *6814*
Kolosov (V.V.), aerosols, luminous energy, particulate damping, turbulence, turbulence (geophysical), Kuzikovskiy (A.V.), *11555*
Kolotilova (N.G.), see Apshtein (E.Z.), *8534*
Kolpashchikov (V.L.), channel flow, heat transfer, micropolar media, unsteady flow, Migun (N.P.), (et al.), *3805*
• boundary conditions, channel flow, convection (forced), micropolar media, microstructural fluids, thermal effects, Migun (N.P.), (et al.), *10573*
Koltunov (M.A.), dynamic stability, shells (cylindrical), shells (viscoelastic), thin walled structures, Karimov (A.I.), (et al.), *10181*
Kolyada (Yu.V.), algorithms, iterative methods, nonlinear analysis, Sigorskii (V.P.), *2040*
Kolyano (Yu.M.), plates (reinforced), thermal stresses, thermoelasticity (transient), Kushnir (R.M.), *925*
• convection, disks, heat sources, plates (circular), Semerak (M.M.), (et al.), *9715*
Kolyshkin (A.A.), see Antimirov (M.Ya.), *10746*
Komai (K.), see Endo (K.), *7495*
Komarov (A.M.), see Zaitsev (A.A.), *3728*
Komarov (V.I.), see Pchelintsev (A.M.), *5254*
Komelkov (V.S.), see Beloshitskii (V.V.), *2900*
Komen (G.J.), spectra, surface waves, wind-wave interaction, *8026*
• gravity waves (surface), ocean waves, oceanography, spectra, surface waves, wind-wave interaction, *8998*
Komissarchik (M.G.), see Zyablova (Zh.I.), *9726*
Komissarova (G.L.), dynamic analysis, flexure, plates (circular), vibration (free), *7389*
Komissarova (N.N.), acoustic waves, arrays, nonhomogeneous media, propagation, *11924*
Komkov (V.), beam columns, beams (variable cross section), buckling, structural stability, *2286*
Komori (S.), see Ogino (F.), *11550*
Komori (T.), anisotropic media, fibers, probability, void fraction, Makishima (K.), *6201*
Kon (N.), see Ota (T.), *1665*
• see Ota (T.), *4602*
Kon-No (A.), see Tanaka (K.), *4448*
• see Tanaka (K.), *4449*
Kondelkin (P.I.), see Erofeev (V.I.), *2242*
Kondo (H.), containers (partially filled), eigenvalue problems, hydroelasticity, sloshing, *6704*
Kondo (K.), large displacement, shells (nonlinear), shells (plastic), shells (spherical), Pian (T.H.H.), *1234*
• deformation (finite), plasticity, plates (circular), Pian (T.H.H.), *2233*
• beams (plastic), deformation (finite), large displacement, plastic behavior, Pian (T.H.H.), *6212*
Kondo (Y.), chatter, tools, vibration (self excited), Kawano (O.), (et al.), *2354*
Kondratev (A.I.), differential games, normative games, Stognii (A.A.), *3202*
• see Bondarenko (A.N.), *10240*
Kondratev (E.N.), see Shevchuk (V.G.), *9768*
Kondratev (I.K.), equipment, monitoring, seismic waves, Christov (P.I.), *5873*
Kondratev (V.V.), algorithms, discrete systems, optimal control, Savelev (V.P.), (et al.), *4310*
Konev (V.V.), see Vorobeychikov (S.E.), *8163*
Konig (J.A.), dynamic effects, elastoplasticity, shakedown structures, thermal effects, work hardening, Maier (G.), *8436*
Konishi (K.), algorithms, discrete systems, identification, kalman filters, linear systems, stochastic systems, Inouchi (K.), (et al.), *4219*
Konkin (A.V.), algorithms, binary signals, digital simulation, filters, interpolation, Kulman (N.K.), *3191*
Konno (K.), see Ichikawa (Y.H.), *2328*
Kono (M.), discrete systems, eigenvalues, linear systems, periodic systems, pole placement, *3156*
Kononenko (V.O.), mechanical systems, vibration (nonlinear), *8279*
Kononyuk (V.A.), differential equations (ordinary), linear systems, oscillations, transition process, *28*
• dynamic analysis, oscillations, time invariant systems, transient effects, *7234*
Konoplev (Yu.G.), elliptical bodies, shells (cylindrical), structural stability, torsion, Kopp (A.V.), *4398*
Konopnicki (T.T.), see Flack (R.D.), *756*
Konorski (A.), choked flow, nonequilibrium flow, steam, Nahlik (S.), *6984*
Konovalov (A.E.), axisymmetric flow, channel flow, channels (divided), divided flow, irrotational flow, *10437*
Konovalov (V.M.), see Nikulin (V.A.), *7573*
Kontarev (G.P.), atmospheric circulation, climatology, weather forecasting, *4059*
Konyukh (L.A.), aerosols, meteorology, planetary atmospheres, radiant interchange, Yurevich (F.B.), (et al.), *5586*
Koo (K.P), see Carome (E.F.), *3980*
Kooi (C.F.), energy conservation, energy storage, solar collectors, solar ponds, *8765*
Kool (P.), see De Grande (G.), *6694*
Koop (C.G.), gravity waves (internal), hydrodynamic stability, stratified flow, wave interactions, Redekopp (L.G.), *10483*
• finite amplitude, gravity waves (internal), gravity waves (solitary), liquid liquid interface, Butler (G.), *11575*
Koopman (D.W.), diagnostics, nuclear fusion, plasma, radiation properties, tokamak, McIrath (T.J.), (et al.), *2898*
Koopmann (G.H.), centrifugal fans, noise abatement, resonance, Neise (W.), *8868*
• machinery, noise, noise abatement, Benner (H.), *8868*
Kopeliovich (B.L.), see Ryvkin (V.B.), *10937*
Kopisz (M.), continuum mechanics, functional analyis, thermodynamics (nonequilibrium), *6042*
Kopnichev (Yu.F.), compressional waves, earthquakes, initiation, models, *9912*
Kopp (A.V.), see Konoplev (Yu.G.), *4398*
Kopper (F.C.), aerodynamic performance, cascades, endwall profiling, pressure distribution, turbines, Milano (R.), (et al.), *2655*
Koprinski (S.Ts.), heat transfer, laplace transform, mass transfer, *10601*
Kops (L.), see Attia (M.H.), *3989*
• see Attia (M.H.), *5800*
Kopylov (A.P.), flood flow, hydrology, watersheds, *1897*
Kopysov (O.Yu.), adaptive systems, algorithms, identification, nonlinear systems, Prokopov (B.I.), *3210*
Korashy (M.), beams, experimental results, fatigue, stiffened structures, Varga (J.), *6471*
Korb (J.), dynamic stability, rails, vibration (parametric), wheels, *1986*
Korchemkin (M.), graph theory, optimization, transport, *2167*
Kordisch (H.), see Wachutka (H.), *5339*
Kordonskii (V.I.), see Entov (V.M.), *6586*
Kordonskiy (V.I.), see Shulman (Z.P.), *5548*
Korduila (W.), see Krause (E.), *608*
• see Hirschel (E.H.), *2636*
• see Hirschel (E.H.), *4596, book*
Korematsu (K.), see Fukuda (M.), *11794*
Koren (Y.), automation, control, discrete systems, Masory (O.), *204*
Korjack (T.A.), channels, deposition, entrance region, suspensions, Chen (R.Y.), *4010*
Kormeling (H.A.), beams, fatigue, fibers, reinforced concrete, *2521*
Kormiltsev (V.V.), electro fluid dynamics, fluid mechanics, permeability, porous media, rocks, Khachay (O.A.), *8921*
Korneev (V.G.), computing techniques, digital simulation, dirichlet problem, finite element techniques, iterative methods, Kuzmenko (V.G.), *8147*

Korneichuk (V.I.), see Zhabin (V.I.), *159*
Korner (E.), approximations, computing techniques, differential equations (ordinary), iterative methods, *7187*
Korner (M.), damping, poiseuille flow, unsteady flow, vibration, viscous effects, *616*
Kornev (V.M.), buckling, composite materials, explosive welding, fibers, metallic composites, Yakovlev (I.V.), *7363*
- acoustic loading, buckling, shells (axisymmetric), Stepanenko (M.V.), *11643*

Kornienko (E.S.), boundary layer, fluid injection, oscillators, supersonic flow, wedges, Shmanenkov (V.N.), *8562*
Kornienko (V.T.), creep, high temperature, microscopy, strain measurement, Rekov (A.M.), (et al.), *5320*
Korobeinikov (V.P.), see Zakharov (N.S.), *10021*
Korobeynikov (V.P.), compressible flow, energy transport, high temperature, similarity methods, unsteady flow, *11419*
Korobko (V.I.), axisymmetric flow, impingement, jets, particle dynamics, turbulent flow, Malyi (I.N.), (et al.), *11512*
Korolev (A.V.), see Koroleva (O.A.), *821*
- free boundary, groundwater, simulation, Shvidler (M.I.), *2998*

Korolev (P.V.), see Yanko (A.K.), *4658*
- see Gogolev (I.G.), *6654*

Koroleva (O.A.), irrigation, tubes (perforated), underground, Korolev (A.V.), *821*
Korolkov (B.P.), see Borchevkin (Yu.S.), *1675*
- dynamic analysis, heat transfer, hyperbolic equations, laplace transform, Pupin (A.A.), *3115*

Korostelev (A.P.), see Kenig (K.E.), *3120*
- convergence, mathematical methods, noise (random), stochastics, *6091*

Korotchenko (M.V.), see Novitskii (E.Z.), *2499*
Korotaev (N.I.), see Gladkov (S.M.), *919*
Korotkii (A.I.), algorithms, control, differential games, distributed parameters, hyperbolic equations, parabolic equations, position control, Osipov (Iu.S.), *7240*
Korotkov (V.N.), composite materials, polymers, thermal stresses, Turusov (R.A.), (et al.), *7952*
Korotnikh (Yu.Ya.), see Kuzmin (N.N.), *2149*
Korpel (A.), see Banerjee (P.P.), *11936*
Korshak (V.), adhesives, friction (sliding), plastics, polymers, Gribova (I.A.), *275*
Korshak (V.V.), additives, bearings (journal), graphite, polymers, wear, Gribova (I.A.), (et al.), *1023*
Korst (H.H.), modeling, plumes, simulation, wind tunnels, White (R.A.), (et al.), *3581*
- decelerators, drag, friction, vehicles, White (R.A.), *9658*

korteweg de vries equation, scattering, surveys, Miles (J.W.), *664*
- finite amplitude, separated flow, transient effects, two phase flow, Banerjee (S.), Chan (A.M.C.), *940*
- averaging, inverse method, mathematical methods, Flaschka (H.), Forest (M.G.), (et al.), *1096*
- burgers equation, evolution equations, nonlinear analysis, Fokas (A.S.), *2002*
- eigenvalue problems, hamiltonian equations, mathematical methods, Alber (S.I.), *2005*
- backlund transformations, evolution equations, inverse problems, scattering, Prikarpatskii (A.K.), *6072*
- dispersion, finite element techniques, galerkin method, waves, Sanz-Serna (J.M.), Christie (I.), *6088*
- gravity waves (finite depth), nonlinear analysis, sloping bottom, Lugovtsov (A.A.), *6696*
- crystals, lattices, one dimensional waves, particle dynamics, Askar (A.), *7140*
- perturbation methods, solitary waves, Grimshaw (R.), *8621*
- gravity waves (solitary), gravity waves (surface), velocity profiles, Longuet-Higgins (M.S.), *9619*
- boussinesq equation, differential equations (partial), nonlinear waves, scattering, solitary waves, Ablowitz (M.J.), Segur (H.), *10017*
- burgers equation, group theory, nonlinear analysis, Zakharov (N.S.), Korobeinikov (V.P.), *10021*
- convergence, finite element techniques, Arnold (D.N.), Winther (R.), *10064*
- hall effect, plasma, turbulence (transport), waves, Granik (A.T.), *10758*
- gravity waves (finite depth), gravity waves (solitary), radial waves, solitary waves, Djordjevic (V.D.), *11568*
- gravity waves (finite depth), radial waves, rotational flow, similarity methods, Djordjevic (V.D.), Pavlovic (M.), *11569*

Kortikov (N.N.), boundary layer (thermal), conical bodies, incompressible flow, laminar flow, singular perturbations, Novikova (I.B.), *2608*
Korving (J.), see Oudeman (P.), *5423*
Kosaryev (G.L.), anisotropic media, displacement, free boundary, half space, seismic waves, Makeyeva (L.K.), (et al.), *5869*
Koshal (D.), bearings (journal), design, design (optimum), lubrication (hydrodynamic), lubrication (hydrostatic), Rowe (W.B.), *5979*
Koshevoi (I.K.), see Khoroshun (L.P.), *2306*
Koshlyakov (V.N.), dynamic analysis, mathematical methods, rotating bodies, *10*
Koshman (V.P.), elastodynamics, half space, seismic waves, *5079*
- elastic waves, half space, impact, lamb problem, *7421*

Kosichenko (A.A.), composite structures, design (minimum weight), flutter, shells (cylindrical), supersonic flow, Pochtman (Yu.M.), (et al.), *10763*
Kosinska (A.), see Godycki-Cwirko (T.), *8379*
Kosinski (W.), elastic waves, fracture, rock mechanics, shock waves (normal), *1300*
Kosinskii (A.V.), displacement-phase-code converter, error, measurements (dynamic), *224*
Kosmodamianskii (A.S.), bending (elastic), inclusions, plates (holed), plates (nonhomogeneous), plates (thick), Shaldyrvan (V.A.), *8251, book*
- elasticity (linear), plates (holed), plates (weakened), Chernik (V.I.), *10145*

Kosmowski (I.), bubble dynamics, liquid gas mixture, measurements, optical techniques, two phase flow, Wunderlich (B.), (et al.), *942*
Kosolapov (V.I.), differential equations (ordinary), lyapunov's functions, stability theory, *4156*
Kosova (N.V.), bearings, contact stresses, cylindrical bodies, rings, Atopov (V.I.), (et al.), *2223*
Kosovichev (A.G.), compressible flow, gravity, numerical methods, one dimensional flow, Popov (Yu.P.), *11418*
Koss (L.L.), machinery, noise, noise abatement, *3952*
- acoustic measurements, damping, machinery, vibration, Moffatt (J.A.), *9851*

Kossa (S.S.), see Cookson (R.A.), *11340*
Kossecka (E.), deformation, dislocations, green function, *8180*
Kostenko (A.V.), see Vigak (V.M.), *177*
Kostenko (I.S.), shells (anisotropic), shells (cylindrical), stress intensity factor, *10157*
Kosterin (A.V.), anisotropic media, incompressible flow, porous media, *5828*
- infiltration, nonequilibr *5831*

Kostyanoy (G.N.), see Arst (Kh.Yu.), *2823*
Kostyleva (N.E.), algorithms, linear systems, stability theory, *4245*
Kostyukov (V.V.), see Babaliev (A.M.), *4088*
Kosut (R.L.), filters, optimal control, optimization, tracking, *196*
Kosygin (E.P.), blades, chemical reactions, cyclic loading, high temperature, surface flaws, Verkhovodov (P.A.), *7492*
Kot (C.A.), cavitation, fluid-structure interaction, piping systems, Hsieh (B.J.), (et al.), *6603*
Kot (S.C.), see Li (Y.S.), *9148*
Kotake (M.), see Nomura (Y.), *1542*
Kotansky (D.R.), impingement, jets, wall jets, Glaze (L.W.), *8599*
Kotas (T.J.), energy transport, thermodynamic functions, thermodynamic processes, *2777*
- energy, power generation, thermodynamic functions, thermodynamics (irreversible), *3769*

Kotera (T.), dynamic stability, joints, stability theory, vibration (torsional), *6280*
Koterayama (W.), cylindrical bodies, drag coefficient, gravity waves (surface), submerged bodies, virtual mass, wave loads, *1594*
- cylindrical bodies, gravity waves (surface), submerged bodies, wave loads, *8632*

Kotharl (M.), design (optimum), mechanisms, synthesis, Rao (A.C.), *1468*
- kinematics, linkages, mechanisms (planes), Rao (A.C.), *3083*

Kotikian (R.A.), see Karapetian (K.S.), *7566*
Kotilainen (H.), crack tip geometry, fracture toughness, plastic flow, pressure vessels, steel, *6479*
Kotlyar (L.M.), see Kiselev (O.M.), *8594, book*
Kotlyarevskii (V.A.), cavitation, compressional waves, soils, Maiorova (E.G.), (et al.), *7440*
Kotov (P.I.), see Vashunin (A.I.), *2976*
Kotschenreuther (P.), see Bender (E.), *9194*
Kottas (J.F.), mathematical models, operations research, risk, Lau (H.-S.), *2118*
Kou (R.S.), airplanes, guns, identification, least squares, mathematical models, Glass (B.C.), (et al.), *3176*
Kounadis (A.N.), buckling, divergence, flutter, follower forces, structural stability, *1783*
- buckling, frames, structural stability, sway, Economou (A.P.), *2285*
- buckling, frames, structural stability, *2299*
- beams (cantilever), flutter, forced systems, Katsikadelis (J.T.), *2911*
- buckling, frames, impulsive loading, snap-through, *5187*
- see Vlachinos (A.S.), *9287*
- buckling, divergence, flutter, follower forces, frames, stiffness, Avraam (T.P.), *9604*

Kountouris (G.E.), see Spillers (W.R.), *1429*
Koura (M.M.), friction (sliding), roughness, surface profiles, surfaces, Omar (M.A.), *10883*
Kousiounelos (P.N.), composite materials, fibers, fracture, Williams (J.H.) Jr., *10303*
Koussiouris (T.G.), decoupling, frequency domain techniques, multivariable systems, pole placement, *3152*
Koussis (A.D.), infiltration, moving surfaces, numerical methods, Chow (S.-L.), *953*
- flood routing, *975*
- see Adams (E.E.), *9741*

Koutitas (C.), coastal engineering, computer programming, modeling, three dimensional flow, wind generation, O'Connor (B.), *7662*
Koutny (F.), deflections, stiffness, tires, *9461*
Koutsky (J.), see Han (K.S.), *10309*
Kouwen (N.), biomechanics, channel flow, channels, darcy flow, river beds, roughness, vegetation, Li (R.-M.), *4569*

Kouzov (D.P.), elastic bodies, green function, sound fields, sound generation, *3939*
Kouzuma (M.), deformation (plastic), foil, materials properties, rolling, *7458*
Kovac (J.), film flow, froude number, reynolds number, rotating cylinders, surface tension, weber number, Balmer (R.T.), *3628*
Kovacic (S.M.), see Kumar (M.), *2866*
Kovacs (B.), buckling, columns, cooling towers, *8459*
Koval (V.I.), crack propagation, experimental methods, measurements, Lebedev (V.G.), *1360*
Koval (V.P.), alloys, cracking, metals, stress corrosion, Karvatskii (L.M.), (et al.), *6423*
Kovalchuk (B.I.), steel, thermal effects, yield condition, Lebedev (A.A.), (et al.), *7287*
Kovalenko (E.V.), see Aleksandrov (V.M.), *4167*
Kovalenko (V.A.), compression, elastoplasticity, shells (cylindrical), Piskun (V.V.), (et al.), *322*
- see Lyakhov (G.M.), *9840*
- see Baranov (E.G.), *9841*

Kovalev (A.M.), dynamic stability, gyrodynamics, rotating bodies, *6057*
Kovalev (V.A.), channel flow, hydrodynamic stability, shear flow, stability theory, turbulent flow, velocity profiles, Ordanovich (A.E.), *11539*
Kovaleva (E.D.), see Beletskii (V.V.), *7111*
Kovalevskii (V.V.), corrosion fatigue, fatigue, fretting, metals, survey, *453*
- see Leadbeater (G.), *5290*

Kovalskii (I.P.), discontinuities, stability theory, state space techniques, Kudin (G.I.), *7238*
Kovarskaya (E.Z.), see Guseva (E.K.), *6481*
Kovasznay (L.S.G.), jets, pressure measurement, pulsatile flow, spherical bodies, unsteady flow, Tani (I.), (et al.), *11381*
Kovena (V.M.), see Berezin (Yu.A.), *589*
Kovenskii (V.I.), dispersed flow, emissions, fluid mechanics, *5848*
- see Borodulya (V.A.), *10840*

Kovenya (V.M.), compressible flow, grids, numerical methods, two dimensional flow, viscous effects, Yanenko (N.N.), *2625*
Kovpak (V.I.), failure, metals, prediction, *5289*
Kovrizhnykh (L.M.), containment, equilibrium, plasma (toroidal), pressure, stability theory, Shchepetov (S.V.), *11838*
Kovtunenko (S.M.), see Birger (V.I.), *9915*
Kowalewski (T.A.), closed conduit flow, particle fluid flow, suspensions, velocity measurement, *6587*
Kowalik (M.), centrifugal pumps, design, optimization, volutes, Zarzer (E.), (et al.), *7804*
Kowalski (A.D.), decay, dispersion, simulation, turbulence (homogeneous), Peskin (R.L.), *8609*
Kowalski (J.), see Trela (M.), *10652*
Kowalski (S.J.), mathematical models, porous media, saturation, two component flow, *7978*
Koyama (H.), mass transfer, rotating disks, sublimation, Ohsawa (S.-I.), (et al.), *794*
Koyanagi (W.), see Okada (K.), *10360*
Koye (K.A.), film thickness, lubrication (elastohydrodynamic), rolling contact, Winer (W.O.), *5988*
Kozachok (A.A.), dynamic loads, misalignment, rolling, *9473*
Kozak (I.), boundary value problems, elasticity (linear), variational methods, *3241*
- elasticity (linear), energy methods, variational methods, virtual work methods, *4339*
- boundary conditions, boundary value problems, elasticity (linear), *5076*
- boundary conditions, conservation laws, cosserat solids, micropolar media, Szeidl (G.), *7263*

Kozarov (M.), annular flow, dynamic stability, hydroelasticity, pipelines, Mladenov (K.), *11687*
Kozel (K.), cascades, finite difference methods, transonic flow, Petrovsky (I.), *3678*
- see Fort (J.), *3726*
- compressible flow, numerical methods, plane flow, transonic flow, Polasek (J.), (et al.), *11430*

Kozenko (A.V.), earth, gravity, mathematical models, Maslov (I.A.), *7023*
Kozeyev (V.A.), control, nonlinear systems, observers, *161*
Kozhabekov (Zh.T.), cavities, dynamic stresses, elastic foundations, inclusions, punch problems, *7409*
Kozhelupenko (Yu.D.), see Koba (A.L.), *10574*
Kozhevnikov (S.N.), dynamic analysis, dynamic response, protective devices, Nuribekov (I.A.-G.), *512*
- kinematics, mechanisms, statically indeterminate structures, synthesis, *1466, book*

Kozhevnikov (S.N.) ed., cams, gear trains, linkages, machine design, mechanisms, transmissions, *2549, book*
Kozhevnikov (Yu.V.), airplanes, design (optimum), gas turbines, Borovik (V.O.), (et al.), *5659*
- design (optimum), ducted fans, gas turbines, turbofan engines, Borovik (V.O.), (et al.), *5660*

Kozhukhar (I.A.), see Bologa (M.K.), *791*
Kozin (F.), crack growth, fatigue, probability, random loading, Bogdanoff (J.L.), *4481*
- see Bogdanoff (J.L.), *10031*

Kozlov (I.A.), bearing capacity, rotating disks, rotors, thermal effects, *3341*
Kozlov (L.F.), boundary layer, damping, liquids, oscillations, slip flow, u-shaped tube, Nikitina (G.D.), *3661*
Kozlov (O.M.), see Ivanov (A.V.), *10055*
Kozlov (V.F.), bottom irregularities, currents, oceanography, Ten (E.V.), *1893*
- density, eddy currents, energy, ocean, oceanography, Molchanova (L.A.), (et al.), *1895*
- bottom irregularities, currents, geostrophic flow, oceanography, Kropinova (N.A.), (et al.), *3016*
- oceanography, rossby waves, *10855*

Kozlov (V.S.), see Veretennikov (V.V.), *5821*
Kozlov (V.V.), hamiltonian equations, integration, mathematical methods, Kolesnikov (N.N.), *29*
- dynamic analysis, mathematical methods, pendulums, vibration (parametric), *358*
- see Bolotin (S.V.), *4146*
- see Dovgal (A.V.), *5463*
- dynamic analysis, mathematical methods, *10930*

Kozlov (Ye.A.), multiple waves, processing, seismic waves, *7024*
Kozmenko (V.K.), see Volchkov (E.P.), *8587*
Kozyaev (E.F.), bubble dynamics, radiation, sound generation, two phase flow, Naugolnykh (K.A.), *906*
Kozyukov (A.V.), see Kiparenko (G.F.), *5690*
Krabiel (A.), high temperature, materials properties, steel, strain rate, Dahl (W.), *8886*
Kracht (M.), complex variables, differential equations (partial), integral operators, linear equations, survey, Kreyszig (E.), (et al.), *7162*
Kraemer (K.), incompressible flow, inviscid fluid, jets, starting, unsteady flow, *2583*
Kraft (K.H.), see Schnieder (E.), *9162*
Kraft (L.M.) Jr., see Kagawa (T.), *9919*
Kragelskii (I.V.), contact problems, friction, roughness, surface profiles, wear, *1002*
- additives, friction, lubricants (liquid), lubrication (boundary), wear, Rybakova (L.M.), (et al.), *1021*

Krahula (J.L.), see Brown (K.W.), *7211*
Kraiko (A.N.), acoustics, ducts, gases, nonlinear waves, Ni (A.L.), *1803*
- compressible flow, jets, mathematical models, nozzles, plumes, Shelomovskii (V.V.), *4591*
- continuum mechanics, jump conditions, moving surfaces, singular waves, *4929*
- see Ivanov (M.J.), *7692*
- compressible flow, duct flow, perturbation methods, three dimensional flow, Shironosov (V.A.), *9553*

Krain (H.), centrifugal compressors, diffusers, entrance region, laser doppler velocimeters, optical analysis, rotors, *6735*
Krajcinovic (D.), fluid-structure interaction, plasticity, submerged bodies, transient loading, *9630*
Krakov (M.S.), see Bashtovoi (V.G.), *9794*
Kramer (E.J.), see Donald (A.M.), *7500*
Kranenburg (C.), entrainment, mixing layers, shear stress, stratification, wind, *7652*
- bucyancy, hydrodynamic stability, richardson number, shear flow, stratified flow, turbulent flow, *11535*

Krapchev (V.B.), density, nonlinear characteristics, plasma (toroidal), tokamak, waveguides, Theilhaber (K.S.), (et al.), *8829*
Krasavin (V.V.), see Yatsyk (S.I.), *500*
Krasilshchikova (E.A.), acoustic waves, boundary value problems, moving media, subsonic flow, wave equations, *10798*
Krasnoselskii (M.A.), analytical methods, control, frequency response, oscillations, pulse-frequency, Pokrovskii (A.V.), (et al.), *10076*
Krasnov (A.E.), algorithms, filters, holography, *162*
Krasnushkin (P.E.), elastic waves, layered media, strips, *6333*
Krasovitskii (B.A.), deposition, oil flow, pipe flow, solidification, wax, Maron (V.I.), *11488*
Krasovskii (A.A.), large scale systems, optimal control, simulation, *210*
- algorithms, estimation, nonlinear systems, observability, *4300*

Krasovskii (N.N.), algorithms, control, differential games, *3200*
Krasulin (Yu.L.), see Barinov (S.M.), *10308*
Kraus (H.), high temperature, pressurized pipes, reactor structures, structural analysis, *1206*
Kraus (M.N.), conveyors, pneumatic transport, transport, two phase flow, *2982, book*
Krause (E.), boundary layer, incompressible flow, laminar flow, navier stokes equation, Kordulla (W.), *608*
- convergence, finite difference methods, fluid mechanics, viscous flow, vortex flow, *5409*

Krause (E.) ed., aerodynamics, blood flow, fluid mechanics, *3064, book*
Krause (G.), dynamic response, modal analysis, piping systems, seismic loading, *8487*

Krause (L.N.), dynamic stresses, flow measurement, testing equipment, transducers, turbomachinery, Fralick (G.C.), *10731*

Krausz (A.S.), crack propagation, dynamic fracture, kinetic theory, *5309*

- crack propagation, dynamic analysis, kinetic theory, stress corrosion, Mshana (J.), (et al.), *6453*

Krauter (A.I.), see Van Zanten (A.T.), *3221*

- bearings (journal), chatter, elastomers, vibration, water, *4890*

Kravchenko (A.A.), see Bazhenov (V.G.), *1471*

Kravchenko (B.A.), blades, cavities, hardening, turbines, Trofimov (N.G.), (et al.), *5801*

- gas turbines, mechanical joints, residual stresses, thermoplasticity, Gutman (G.N.), (et al.), *7953*

Kravchenko (V.I.), crossflow, cylindrical bodies, navier stokes equation, numerical methods, viscous flow, vorticity, *10413*

Kravchuk (A.S.), contact problems, friction (solid solid), indentation, variational methods, *249*

- contact problems, contact stresses, elastic behavior, inequalities, variational methods, Vasilev (V.A.), *3247*

Kravchuk (L.V.), see Tretyachenko (G.N.), *7474*

Kravitz (D.W.), see Wang (D.-P.), *2594*

Kravtsova (E.V.), damping, dynamic behavior, rotors, vibration isolation, Poznyak (E.L.), *2356*

Krawczyk (R.), iterative methods, mathematical methods, nonlinear methods, *1120*

Krawietz (A.), constitutive equations, convexity conditions, elastoplasticity, functional analyis, *266*

Kray (R.J.), composite materials, resins, *2244*

Krazinski (J.L.), coal, combustion, dust, flame propagation, pyrolysis, Buckius (R.O.), (et al.), *7880*

Krebs (L.), jets, nuclear reactors, pipe flow, tube bundles, Bremhorst (K.), (et al.), *8725*

Krebs (R.), see Bonn (W.), *9689*

Krechetov (G.S.), lyapunov's functions, periodic orbits, stability theory, *3098*

Kreger (A.F.), anisotropy, biomaterials, bones, composite materials, Zilauts (A.F.), *3248*

Kreichman (M.M.), membranes, shells (of revolution), variational methods, Cherevatskii (V.B.), *8248*

Kreider (J.F.), energy conversion, solar collectors, solar energy, wind power, Kreith (F.), *2831, book*

Kreiss (B.), computing techniques, differential equations (ordinary), mesh generation, singular perturbations, Kreiss (H.-O.), *6087, book*

Kreiss (H.-O.), see Kreiss (B.), *6087*

Kreisselmeier (G.), adaptive systems, control, linear systems, time invariant systems, *188*

Kreith (F.), see Kreider (J.F.), *2831, book*

- solar collectors, solar energy, Lof (G.O.G.), (et al.), *5605*

Kremenetskii (M.D.), numerical methods, three dimensional flow, turbomachinery, Leonteva (N.V.), (et al.), *10534*

Kremer (E.B.), see Gusinskii (G.M.), *1868*

- bubble dynamics, interaction, particles, two phase flow, Nagaev (R.F.), *12045*

Kremnev (O.A.), heat transfer, mass transfer, mines, rocks, Zhuravlenko (V.Ya.), (et al.), *5609*

Kremnev (V.O.), centrifugal fans, heat transfer, mass transfer, *10647*

Krempl (E.), see Stouffer (D.C.), *2405, book*

Krenk (S.), dislocations, elastic constants, orthotropic materials, stress concentration, strips, *2213*

- creeping flow, heat transfer, nuclear waste, singularities, spherical bodies, viscous flow, *11363*

Krenz (J.H.), energy, energy conservation, energy conversion, fuels, *4715, book*

Kreplin (H.-P.), see Meier (H.U.), *3651*

Kreskovsky (J.P.), blades, ducts (curved), laminar flow, secondary flow, turbulent flow, Briley (W.R.), (et al.), *10439*

Kretz (M.), automatic control, electrical components, fiber optics, helicopters, hydraulics, rotors, Larche (M.), *8649*

Kreyszig (E.), see Kracht (M.), *7162*

Krieg (R.), boundary integral methods, condensation, dynamic response, pressure vessels, reactor structures, shells (spherical), steam, Goller (B.), (et al.), *6549*

Krieg (R.D.), free boundary, liquid vapor interface, shear flow, viscometry, Son (J.E.), (et al.), *8500*

Kriegel (E.), see Mostofizadeh (C.), *1642*

Kriegsmann (G.A.), see Lange (C.G.), *1252*

Krikunov (A.A.), see Gorbachev (S.P.), *5571*

Kril (S.I.), conservation laws, equations of motion, mixture theories, nonhomogeneous media, *4135*

Krings (W.), see Form (J.), *321*

Krinke (D.C.), algorithms, computing techniques, differential equations (ordinary), runge kutta method, Huston (R.L.), *4183*

Krishan (B.), heat transfer, plates (vertical), thermal diffusion, transient effects, *3797*

Krishna (D.V.), boundary layer, disks, hall effect, magneto fluid dynamics, torsional waves, Prasada Rao (D.R.V.), *2883*

- see Prasada Rao (D.R.V.), *3891*
- see Sarojamma (G.), *11508*

Krishna (K.), boundary layer (atmospheric), meteorology (physical), *8985*

Krishna (R.), binary flow, condensation, inert gases, *811*

- diffusion, mass transfer, turbulence, *1585*
- condensation, mass transfer, multicomponent flow, *1727*

Krishna Murthy (M.), anisotropy, layered media, soils, strength, Nagaraj (T.S.), (et al.), *2379*

Krishnaiah Chetty (O.V.), grain size, machining (electrochemical), material testing, metallurgy, Radhakrishnan (V.), *4472*

Krishnam Raju (G.), see Vidyanidhi (V.), *4745*

Krishnamoorthy (C.S.), framed structures, inelasticity, reinforced concrete, structural analysis, Mosi (D.R.), *8451*

Krishnamurthy (A.R.), birefringence, dilute solutions, scattered light, visualization, Pindera (J.T.), *9678*

Krishnamurthy (M.), see Motayed (A.K.), *3598*

Krishnamurthy (N.), beams, bolted joints, experimental mechanics, stress analysis, structural elements, *3581*

- bolted joints, bolts, connections, finite element methods, modeling, prediction, *7637*

Krishnan (R.), see Carey (G.F.), *2036*

Krishnan (V.M.R.), crack growth, crack tip geometry, creep, Mutoh (Y.), (et al.), *1357*

Krishnappan (B.G.), see Lau (Y.L.), *9520*

Krishnaswamy (N.R.), see Sankaran (K.S.), *6310*

Krisper (G.), dynamic properties, measurements (dynamic), trucks, Reichweger (J.), (et al.), *4145*

Kristek (V.), multistory frames, plates (folded), shear walls, walls, *2542*

Kristensson (G.), see Bostrom (A.), *2368*

Krivenkov (Iu.P.), linear systems, optimization, *4287*

Krivenyuk (V.V.), materials properties, microstructures, refractories, Zelenyuk (E.E.), *8885*

Krivocheine (L.E.), see D'Ambrosio (U.), *4981*

Krivolutskii (A.A.), see Ivanovskii (A.I.), *5941*

Krivonos (Yu.G.), see Gubarev (V.F.), *3218*

Krivoruchko (S.P.), see Kalaidzhan (S.E.), *496*

Krivoshein (L.E.), boundary value problems, existence theorems, hyperbolic equations, integro differential equations, uniqueness, Leung (K.V.), (et al.), *8121*

Krivulin (V.N.), convection (free), extinguishment, flame propagation, Kudryavtsev (E.A.), (et al.), *9750*

Kriz (J.), boundary value problems, differential equations (ordinary), discontinuities, variational methods, *1992*

Krizan (P.), bubble dynamics, measurements, two phase flow, velocity measurement, Pilhofer (T.), *7971*

- absorption, attenuation, ducts, sound propagation, Kuscer (I.), *11917*

Krogh (S.R.), comminution, crushing, dynamic behavior, *12054*

Krogstad (P.-A.), boundary layer (turbulent), computer programming, froude number, hulls, three dimensional formulation, *1537*

Krokhin (O.N.), see Basov (N.G.), *5686*

Krokovnyi (P.M.), pulsatile flow, spectral density, two phase flow, *2678*

Kroll (R.I.), see Perry (B.) III, *8647*

Kromer (F.J.), see Bush (A.F.), *6467*

Kroner (E.), see Gairola (B.K.D.), *6468*

- dilute solutions, micromechanisms, polar fluids, polymers, Takserman-Krozer (R.), *8484*

Kropac (O.), dynamic response, random excitation, vibration (random), *2321*

- random excitation, stochastic systems, vibration (random), *10032*

Kropachev (E.P.), see Barash (Yu.S.), *11830*

Kropinova (N.A.), see Kozlov (V.F.), *3016*

Kroplin (B.-H.), nonlinear structures, postbuckling theory, structural stability, viscous buckling, *6237*

Kroshilin (A.E.), bubble dynamics, concentration, inclusions, oscillations, two phase flow, Kroshilin (V.E.), (et al.), *6988*

- bubble dynamics, hydrodynamics, mixtures, two phase flow, Kroshilin (V.E.), (et al.), *12027*
- dispersed flow, hydrodynamics, rods, tube bundles, two phase flow, Kroshilin (V.E.), (et al.), *12028*

Kroshilin (A.Ye.), see Nigmatulin (B.I.), *10650*

Kroshilin (V.E.), see Kroshilin (A.E.), *6988*

- see Kroshilin (A.E.), *12027*
- see Kroshilin (A.E.), *12028*

Kroutil (J.C.), see Sajben (M.), *8586*

Kruchoski (B.L.), beam columns, beams (variable cross section), structural stability, Leonard (J.W.), *4393*

Krug (E.K.), identification, man machine systems, mathematical models, Legovich (Yu.S.), (et al.), *3182*

Krug (G.K.), see Brimkulov (U.N.), *4081*

Kruger (K.H.), cracks, elasticity, plates, singular integral equations, *1373*

Kruglov (A.S.), creep, deformation, ductility, nuclear reactors, testing equipment, tests, Fazkullin (V.A.), (et al.), *6498*

Kruglov (V.I.), probability theory, radiant interchange, real gas effects, vibration (thermally excited), Katkovskii (L.V.), (et al.), *5588*

Kruk (B.Z.), cyclic loading, fatigue, life expectancy, random loading, strength, Kuzmenko (V.A.), (et al.), *2527*

• see Vasinyuk (I.M.), *4415*
Krumm (H.), see Dittrich (G.), *7404*
Krupenin (V.L.), dynamic analysis, mathematical methods, vibration (parametric), *359*
• dynamic response, shock, transient effects, *9305*
Krupin (V.D.), see Ageeva (N.S.), *2933*
Kruse (H.), aerodynamic performance, annuli, conical flow, diffusers, turbines, Quest (J.), *4629*
Krusev (S.D.), see Birjukov (L.V.), *2563*
Krutko (P.D.), algorithms, control, robotics, Popov (Ye.P.), *213*
• algorithms, design, digital control, discrete systems, Popov (Ye.P.), *4257*
Krycer (I.), aggregates, comminution, equipment, grinding, Hersey (J.A.), *12055*
Krylov (V.V.), nonhomogeneous media, scattering, waves, *6900*
Kryter (K.D.), acoustics (psychological), human body, noise, Poza (F.), *3072*
Krzeczkowski (S.), see Hammitt (F.G.), *9780*
Krzeczkowski (S.A.), deformation, drops, two phase flow, *1859*
Kuang (V.Z.), convection, liquids, magneto fluid dynamics, stability, walls, Kan (N.Z.), *2878*
Kuang (Z.-B.), blunt bodies, crack opening displacement, fracture criteria, *8395*
Kubasco (A.J.), see Roberts (P.B.), *7883*
Kubenko (V.D.), see Gordienko (V.I.), *9336*
Kubik (J.), channel flow, permeability, porous media, *4027*
Kubintsev (G.M.), see Kakabadze (D.P.), *4312*
Kubo (K.), see Harada (T.), *2345*
• see Fukusako (T.), *2403*
Kubo (S.), cylindrical bodies, navier stokes equation, oscillating bodies, secondary flow, two dimensional flow, Kitano (Y.), *581*
Kubota (N.), burning rate, combustion, solid propellants, wires, Ichida (M.), (et al.), *11787*
Kubota (T.), see Liu (A.K.), *11566*
Kubrusly (R.S.), existence theorems, postbuckling theory, shells (shallow), *10165*
Kuchay (V.K.), bayesian phenomena, classification, geomorphology, pattern recognition, Chuchadeyev (D.N.), *154*
• deformation, earth, geodetic measurements, mantle, measurements, Pevnev (A.K.), (et al.), *1878*
Kucherenko (I.K.), see Sadokov (V.P.), *990*
Kuchkin (V.N.), see Ershov (N.S.), *7791*
• see Dymenko (S.K.), *12042*
Kuczera (F.), acoustic properties, acoustic waves, sound speed, *896*
Kudin (G.I.), see Kovalskii (I.P.), *7238*
Kudinov (V.A.), see Budanov (B.V.), *4892*
Kudinov (V.K.), machinery, numerical control, turning, Taranenko (V.A.), (et al.), *2190*
Kudoh (T.), mathematical models, meteorology, *7028*
Kudriavtsev (B.A.), cracks, magnetoelasticity, plates (weakened), thermomagnetic phenomena, Parton (V.Z.), (et al.), *7266*
Kudrya (A.V.), computing techniques, earth, gravity, gravity anomalies, three dimensional formulation, *4033*
Kudryashov, see Ivkin (A.M.), *1159*
Kudryashov (N.A.), see Zyabrev (N.B.), *823*
Kudryavtsev (E.A.), see Krivulin (V.N.), *9750*
Kudryavtsev (E.P.), cylindrical bodies, diffraction, elastic bodies, floating bodies, gravity waves (surface), *8625*
Kudryavtsev (V.M.), combustion, diffusion, metals, models, Sukhov (A.V.), (et al.), *9774*
Kuehn (T.H.), annuli, convection (free), heat transfer, pipe flow, prandtl number, Goldstein (R.J.), *5551*
Kueny (J.-L.), see Rowe (A.), *5968*
Kuhlman (J.M.), drag, induced drag, optimization, subsonic flow, wakes, wings, *7786*
Kuhne (J.), see Petho (A.), *1101*
• fluidized beds, multiphase media, reactors, Wippern (D.), *5844*
Kuiken (G.D.C.), adiabatic processes, caratheodory's axiom, entropy, thermodynamic functions, *7818*
Kuiken (H.K.), boundary layer (thermal), convection (free), cooling, fiber optics, optical techniques, *4695*
• asymptotic behavior, boundary layer, fluid mechanics, heat transfer, navier stokes equation, *10424*
Kuiper (G.), blades, cavitation inception, models, propellers (marine), *3749, book*
Kuipers (M.), dynamic analysis, lagrange equations, rigid bodies, Van De Ven (A.A.F.), *10928*
Kukareko (E.P.), see Kuznetsov (V.P.), *1145*
Kukes (V.I.), experimental methods, hot wire, turbulence, Ufimtsev (A.A.), (et al.), *7755*
Kukhta (T.K.), algorithms, markov processes, queue theory, *152*
Kukhtenkov (L.P.), discrete systems, nonlinear systems, sensitivity, time delay systems, Ruban (A.I.), *8167*
Kuksa (L.V.), finite element techniques, inhomogeneities, micromechanics, polycrystalline materials, Elmanovich (V.I.), *3140*
Kuksenko (V.S.), acoustic emission, crack growth, material testing, x ray techniques, Orlov (L.G.), (et al.), *6438*
Kukudzhanov (S.N.), dynamic analysis, prestressed structures, shells (cylindrical), vibration (free), *9322*
Kukuyu (A.), see Sakurai (A.), *7685*
Kulagin (V.L.), see Klykov (V.E.), *4466*
Kulagina (V.V.), crystals, deformation (plastic), dislocations, micromechanics, stress concentration, Dudarev (E.F.), (et al.), *8416*
Kulak (G.L.), see Bardell (G.R.), *495*
Kulak (R.F.), finite element techniques, fluid-structure interaction, three dimensional formulation, *2075*
Kulakov (S.V.), see Shevchenko (Yu.N.), *5115*
Kulakov (V.L.), see Portnov (G.G.), *6196*
Kulakowski (B.T.), digital control, heat, heat storage, heat transfer, heating, identification, Schmidt (F.W.), *3211*
Kulczyk (J.), canals, couette flow, ships, wakes, *8048*
Kuleshov (G.G.), phase changes, specific heat, thermophysical properties, *10560*
Kulicke (W.-M.), polymers, shear flow, viscometry, Porter (R.S.), *1488*
Kuliev (V.D.), interface cracks, refraction, shear cracks, wiener-hopf technique, *2452*
• cracks, shear loading, stress intensity factor, twinning, *2457*
• complex variables, plates (weakened), stress intensity factor, *4334*
• damage (cumulative), fatigue, fracture, life expectancy, Kaplun (A.B.), *7486*
• crack branching, interface cracks, stress intensity factor, transforms, wiener-hopf technique, *8417*
Kulik (A.Ya.), coatings, piston rings, residual stresses, stress analysis, thermoelasticity (steady), Shapiro (M.I.), *5099*
Kulik (N.N.), see Glasko (V.B.), *8734*
Kulikov (E.A.), see Zhak (V.M.), *1892*
Kulikovskii (A.G.), elasticity (nonlinear), material nonlinearities, shock waves (normal), Shaposhnikova (E.I.), *2363*
Kulkarni (S.G.), hypergolic propellants, self ignition, solid propellants, thermal instability, Panda (S.P.), *10715*
Kulkarni (S.V.), see Subrahmanyam (K.B.), *366*
• see Kumar (D.), *5197*
• see Rao (J.S.), *5199*
• see Subrahmanyam (K.B.), *5200*
• see Subrahmanyam (K.B.), *10208*
Kullen (A.), finite difference methods, friction (skin), internal flow, rotating disks, viscous flow, *1510*
Kullgren (T.E.), see Grandt (A.F.) Jr., *480*
Kulman (N.K.), see Konkin (A.V.), *3191*
Kulonen (L.A.), see Boldei (L.M.), *9571*
Kulshreshtha (A.K.), see Tandon (P.N.), *6652*
Kulter (P.), see Hindman (R.G.), *587*
Kumar (A.), brittle fracture, fracture, grain boundaries, metallurgy, molybdenum, Eyre (B.L.), *1355*
• dispersion, sedimentation, sprays, Vohra (D.K.), (et al.), *1867*
• algorithms, computing techniques, continued fraction expansion, inversion, *2053*
• friction factor, pipelines, roughness, *2650*
• see Sodha (M.S.), *2833*
• see Bindal (V.N.), *3975*
• damping, dynamic response, plasticity, plates, Hegde (M.), *7426*
• chemically reactive flow, inlets, numerical analysis, scramjets, *7726*
• error, manipulators, robotics, surfaces, Waldron (K.J.), *8469*
Kumar (D.), beams (cantilever), frequency response, vibration (free), Kulkarni (S.V.), (et al.), *5197*
• hydraulic structures, river beds, scour, stability, Misra (G.C.), (et al.), *9515*
Kumar (D.S.), annuli, diffusers, pressure recovery, swirl, Kumar (K.L.), *1570*
Kumar (K.L.), see Kumar (D.S.), *1570*
Kumar (M.), combustion, cracks, flame propagation, solid propellants, Kovacic (S.M.), (et al.), *2866*
• computing techniques, cracks, stress analysis, stress intensity factor, *8418*
Kumar (P.R.), differential games, optimization, synthesis, *7247*
• optimal control, stochastic control, stochastic systems, Van Schuppen (J.H.), *11072*
• adaptive systems, dynamic properties, one-armed bandit, optimal control, Seidman (T.I.), *11091*
Kumar (S.), contact stresses, rails, wheels, Rajkumar (B.R.), *1455*
• cylindrical bodies, mass transfer, power law fluids, spherical bodies, Tripathi (P.K.), (et al.), *3857*
• algorithms, conduits, resistance, roughness, Roberson (J.A.), *6594*
• fluidized beds, mass transfer, power law fluids, *10695*
Kumar (V.), crack opening displacement, cracks, j-integral, plasticity, stability, Shih (C.F.), *1381*
• lubrication (hydrodynamic), reynolds equation, turbulent flow, *4108*
• bearings (journal), lubrication (hydrodynamic), turbulent flow, *7092*
• bearings (journal), lubricants (liquid), lubrication (hydrodynamic), *8060*
Kumar (V.K.), see Bainum (P.M.), *5701*
Kumari (M.), boundary layer, compressible flow, similarity methods, stagnation point, three dimensional flow, unsteady flow, Nath (G.), *1545*
Kume (Y.), beams (cantilever), damping, dynamic stresses, vibration (forced), Hashimoto (F.), (et al.), *7375*
Kun (L.A.), see Dobronravov (D.N.), *207*
Kuna (M.), cracks, elastoplasticity, finite element methods (hybrid), stress intensity factor, Bilek (Z.), (et al.), *6447*

Kunakov (V.G.), see Savchenkov (G.A.), *3836*

Kunar (R.R.), finite difference methods, finite element techniques, mesh generation, plane strain, *55*

Kundu (K.M.), convection (free), laminar flow, plates (vertical), *1688*

Kundu (P.K.), mixing layers, oceanography, stratified flow, turbulence (geophysical), *5926*

- entrainment, similarity methods, stratified flow, stresses, turbulent mixing, *10408*

Kunetskii (M.G.), see Sakhnovskii (M.Yu.), *12059*

Kuniansky (J.), reservoir engineering, simulation, three dimensional flow, Hillestad (J.G.), *7995*

Kunin (I.A.), continuum mechanics, elastic dislocations, elasticity, mathematical methods, tensor methods, *4943*

- see Wheeler (L.T.), *8188*

Kunio (T.), crack growth, fatigue, fractographic tests, steel, Shimizu (M.), (et al.), *442*

Kunitomo (T.), see Shafey (H.M.), *3827*

- see Shafey (H.M.), *6804*
- coatings, mie scattering, radiant interchange, radiation properties, scattered light, spherical bodies, thin films, Shafey (H.M.), (et al.), *6805*
- cooling, critical flow, drawing, glass, solidification, Ebisu (A.), *10596*

Kunitsyn (A.L.), differential equations (ordinary), eigenvalue problems, resonance, spinning bodies, stability theory, Medvedev (S.V.), *2000*

Kuno (A.Ya.), computer programming, fast fourier transform, processing, real time solution, *71*

Kuno (T.), see Terao (K.), *11162*

Kuntsevich (V.M.), discrete systems, maximum principle, optimal control, sampled data systems, Lychak (M.M.), *176*

- design, differential games, optimal control, unknown parameters, Lychak (M.M.), *4301*

Kuntzsch (V.), see De Boer (R.), *8242*

Kunz (P.), abrasion, finishing, grinding, materials processing, tribology, *6411*

Kuo (C.), capsizing, models, resonance, rolling motion, safety, ship motion, Welaya (Y.), *8043*

Kuo (C.-P.), see Udwadia (F.E.), *5898*

- see Chou (C.-T.), *9397*

Kuo (J.T.), see Malone (F.D.), *11693*

Kuo (K.K.), see Caveny (L.H.), *10723*

Kuo (S.), generators, hall effect, magneto fluid dynamics, nonhomogeneous media, nonlinear analysis, Cheo (B.), (et al.), *852*

Kuo (Y.-M.), bonded joints, cylindrical bodies, reinforced bodies, torsion, Conway (H.D.), *245*

Kuo-Pen-Yu, compressible flow, navier stokes equation, numerical methods, unsteady flow, *9558*

Kuperman (W.A.), see Jensen (F.B.), *6911*

Kupper (T.), see Hoffman (W.), *10169*

Kupras (L.K.), computer aided design, graphical methods, ship design, De Zwaan (A.P.), *995*

Kuptsov (V.M.), base pressure, blunt bodies, compressible flow, experimental results, spherical bodies, subsonic flow, *8553*

- cavities, compressible flow, heating, jets, pressure change, resonance, supersonic flow, Filippov (K.N.), *10417*

Kurach (T.N.), see Gulyaev (Yu.V.), *6332*

Kurajian (G.M.), see Na (T.Y.), *323*

- combined loading, fatigue, material testing, notch sensitivity, stress concentration, Na (T.Y.), *2433*

Kuranov (B.A.), see Makarov (A.M.), *3994*

Kuranov (V.N.), acoustic emission, crack propagation, kinetics, nucleation, Ivanov (V.I.), (et al.), *9412*

Kurashige (M.), see Yamagami (K.), *5838*

Kurbanov (B.T.), forecasting, isobaric processes, meteorology (physical), *4073*

Kurbatkin (G.P.), atmospheric circulation, meteorology (physical), Karimov (A.U.), (et al.), *4072*

- forecasting, meteorology (physical), Eikher (M.Sh.), (et al.), *4086*

Kurdoya (E.A.), see Grigorev (F.N.), *5057*

Kurdyumov (S.P.), see Galaktionov (V.A.), *2810*

- see Galaktionov (V.A.), *10591*

Kurupin (V.V.), see Buravoi (S.E.), *1661*

Kurganskiy (M.V.), atmospheric circulation, hydrodynamic stability, internal waves, *5827*

Kurguzov (V.D.), see Vaikovskii (S.N.), *2432*

Kuriki (K.), arcjet engines, magneto fluid dynamics, space shuttle, thrusters, *5668*

Kurisu (T.), see Nakahara (T.), *4896*

Kuriyama (Y.), containers (partially filled), honeycomb structures, seismic loading, sloshing, Fukuda (H.), *7774*

Kurkin (V.I.), dynamic response, filaments, vibration (free), Medvedev (S.A.), *7382*

Kurokawa (J.), internal flow, rotating disks, secondary flow, unsteady flow, vortex flow, Toyokura (T.), (et al.), *11377*

Kurshin (L.M.), plates (holed), reinforced openings, variational methods, Rastorguev (G.I.), *6226*

- see Boldyrev (E.I.), *7278*

Kuruppu (M.D.), see Woo (C.W.), *2453*

Kurzhanskii (A.B.), see Kats (I.Ya.), *2141*

Kuscer (I.), see Krizan (P.), *11917*

Kushner (H.J.), adaptive systems, filters, identification, stochastic systems, *3147*

Kushnir (R.M.), see Kolyano (Yu.M.), *925*

Kussoy (M.I.), boundary layer (three dimensional), boundary layer (turbulent), mathematical models, shock layer, Viegas (J.R.), (et al.), *601*

Kusuda (H.), see Imura (H.), *1719*

- boiling, bubble dynamics, heat transfer, Monde (M.), (et al.), *12047*

Kusuoka (H.), biomathematics, optimal control, pharmacokinetics, Kodama (S.), (et al.), *9196*

Kut (D.), see Diamant (R.M.E.), *3833, book*

Kutalo (A.A.), convection, evaporation, mass transfer, oceanography, Chernyavskii (E.B.), *5952*

Kutateladze (S.S.), boiling, condensation, liquid gas mixture, modeling, similarity methods, *6758*

- condensation, convection, heat transfer, tube bundles, turbulent flow, Gogonin (I.I.), (et al.), *10622*

Kuteev (V.M.), see Efimov (A.N.), *1098*

Kutsenko (G.V.), see Bondarenko (A.A.), *6324*

Kuttler (J.R.), approximation methods, mathematical models, vibration, Sigillito (V.G.), *363*

- eigenvalue problems, finite difference methods, membranes, *5006*
- dynamic response, plates, vibration (free), Sigillito (V.G.), *6292*
- eigenvalue problems, laplace equation, poisson equation, *9105*

Kuttruff (K.H.), acoustics (architectural), decay, diffusion, reverberation, *11938*

Kutyrev (V.V.), see Voronkov (N.N.), *7148*

Kutzner (J.), free boundary, reflection, ultrasonics, *9343*

Kuvshinskii (E.V.), see Aleshin (V.I.), *457*

Kuzema (Yu.A.), see Voloshchenko (A.P.), *5326*

Kuzenkov (V.K.), see Repik (E.U.), *6765*

Kuzikovskiy (A.V.), see Kolosov (V.V.), *11555*

Kuzivanov (V.A.), see Kiselyev (M.I.), *5872*

Kuzma-Kichta (Yu.A.), film boiling, porous walls, spherical bodies, thermal contact resistance, Lenkov (V.A.), (et al.), *9686*

Kuzman (V.M.), gyroscopes (rotary), modes, vibration (random), *1069*

Kuzmanovic (B.O.), beams (box), girders (plate), shear lag, *11110*

Kuzmenko (L.M.), see Chernyy (I.M.), *5813*

Kuzmenko (V.A.), see Kruk (B.Z.), *2527*

- fatigue, high cycle fatigue, material testing, *7510*
- accelerated testing, correlation, endurance limit, frequencies, high cycle fatigue, *10339*

Kuzmenko (V.G.), see Korneev (V.G.), *8147*

Kuzmin (A.V.), compressible flow, finite difference methods, numerical methods, Makarov (V.L.), (et al.), *11427*

Kuzmin (Iu.N.), see Beliaev (S.Iu.), *44*

Kuzmin (N.N.), algorithms, estimation, identification, Korotnikh (Yu.Ya.), (et al.), *2149*

Kuzmina (L.K.), dynamic stability, gyroscopic stabilization, perturbation methods, *15*

Kuzminskaya (G.G.), ocean air interaction, ocean waves, surface waves, Tsareva (T.I.), *5940*

Kuznetsov (A.L.), compressors, gas turbines, performance, pipelines, pumps, Evdokimov (V.E.), (et al.), *700*

Kuznetsov (A.V.), air water entry, cavities, fredholm equations, inviscid fluid, wedges, *5967*

Kuznetsov (B.I.), cyclic loading, relaxation, tests, torsion, wires, *494*

Kuznetsov (E.A.), see Vasilenko (Yu.G.), *639*

Kuznetsov (G.B.) eds., composite materials, elasticity (linear), photoplasticity, shells, viscoelasticity, Shakirov (N.V.), *5071, book*

Kuznetsov (L.I.), magneto fluid dynamics, orbit mechanics, oscillations, Chikova (N.V.), *9620*

Kuznetsov (N.A.), linear systems, optimal control, stochastic control, Liptser (L.Sh.), (et al.), *4294*

Kuznetsov (N.D.), anisotropic structures, plates (sandwich), rayleigh ritz method, shells, vibration (free), Kartashov (G.G.), (et al.), *8305*

- dynamic analysis, shells (sandwich), vibration, Kartashov (G.G.), *11137*

Kuznetsov (V.K.), modal analysis, refraction, underwater acoustics, *11910*

Kuznetsov (V.M.), compressible flow, entrance region, lasers (gasdynamic), perturbation methods, *1523*

- see Blagosklonov (V.I.), *2983*

Kuznetsov (V.N.), boundary value problems, functional analyis, plasticity, variational methods, *4355*

Kuznetsov (V.P.), linear systems, lyapunov's functions, stability theory, time varying systems, Kukarekо (E.P.), *1145*

Kvashnin (A.G.), see Shenderov (L.Z.), *6977*

Kvasnevskii (I.P.), see Kirshtein (G.Kh.), *11833*

Kvitka (A.L.), brittle materials, compression, finite element methods, specimen design, tests, Dyachkov (I.I.), *492*

- see Gnuchii (Yu.B.), *3136*
- brittle materials, composite materials, compression, specimen design, tests, Dyachkov (I.I.), *3491*
- boundary integral methods, finite element techniques, internal combustion engines, stress strain relationships, Voroshko (P.P.), (et al.), *4199*

Kvon (V.I.), cooling, cooling ponds, power plants, thermal effects, *5595*
Kwack (E.Y.), chemically reactive flow, dilute solutions, polymers, Hartnett (J.P.), (et al.), *7640*
• drag reduction, pipe flow, polyacrylamide, turbulent flow, viscous effects, weissenberg number, Hartnett (J.P.), *8722*
Kwak (D.), boundary conditions, compressible flow, numerical methods, transonic flow, unsteady flow, *5421*
Kwiecinski (M.), design (ultimate strength), plates (skew), reinforced concrete, slabs, Wojewodzki (W.), *7604*
Kwok (K.C.S.), galloping, towers, turbulence (freestream), wind loads, wind tunnels, Melbourne (W.H.), *3907*
Kwong (C.W.), cams, design, dynamics, linkages, mechanisms, Wiederrich (J.L.), (et al.), *7627*
Kwong (R.H.), see Vinter (R.B.), *1142*
Kwun (M.), see Batchelor (B. De V.), *10359*
Ky Dang Van, see Huy Duong Bui, *7517*
Kyanka (G.H.), beams (sandwich), composite materials, fatigue, weibull statistics, wood, *3280*
Kydoniefs (A.D.), deformation (finite), elasticity (nonlinear), protoelasticity, sheet metal, *233*
Kyozuka (Y.), floating bodies, gravity waves (surface), oscillating bodies, ships, Yoshida (K.), *11644*
Kyriakides (S.), collapse, large displacement, plastic behavior, postbuckling behavior, rings, Babcock (C.D.), *1249*
• buckling (local), experimental mechanics, pipes, propagation, Babcock (C.D.), *8465*
Kyrtatos (N.), aerodynamics, centrifugal compressors, superchargers, turbomachinery, Watson (N.), *703*

L

La Celle (P.L.), see Waugh (R.E.), *1949*
La Tegola (A.), collapse, framed structures, imperfections, random media, *6242*
Laan (J.N.), ducts, flow, sound propagation, *11941*
Labendik (V.P.), compressible flow, diffusers, geometrical properties, incompressible flow, mixing, pressure drop, Dantsyg (A.Ya.), (et al.), *11799*
Labes (M.), see Dresig (K.F.H.), *8299*
Labianca (F.M.), see Claus (A.J.), *11976*
Labib (F.), beams, crack initiation, crack propagation, cracking, prestressed concrete, Edwards (A.D.), *10361*
Labini (F.S.), see Morabito (G.), *3546*
Laborde (J.M.), biomechanics, bones, kinematics, spine, stiffness, stress strain relationships, Burstein (A.H.), (et al.), *7104*
Labouff (G.A.), see Cronin (D.L.), *9468*
labyrinth seals, bearings (tilted pad), helium, turbines, Franck (D.), Noack (G.), (et al.), *4556*
Lachance (L.), composite structures, nonlinear analysis, reinforced concrete, ultimate strength, Hays (C.O.), *2518*
Ladany (S.P.), design (optimum), dynamic programming, foundations, walls, *6511*
Ladeira (F.L.), bed thickness, fracture, joint spacing, joints, models, rocks, Price (N.J.), *9371*
Laderman (A.J.), aerodynamics, compressible flow, potential flow, subsonic flow, turrets, De Jonckheere (R.), *9548*
Ladyzhenskaya (O.A.), boundary value problems, existence theorems, infinite medium, navier stokes equation, Solonnikov (V.A.), *7169*
Laedke (E.W.), gravity waves (surface), hydrodynamic stability, mathematical models, Spatschek (K.H.), *7744*
Laermann (K.-H.), experimental methods, hybrid techniques, large displacement, plates (circular), *4387*
Lafe (O.E.), darcy flow, porous media, singularities, Montes (J.S.), (et al.), *9905*
Lafortune (M.A.), see Cavanagh (P.R.), *9068*
Lagache (J.-M.), design (minimum weight), trusses, *5346*
- design (optimum), minimization, trusses, *6509*

Lagarde (A.), see Grellier (J.P.), *10311*
Lagneborg (R.), see Ostrom (P.), *8385*
Lago (S.), see Lombardero (M.), *6581*
- polar fluids, rheology, statistical continuum mechanics, thermodynamic properties, Lombardero (M.), *6582*

lagrange equations, dynamic analysis, kinematics, mathematical methods, Schrapel (H.D.), *7*
- constraints, dynamic analysis, Muschik (W.), *1061*
- dynamic analysis, energy conservation, Nicolae (V.), Chiroiu (V.), *1065*
- dynamic analysis, mathematical methods, Baumgarte (J.), *1977*
- dynamic analysis, mathematical methods, Muschik (W.), Poliatzky (N.), (et al.), *1979*
- dynamic analysis, mathematical methods, Baumgarte (J.), *1980*
- dynamic analysis, Whittaker (J.M.), *1982*
- constraints, dynamic analysis, Hering (J.), *1984*
- dynamic analysis, energy conservation, mathematical methods, Vujicic (V.A.), *1985*
- algorithms, optimal control, Svechinskii (V.B.), *4272*
- euler equations, oceanography, particle fluid flow, tracers, Regier (L.), Stommel (H.), *4880*
- dynamic analysis, kinematics, Gonzalez-Gascon (F.), *4939*
- constraints, dynamic analysis, mechanics, Hering (J.), *6053*
- conservation laws, mechanics, particle dynamics, Lutzky (M.), *7131*
- dynamic analysis, mathematical methods, Pascal (M.), *10009*
- dynamic analysis, rigid bodies, Kuipers (M.), Van De Ven (A.A.F.), *10928*

lagrange multiplier, eigenvalue problems, elasticity, finite element techniques, stability (numerical), Malkus (D.S.), *76*
- dynamic analysis, mathematical models, Hemami (H.), Weimer (F.C.), *1063*
- dynamic analysis, many body systems, railroads, Knothe (K.), Mauer (L.), *2351*
- finite element methods (hybrid), finite element techniques, variational methods, Wissmann (J.W.), Specht (B.), *5032*
- linear theory, optimization, Nagahisa (Y.), *6138*
- elastic behavior, equations of motion, kinematics, mechanisms, Blejwas (T.E.), *8100*
- convergence, corners, dirichlet problem, finite element methods, Pitkaranta (J.), *9133*

Lagunov (V.N.), see Vasileva (L.G.), *102*
Lahey (R.T.) Jr., bubbly flow, stability (numerical), two phase flow, virtual mass, Cheng (L.Y.), (et al.), *1844*
- see Rothe (P.H.) eds., *8901, book*

Lahoti (G.D.), computer aided design, plates, rolling, stress analysis, Akgerman (N.), (et al.), *1342*
Lai (F.), mixtures, powders, separation, Hersey (J.A.), (et al.), *5824*
Lai (J.C.S.), free jets, jets, pulsejets, Simmons (J.M.), *628*
- see Simmons (J.M.), *4633*

Lai (J.S.), see Findley (W.N.), *1411*
Lai (R.Y.S.), oscillating bodies, spherical bodies, stratified flow, virtual mass, Lee (C.-M.), *1602*
Lai (S.-S.P.), earthquake resistant structures, inelasticity, spectra, Biggs (J.M.), *7047*
Laine (E.F.), concrete, nondestructive tests, radio waves, waves, Dines (K.A.), (et al.), *5262*
- boreholes, electromagnetic waves, measurements, soil stability, Lytle (R.J.), (et al.), *6396*

Lainoff (S.M.), box-shaped structures, structures, walled structures, *5354*
Laithier (B.E.), beams (timoshenko), equations of motion, fluid-structure interaction, follower forces, pipe flow, Paidoussis (M.P.), *11642*
Laitone (E.V.), see Laitone (J.A.), *8913*
- airplane performance, flight, propellers, *10508*

Laitone (J.A.), approximations, error, integration, linearization, particle dynamics, Laitone (E.V.), *8913*
Lake (B.M.), surface waves, wind-wave interaction, Yuen (H.C.), *3020*
- see Crawford (D.R.), *7746*
- see Crawford (D.R.), *11574*

Lake (L.W.), dispersion, porous media, stratification, taylor instability, Hirasaki (G.J.), *8919*

lakes, canals, helmholtz resonator, oscillations, Miles (J.W.), *3610*
- estuaries, finite difference methods, free boundary, hydraulics, water pollution, Fischer (H.B.) ed., *4577, book*
- diffusion, reservoirs, Imberger (J.), Patterson (J.), (et al.), *5912*
- convection (free), cooling, currents, heat transfer, Sturm (T.W.), Kennedy (J.F.), *5924*
- conduits, finite difference methods, ice mechanics, unsteady flow, Spring (U.), Hutter (K.), *6608*
- circulation, hydrology, inlet flow, models, outflow, Gatto (M.), Rinaldi (S.), *7660*
- contamination, dispersion, finite element techniques, water pollution, Salmon (J.R.), Liggett (J.A.), (et al.), *7661*
- mixing layers, reservoirs, wind-wave interaction, Imberger (J.), Hamblin (P.F.), *8519*
- coherent structure, loch ness, mixing layers, wind, Thorpe (S.A.), Hall (A.J.), *11521*
- approximations (higher order), gravity waves (surface), ocean, rotational flow, Bennett (J.R.), Schwab (D.J.), *11573*

Lakin (D.F.), beams (cantilever), beams (composite), strain gages, strain measurement, *2483*
Lakin (W.D.), flexible bodies, perturbation methods, rotating cylinders, vibration, Nachman (A.), *10198*
Lakota (N.A.), algorithms, control, design, manipulators, robotics, trajectories, Lisenko (S.A.), (et al.), *214*
Lakshmana Gowda (B.H.), boundary layer, convex surfaces, flow measurement, separated flow, Aswatha Narayana (P.A.), *2637*
Lakshmana Rao (S.K.), couple stresses, micropolar media, polar fluids, rotating bodies, spherical bodies, Iyengar (T.K.V.), *8497*
Lakshmikantham (V.), lyapunov's functions, mathematical methods, vector methods, Leela (S.), (et al.), *10014*
- diffusion, mathematical methods, quasisolutions, reaction kinetics, stability theory, Vatsala (A.S.), *10028*

Lakshminarayana (B.), see Hah (C.), *2663*
- see Trunzo (R.), *4809*
- fans, hot wire, incompressible flow, rotors, turbomachinery, wakes, Govindan (T.R.), (et al.), *8653*
- see Hah (C.), *9596*
- boundary layer (turbulent), cascades, integral methods, rotors, turbomachinery, Govindan (T.R.), *10449*
- see Davino (R.M.), *10522*
- blades, rotors, turbulence, turbulence (structure), wakes, Reynolds (B.), *11553*
- see Reynolds (B.), *11738*

Lakshminarayananan (P.A.), flow measurement, internal combustion engines, thermodynamic processes, ultrasonics, Janakiraman (P.A.), (et al.), *1761*
Lakusta (K.V.), conduction (heat), cylindrical bodies, internal flow, lasers, unsteady flow, *7850*
Lal (D.), see Gupta (S.K.), *5902*
Lal (K.), elliptical bodies, laminar flow, moving surfaces, noncircular pipes, viscous flow, Chorlton (F.), *1568*
- incompressible flow, laminar flow, noncircular pipes, tubes, *2601*
- boundary layer, friction (skin), porous media, suction, unsteady state, *5435*

Lal (K.M.), crack closure, crack opening displacement, crack propagation, fatigue, Le May (I.), *3450*
Lal (P.), diffusion, mass transfer, polymers, rotating disks, Mishra (P.), (et al.), *4729*
Lalas (D.P.), see Asimakopoulos (D.N.), *7062*
Lallement (G.), see Bugeat (L.P.), *8323*
Lalor (M.J.), see Groves (D.), *10897*
Lam (C.K.G.), heat transfer, turbulence, turbulence model, turbulent flow, Bremhorst (K.), *2700*
- boundary layer, pipe flow, turbulence, turbulence model, Bremhorst (K.), *4646*

Lam (I.), see Martin (G.R.), *10253*
Lam (L.C.H.), damping, dynamic behavior, experimental results, framed structures, multistory frames, wind loads, Lam (R.P.), *6529*
- see Lam (R.P.), *7908*

Lam (R.P.), see Lam (L.C.H.), *6529*
- buildings, field tests, multistory frames, pressure distribution, wind loads, wind tunnels, Lam (L.C.H.), *7908*

Lamalle (J.), filament winding, nonmetals, solid propellants, wirewound vessels, Cabanel (D.), *9465*

Lamar (J.E.), aerodynamic interference, aerodynamic performance, longitudinal stability, subsonic flow, visualization, wing body combinations, Frink (N.T.), *5494*
- airplanes, design, optimization, supersonic flow, transonic flow, vortex flow, wings, Schemensky (R.T.), (et al.), *9639*

Lamb (J.P.), energy conversion, geothermal energy, heat engines, thermodynamic functions, thermodynamic processes, Polansky (G.F.), (et al.), *4691*

Lamb (M.), see Stallings (R.L.) Jr., *1628*

Lamb (R.G.), diffusion, particle dynamics, statistical theory, turbulence, turbulence model, *1586*

lamb problem, elastic waves, half space, impact, Koshman (V.P.), *7421*
- cracks, diffraction, elastic waves, fracture, Rokhlin (S.I.), *9347*

Lamba (H.), see Mccarthy (W.A.) Jr., *1476*

Lamba (S.S.), approximation methods, dynamic response, large scale systems, mathematical models, Rao (S.V.), *183*

Lambeck (K.), elasticity, modeling, ocean bed, viscoelasticity, Nakiboglu (S.M.), *4844*

Lambert (L.), describing function, feedback, nonlinear systems, nonlinear theory, oscillations, Dittrich (F.), *7237*

Lamberton (H.M.), see Roberts (S.A.), *588*

Lambertz (J.), aerodynamic loads, axial compressors, inviscid fluid, stress analysis, unsteady flow, wind tunnels, Wallmann (T.), (et al.), *7808*

Lambson (E.F.), see Yogurtcu (Y.K.), *5240*

laminar flow, capillary flow, electro fluid dynamics, oscillatory flow, Sears (A.R.), Groves (J.N.), *553*
- bubble dynamics, cavitation flow, ogives, separation, water tunnels, Arakeri (V.H.), Carroll (J.A.), (et al.), *563*
- asymptotic methods, boundary layer, moving surfaces, Chernyy (G.G.), *593*
- boundary layer, hypersonic flow, interaction, Rodkiewicz (C.M.), Gupta (R.N.), *599*
- numerical methods, oscillatory flow, wavy walls, Matsunaga (N.), Kaneko (A.), (et al.), *602*
- boundary layer, incompressible flow, navier stokes equation, Krause (E.), Kordulla (W.), *608*
- entrainment, pipe flow, swirl flow, Singh (M.P.), Sinha (P.C.), (et al.), *610*
- noncircular pipes, pipe flow, velocity profiles, Vasilescu (A.), Andrei (V.I.), *612*
- non newtonian flow, poiseuille flow, Basovich (I.B.), Bernadiner (M.G.), (et al.), *613*
- non newtonian flow, pipe flow, yield condition, Froishteter (G.B.), Vinogradov (G.V.), *619*
- channel flow, porous walls, unsteady flow, Bhattacharyya (P.), *620*
- ducts (curved), navier stokes equation, turbulent flow, Buggeln (R.C.), Briley (W.R.), (et al.), *621*
- channel flow, heat addition, Bar-Cohen (A.), *737*
- buoyant flow, convection (free), stokes flow, transient effects, Pop (I.), Soundalgekar (V.M.), *752*
- annular flow, friction (internal), heat transfer, pressure drop, rotating disks, Mochizuki (S.), Yang (W.-J.), *761*
- bearings (journal), lubrication (hydrodynamic), Hinton (R.E.), Roberts (J.B.), *1019*
- design, diodes, fluidics, scroll diode, Sher (E.), *1170*
- boundary layer, hypersonic flow, oscillating bodies, Stepanov (G.N.), *1535*
- bodies of revolution, boundary layer, transition flow, water tunnels, Lauchle (G.C.), Eisenhuth (J.J.), (et al.), *1541*
- boundary layer, computing techniques, three dimensional flow, Dwyer (H.A.), *1543*
- boundary layer, elliptical bodies, three dimensional flow, Stock (H.W.), *1544*
- approximations (higher order), ducts (curved), helical flow, Murata (S.), Miyake (Y.), (et al.), *1555*
- convection, diffusion, dilute solutions, Yu (J.S.), *1557*
- analysis, micropolar media, slots, Walicki (E.), Walicka (A.), *1562*
- axial flow, heat transfer, velocity profiles, vortex flow, Simmers (D.A.), Coney (J.E.R.), *1566*
- elliptical bodies, moving surfaces, noncircular pipes, viscous flow, Lal (K.), Chorlton (F.), *1568*
- convection, heat transfer, integral methods, nusselt number, Hwang (U.P.), *1677*
- convection (free), cylindrical bodies, heat transfer, rayleigh number, Chand (J.), Vir (D.), *1679*
- convection (free), plates (vertical), Kundu (K.M.), *1688*
- boundary layer (thermal), heat transfer (combined modes), nusselt number, plane flow, Gosse (J.), *1710*
- condensation (filmwise), theory, waves, Sofrata (H.), *1724*
- incompressible flow, noncircular pipes, tubes, Lal (K.), *2601*
- boundary layer (thermal), conical bodies, incompressible flow, singular perturbations, Kortikov (N.N.), Novikova (I.B.), *2608*
- boundary layer, cylindrical bodies, similarity methods, Stock (H.W.), *2626*
- bodies of revolution, boundary layer, rotating bodies, Suwono (A.), *2627*
- asymptotic behavior, boundary layer, time dependence, Hultgren (L.S.), Gustavsson (L.H.), *2631*
- bubble dynamics, leading edge, separated flow, stalling, Van Den Berg (B.), *2635*
- poiseuille flow, unsteady flow, Stavitsky (D.), Macagno (E.), *2642*
- friction factor, poiseuille flow, transition, Barr (D.I.H.), *2643*
- jets, supersonic flow, Myshenkov (V.I.), *2662*
- free boundary, modeling, n body problems, nonlinear theory, turbulent flow, Greenspan (D.), *2720*
- convection (forced), heat transfer, plane flow, transient effects, Hanawa (J.), *2768*
- annular flow, convection (free), nusselt number, El-Shaarawi (M.A.I.), Sarhan (A.), *2790*
- closed conduit flow, convection (free), finite difference methods, heat transfer, transient effects, Vasseur (P.), Robillard (L.), *2799*
- channel flow, cooling, heat exchangers, heat transfer, Nikitenko (N.I.), Tsybulenko (E.V.), (et al.), *2829*
- mass transfer, rotating disks, turbulent flow, Law (C.G.) Jr., Pierini (P.), (et al.), *2848*
- stochastics, two dimensional flow, Bellomo (N.), Riganti (R.), (et al.), *3107*
- conical bodies, navier stokes equation, rotating bodies, viscous flow, Patni (G.C.), Rawat (M.L.), *3620*
- boundary layer, similarity methods, turbulence (transport), Sokolov (M.), Antonia (R.A.), (et al.), *3648*
- asymptotic behavior, boundary layer, computing techniques, pressure gradient, separation, Curle (N.), *3653*
- boundary layer, fluid injection, reynolds number (high), subsonic flow, Napolitano (M.), Messick (R.E.), *3656*
- anemometers, flow measurement, vortex flow, Winoto (S.H.), Crane (R.I.), *3658*
- ducts (constant area), entrance region, noncircular pipes, three dimensional flow, Del Giudice (S.), Strada (M.), (et al.), *3659*
- annuli, approximations (higher order), conical bodies, divergence, Renaud (M.F.), *3662*
- hydrodynamic stability, poiseuille flow, transition, Scobelev (B.Yu.), Moloroдov (Yu.I.), *3664*
- pipelines, pulsatile flow, unsteady flow, visualization, Muto (T.), Nakane (K.), *3666*
- entrance region, pipe flow, porous walls, Masuzawa (J.), Tanahashi (T.), (et al.), *3672*
- ducts (curved), secondary flow, turbulent flow, Taylor (A.M.K.P.), Whitelaw (J.H.), (et al.), *3673*
- cavities, convection, Shiralkar (G.S.), Tien (C.L.), *3783*
- buoyant flow, curved surfaces, duct flow, recirculation, Chilukuri (R.), Humphrey (J.A.C.), *3785*
- augmentation, convection, fins, heat transfer, tubes, Soliman (H.M.), Chau (T.S.), (et al.), *3786*
- boundary layer (thermal), convection (free), heat transfer, plates (vertical), Sokovishin (Yu.A.), Semenov (A.G.), *3798*
- conical bodies, convection (free), heat addition, Chiou (J.P.), Na (T.Y.), *3799*
- convection (free), cylindrical bodies, transient effects, Katagiri (M.), Pop (I.), *3800*
- pipe flow, power law fluids, pressure drop, thermal effects, Nowak (Z.), Gryglaszewski (P.), (et al.), *3803*
- pipe flow, power law fluids, pressure drop, thermal effects, viscous effects, Gryglaszewski (P.), Nowak (Z.), (et al.), *3804*
- axial flow, closed conduit flow, conduction (heat), peclet number, Vick (B.), Ozisik (M.N.), *3812*
- convection (free), lasers, visualization, Boyd (R.D.), Vest (C.M.), *3831*
- heat exchangers, heat exchangers (crossflow), plates (parallel), Mori (S.), Kataya (M.), (et al.), *3835*
- flame propagation, mixtures, numerical analysis, Aldushin (A.P.), Zeldovich (Ya.B.), (et al.), *3860*
- channels, suspensions, Rubinstein (I.), *4009*
- irrigation, reynolds number (small), Vorontsov (E.G.), Yakhno (O.M.), *4598*
- free shear layer, reynolds number, transition, turbulence, Demetriades (A.), Ortwerth (P.J.), (et al.), *4605*
- computing techniques, fluid injection, navier stokes equation, reynolds number, Smith (F.T.), Dennis (S.C.R.), *4613*
- boundary layer, finite difference methods, navier stokes equation, separated flow, Horton (H.P.), *4614*
- ducts (curved), porous surfaces, secondary flow, unsteady flow, Zapryanov (Z.), Matakiev (V.), *4618*
- developing flow, inlet flow, non newtonian flow, pipe flow, Al-Nassri (S.A.), Unny (T.), *4626*
- boundary layer, convection, friction (skin), plates (vertical), shear stress, Hunt (R.), Wilks (G.), *4696*
- extended surfaces, fins, heat transfer, pipe flow, Sparrow (E.M.), Charmchi (M.), *4699*
- boundary layer (thermal), convection, crossflow, Eichhorn (R.), Hasan (M.M.), *4707*
- convection (free), cylindrical bodies, plane flow, Zariffeh (E.K.), Daguenet (M.), *4708*

- cylindrical bodies, heat transfer, rotating cylinders, tubes, Woods (J.L.), Morris (W.D.), *4711*
- boundary conditions, concentration, diffusion, mass transfer, Vorotyntsev (M.A.), Grafov (V.M.), (et al.), *4730*
- eulerian approaches, fluid mechanics, lagrangian approach, navier stokes equation, stability theory, Huffenus (J.), Khaletzky (D.), *4999*
- filtration, porous media, resistance, tube bundles, Kolodziej (J.A.), *5437*
- inlet flow, non newtonian flow, power law fluids, Gupta (R.C.), *5441*
- duct flow, integral methods, Khader (M.S.), *5442*
- airfoils, boundary layer, design, gliders, sailplanes, Ostrowski (J.), Skrzynski (S.), (et al.), *5492*
- heat transfer, rotating bodies, spherical bodies, Suwono (A.), *5559*
- film cooling, hypersonic flow, slots, thermal protection, Richards (B.E.), Stollery (J.L.), *5561*
- convection (free), cylindrical bodies, nusselt number, Farouk (B.), Guceri (S.I.), *5565*
- vortex flow, wind power, So (R.M.C.), *5670*
- boundary layer, cylindrical bodies, Curie (S.N.), *6636*
- boundary layer, supersonic flow, swept wings, Brykina (I.G.), Gershbein (E.A.), (et al.), *6637*
- contraction, noncircular pipes, numerical analysis, separation, steps, Dennis (S.C.R.), Smith (F.T.), *6649*
- drag, ducts, porous walls, variable fluid properties, Eroshenko (V.M.), Zaichik (L.I.), (et al.), *6658*
- jets, stick-slip, swell, velocity profiles, Trogdon (S.A.), Joseph (D.D.), *6660*
- heat transfer, stagnation point, unsteady flow, Sergeev (V.L.), Strogii (A.S.), *6762*
- annular flow, convection, dielectrics, electro fluid dynamics, heat transfer, Mizushina (T.), Ogino (F.), (et al.), *6768*
- annular flow, convection, heat transfer (combined modes), Hattori (N.), *6776*
- cylindrical bodies, external flow, heat transfer (combined modes), separated flow, Yao (L.S.), Chen (F.F.), *6777*
- buoyant flow, convection (free), plates (vertical), Anderson (R.), Bejan (A.), *6778*
- drag reduction, laser doppler velocimeters, polymers, rotating disks, Ulbrecht (J.J.), Gasparetto (C.A.), *7675*
- boundary layer, computing techniques, cyclones, navier stokes equation, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7704*
- boundary layer, computing techniques, navier stokes equation, transition, Dumitrescu (H.), Savulescu (S.N.), *7706*
- moving surfaces, separated flow, Inoue (O.), *7708*
- fluid injection, porous surfaces, Sadhna Khare (K.), *7709*
- channel flow, pressure drop, runge kutta method, viscous flow, wavy walls, Vajravelu (K.), Nayfeh (A.H.), *7714*
- computing techniques, heat transfer, noncircular pipes, pipe flow, swirl flow, Masliyah (J.H.), Nandakumar (K.), *7715*
- particle fluid flow, pressure gradient, turbulent flow, Stan (A.D.), Oana (S.), *7716*
- optical techniques, particle dynamics, particle fluid flow, velocity measurement, vessels, Kamiwano (M.), Motoyoshi (T.), (et al.), *7813*
- heat transfer, pipe flow, pseudoplastic fluids, Joshi (S.D.), Bergles (A.E.), *7826*
- axisymmetric flow, bodies of revolution, boundary layer (thermal), convection (free), heat transfer, Lin (F.N.), Chern (S.Y.), *7837*
- cavities, convection (free), unsteady flow, variable thermal properties, Le Quere (P.), Humphrey (J.A.C.), (et al.), *7843*
- cavities, convection (free), cooling, heat transfer, transient effects, water, Robillard (L.), Vasseur (P.), *7844*
- convection, heat transfer, plates (parallel), power law geometrics, solar collectors, Naidu (G.M.), Agarwal (J.P.), *7864*
- fluctuations, polymers, strain rate, two dimensional flow, Abernathy (F.H.), Bertschy (J.R.), (et al.), *8508*
- bodies of revolution, cavitation inception, separation, water tunnels, Pan (S.-S.), Yand (Z.M.), (et al.), *8514*
- friction (skin), pipe flow, unsteady flow, Achard (J.L.), Lespinard (G.M.), *8565*
- channel flow, flow reversal, moving surfaces, navier stokes equation, Brady (J.F.), Acrivos (A.), *8566*
- channel flow, duct flow, shock waves, wakes, Byrkin (A.P.), Shchennikov (V.V.), *8568*
- annuli, frequency domain techniques, unsteady flow, Franke (M.E.), Farney (G.R.), (et al.), *8573*
- dust, noncircular pipes, particle fluid flow, unsteady flow, Gupta (M.), *8575*
- entrance region, film flow, non newtonian flow, Yang (T.M.T.), Yarbrough (D.W.), *8579*
- cavities, finite element methods, recirculation, Pepper (D.W.), Cooper (R.E.), *8584*
- free jets, viscoelastic fluids, Jimenez (J.), Daguenet (M.), (et al.), *8595*
- convection, dissipation, heat addition, velocity profiles, Jaluria (Y.), *8681*
- convection, extended surfaces, fins, grashof number, Acharya (S.), Patankar (S.V.), *8684*
- heat transfer, mist flow, pipe flow, spray flow, Yao (S.-C.), Rane (A.), *8697*
- channel flow, closed conduit flow, convection (free), Nansteel (M.W.), Greif (R.), *8701*
- rayleigh number, thermosyphons, three dimensional flow, Mallinson (G.D.), Graham (A.D.), (et al.), *8702*
- boundary layer, compressible flow, edge effects, rotating disks, Toren (M.), Solan (A.), *8718*
- asymptotic methods, boundary layer, Osiptsov (A.N.), *9560*
- boundary layer, flow obstructions, separated flow, singularities, Smith (F.T.), Daniels (P.G.), *9569*
- coils, ducts (curved), heat exchangers, pipe flow, secondary flow, Balejova (M.), Cakrt (J.), (et al.), *9576*
- compressible flow, containers (partially filled), cylindrical bodies, gravity, Greenwell (R.N.), Wang (C.Y.), *9577*
- annuli, moving surfaces, porous walls, Kalita (W.), Szaniawski (A.), *9584*
- airfoil theory, oscillating bodies, supersonic flow, trailing edge, Brown (S.N.), Cheng (H.K.), *9651*
- condensation (dropwise), drops, external flow, film flow, mist flow, Trela (M.), *9692*
- annuli, coaxial flow, convection, cylindrical bodies, helicoidal flow, Mojtabi (A.), Caltagirone (J.-P.), *9696*
- convection (free), critical flow, grashof number, plates (vertical), temperature, variable thermal properties, Ghajar (A.J.), Parker (J.D.), *9700*
- convection (forced), non newtonian flow, unsteady flow, wedges, Gorla (R.S.R.), *9706*
- convection (forced), external flow, internal flow, non newtonian flow, turbulent flow, viscoelastic fluids, Shenoy (A.V.), Mashelkar (R.A.), *9707*
- boundary layer (thermal), convection (forced), cylindrical bodies, galerkin method, mathematical models, Graebel (W.P.), Hsu (C.C.), *9711*
- bearings (gas lubricated), bearings (journal), reynolds number, thermal effects, Fijalkowski (S.), *9965*
- boundary layer, compressible flow, unsteady state, Chang (L.M.), Chen (C.-J.), *10430*
- separated flow, steps, Tobak (M.), Peake (D.J.), *10433*
- blades, ducts (curved), secondary flow, turbulent flow, Kreskovsky (J.P.), Briley (W.R.), (et al.), *10439*
- dilute solutions, inlets, pitot tube, polymers, Bistagnino (C.), Cancelli (C.), (et al.), *10444*
- film flow, heat transfer, integral methods, nuclear reactors, tubes, Rogers (J.T.), *10565*
- duct flow, ducts (variable area), heat transfer, nusselt number, transition flow, turbulent flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- heat transfer, integral methods, mass transfer, rotating disks, rotating fluids, Felsch (K.-O.), Plesche (M.), *10580*
- heat transfer, non newtonian flow, nusselt number, pipe flow, power law fluids, rheology, Joshi (S.D.), Bergles (A.E.), *10582*
- buoyant flow, cavities, channel flow, convection, heat transfer, Humphrey (J.A.C.), Jacobs (E.W.), *10585*
- convection (free), heat transfer, tube bundles, Magallon (D.), *10587*
- heat transfer, mass transfer, mist flow, plates, Trela (M.), Kowalski (J.), *10652*
- heat transfer, plates (parallel), porous surfaces, Chaudhary (R.C.), Gaur (Y.N.), *10683*
- convection (free), heat transfer, stratification, Venkatachala (B.J.), Nath (G.), *11371*
- air, bubble dynamics, cavitation inception, diffusion, separation, Parkin (B.R.), *11382*
- channel flow, particle dynamics, sublayers, turbulent flow, Grishin (Yu.M.), Mosin (A.A.), *11489*
- molecular diffusion, oscillatory flow, pipe flow, Purtell (L.P.), *11494*
- annuli, hydrodynamic stability, rotating cylinders, Hall (P.), *11496*
- condensation (filmwise), porous walls, similarity methods, velocity profiles, Liu (C.Y.), Ismail (K.A.R.), (et al.), *11762*
- buoyancy, hele-shaw flows, optical techniques, particles, trajectories, Bugliarello (G.), Yanizeski (G.M.), *12016*
- bearings (hydrostatic), lubrication (hydrostatic), optimization, stiffness, Debailleux (C.), Flamme (J.M.), *12095*

laminar mixing, flames (diffusion), ignition, kinetics, Law (C.K.), Law (H.K.), *11780*

- boundary layer (control), jet boundaries, magneto fluid dynamics, walled structures, Kiryushchenko (E.V.), Sheryazdanov (G.B.), *11813*

laminates, composite materials, nonlinear materials, numerical methods, stress strain relationships, Ditcher (A.K.), Rhodes (F.E.), (et al.), *290*

- fatigue, metallic composites, shakedown structures, Dvorak (G.J.), Johnson (W.S.), *283*
- composite structures, reliability analysis, structural analysis, surveys, Lenoe (E.M.) eds., Oplinger (D.W.), (et al.), *286, book*
- buckling, composite structures, plates, Sharma (S.), Iyengar (N.G.R.), (et al.), *287*
- composite structures, strength, Rabotnov (Yu.N.), *290*
- beams (sandwich), laminated beams, tension, Gopu (V.K.A.), *302*
- brittle fracture, composite materials, fracture toughness, plates (holed), Nepershin (R.I.), Klimenov (V.V.), (et al.), *1213*
- beams (sandwich), strength, Foschi (R.O.), Barrett (J.D.), *1224*
- composite materials, creep rupture, plasticity, polymers, Brinson (H.F.), Griffith (W.I.), (et al.), *1356*
- anisotropic media, composite materials, slabs, thermoelasticity (steady), Tauchert (T.R.), *1838*
- fibers, geometric nonlinearities, reinforced bodies, Hyer (M.W.), *2247*

- elastoviscoplasticity, stiffness, work hardening, Aboudi (J.), *2250*
- buckling (local), delamination, plates (orthotropic), Chai (H.), Babcock (C.D.), (et al.), *2312*
- composite materials, elastic waves, impact, Takeda (N.), Sierakowski (R.L.), (et al.), *2376*
- airplane structures, aluminum alloys, bonding, corrosion fatigue, Vogelesang (L.B.), Mariseen (R.), (et al.), *2424*
- boron, composite materials, damage, fatigue, stiffness, O'Brien (T.K.), Reifsnider (K.L.), *2493*
- aluminum alloys, high temperature, mechanical properties, Mcwithey (R.R.), Royster (D.M.), *3281*
- finite element techniques, penalty function, plates (anisotropic), plates (sandwich), Reddy (J.N.), *3308*
- elastic constants, knot size, wood, Wolfe (R.W.), Moody (R.C.), *3493*
- beams, bonded joints, stiffness, strength, wood structures, Marx (C.M.), Moody (R.C.), *3528*
- finite element techniques, shells (anisotropic), shells (of revolution), Venkatesh (A.), Rao (K.P.), *4194*
- beams (cantilever), damping, fibers, reinforced bodies, Plunkett (R.), *4357*
- bending, bimodulus materials, computing techniques, extension, Jones (R.M.), Morgan (H.S.), *4358*
- creep, dynamic stresses, glass fibers, Sarkisian (N.E.), Martirosian (M.M.), (et al.), *4359*
- acoustic emission, composite materials, material testing, nondestructive tests, Prakash (R.), *4360*
- deformation (plastic), metallurgy, work hardening, Yellup (J.M.), Woodward (R.L.), *4498*
- anisotropic media, elliptical bodies, plates, Bert (C.W.), *5126*
- bimodulus materials, composite materials, finite element techniques, Reddy (J.N.), Chao (W.C.), *5128*
- design (minimum weight), multilayer, optimization, tubes, Doroginin (V.V.), *5164*
- composite materials, fracture mechanics, j-integral, strength, stress intensity factor, three dimensional formulation, Altus (E.), Rotem (A.), *5312*
- bolted joints, composite materials, failure, Tang (S.), *5390*
- composite materials, conduction (heat), mixtures, Murakami (H.), Maewal (A.), (et al.), *5575*
- conductivity, pressure vessels, thermal properties, Armstrong (W.P.), Jawad (M.H.), *5805*
- elasticity (nonhomogeneous), nonhomogeneous media, stress concentration, Plevako (V.P.), *6170*
- material testing, shear rigidity, shear strength, Polyakov (V.A.), Tanevskii (V.V.), *6193*
- blades, composite structures, turbomachinery, Gorlyshkin (V.T.), *6199*
- bimodulus materials, displacement, plates (rectangular), Bert (C.W.), Sudhakar Reddy (V.), (et al.), *6225*
- bending, plates (sandwich), Seide (P.), *6228*
- acoustic emission, damage, Mohan (R.), Prathap (G.), *6356*
- inspection, layered media, nondestructive tests, thermography, Rapoport (D.A.), *6484*
- layered media, shear, shells (sandwich), thermal stresses, thermoelasticity, Khoroshun (L.P.), Babich (D.V.), *6953*
- composite materials, dynamic behavior, mixture theories, waves, Benveniste (Y.), Aboudi (J.), *7142*
- composite materials, delamination, Herakovich (C.T.), *7302*
- edge effects, finite element methods (hybrid), Spilker (R.L.), *7304*
- composite materials, plates (anisotropic), Sharma (S.), Iyengar (N.G.R.), (et al.), *7342*
- bending, bimodulus materials, plates (rectangular), plates (thick), Bert (C.W.), Reddy (J.N.), (et al.), *7343*
- dynamic response, elastoviscoplasticity, nonlinear analysis, work hardening, Aboudi (J.), Benveniste (Y.), *7407*
- edge cracks, plates (weakened), viscoelastic materials, Gorelik (A.V.), *7506*
- bonded joints, composite materials, delamination, ultrasonics, Schramm (S.W.), Daniel (I.M.), (et al.), *7557*
- nondestructive tests, testing equipment, transducers (ultrasonic), ultrasonics, Crostack (H.A.), Deutsch (V.), (et al.), *7560*
- flaw detection, glass fibers, liquid crystals (cholesteric), nondestructive tests, thermography, Williams (J.H.), Mansouri (S.H.), (et al.), *7574*
- composite materials, flaw detection, liquid crystal, thermography, Wilson (D.W.), Charles (J.A.), *7576*
- composite structures, holes, shells (sandwich), Shnerenko (K.I.), *8221*
- computing techniques, finite element methods (hybrid), plates (thick), Spilker (R.L.), *8226*
- composite materials, conduction (heat), green function, layered media, unsteady flow, Huang (S.C.), Chang (Y.P.), *8733*
- anisotropic media, composite materials, plates (sandwich), thermal effects, Reddy (J.N.), Hsu (Y.S.), *8888*
- mechanical stabilization, plates, rayleigh ritz method, shape factors, temperature, Hyer (M.W.), *9247*
- coatings, residual stresses, Martynenko (A.A.), *9248*
- composite materials, interlaminar stresses, perturbation methods, rayleigh ritz method, Bar-Yoseph (P.), Pian (T.H.H.), *9249*
- aging, computer programming, viscoelastic materials, volterra equations, Huet (C.), *9250*
- bending, composite materials, plates (anisotropic), plates (nonlinear), plates (rectangular), plates (thick), Reddy (J.N.), Chao (W.C.), *9273*
- elastic waves, harmonic waves, Shah (A.H.), Datta (S.K.), *9345*
- composite materials, elastic constants, glass fibers, materials properties, Wagner (H.D.), Fischer (S.), (et al.), *10128*
- electrical properties, mechanical properties, Kadotani (K.), Aki (F.), (et al.), *10132*
- fibers, material testing, plastics, stretching, Polyakov (V.A.), Tanevskii (V.V.), *10133*
- damage, stress concentration, thermography, vibration, Henneke (E.G.) II, *10135*
- absorption, adhesives, bonded joints, composite materials, optical techniques, swelling stresses, water, Sargent (J.P.), Ashbee (K.H.G.), *11343*

Lammens (R.F.), compaction, dies, friction (rolling), materials properties, powder metallurgy, Struyk (C.), (et al.), *7463*
- compaction, dies, friction, powder metallurgy, powders, punch problems, Liem (T.B.), (et al.), *7465*

Lamon (J.), ceramics, endurance limit, material testing, refractories, thermal fatigue, *3435*

Lamp (Yu.Yu.), see Ainola (L.Ya.), *11417*

Lampinen (M.), drying, evaporation, mechanics, thermodynamics, *800*

Lamvik (M.), cylindrical bodies, diffusion, solids, thermal excitation, unsteady flow, *8678*

Lamy (R.), see Gamby (D.), *6357*

Landa (Ye.I.), faults, seismic waves, spectral analysis, Mitrofanov (G.M.), *8011*

Landau (I.D.), adaptive systems, model reference systems, stability theory, *11094*

Landes (J.D.), ductile fracture, elastoplasticity, fracture, j-integral, material testing, surveys, Begley (J.A.), (et al.), *3480, book*

landing, friction, runways, space shuttle, Yager (T.J.), Horne (W.B.), *1332*

landing devices, flight control, state space techniques, vtol, Guy (C.R.), *1627*
- dimensional analysis, turbojet engines, Khabibullin (M.G.), Nesterov (E.D.), (et al.), *5661*

landing gears, design, dynamic loads, longitudinal stability, stabilization, Allen (R.R.), O'Massey (R.C.), *8462*
- airplane performance, ground roll, Sivaramakrishnan (M.M.), *10509*

Landis (F.), see Pratt (T.K.), *6801*

Landman (K.A.), bifurcation, integro differential equations, periodic orbits, stability theory, *2016*

Landolt (D.), see Mathieu (H.J.), *4116*

Landsbaum (E.M.), design, impulse, rockets, solid propellants, Salinas (M.P.), (et al.), *10726*

landslides, edge effects, seepage, Barron (R.A.), *962*
- avalanches, modeling, snow, Pariseau (W.G.), *1330*
- avalanches, modeling, snow, Danilova (E.M.), Eglit (M.E.), *1331*
- mountains, slopes, soils, stability, Okimura (T.), *9363*

Lane (J.C.), blunt bodies, leading edge, reynolds number (small), separated flow, Loehrke (R.I.), *574*

Lane (R.G.T.), cracking, dams, earthquake effects, embankments, *9365*

Lane (S.M.), see Campbell (E.M.), *5694*

Lang (T.), see Bryanston-Cross (P.J.), *5505*

Lang (W.W.), noise measurements, *3973*

Lange (C.G.), buckling, shells (nonlinear), shells (spherical), structural stability, Kriegsmann (G.A.), *1252*

Lange (Yu.V.), defects, flaw detection, nondestructive tests, transducers, *6488*

Langeheineken (T.), pipe flow, turbulence (structure), turbulent flow, *7718*

Langen (I.), bridges, dynamic analysis, floating structures, stochastic processes, wave loads, Sigbjornesson (R.), *5356*

Langenberg (H.), dynamic stability, ship design, ship structures, *7617*

Langenberg (K.J.), see Aulenbacher (U.), *7585*

Langerholc (J.), boundary layer, latent heat, phase boundaries, stefan problem, *10658*

Langhans (R.A.), airplane performance, stability derivatives, transonic flow, wind tunnels, Flechner (S.G.), *3736*

Langlois (M.), three body problem, trajectories, transformation, *875*

Langston (D.B.), see Haines (N.F.), *3940*

Langston (L.S.), axial turbines, cascades, crossflow, three dimensional flow, *2751*

Lanin (A.G.), see Stepanov (V.V.), *1413*

Lankford (J.), crack propagation, edge cracks, fatigue, material testing, microcracks, nickel alloys, Cook (T.S.), (et al.), *7476*
- fracture mechanics, microfracture, rocks, strain rate, strength, *8351*
- see Davidson (D.L.), *8373*

Lapiga (E.Ya.), approximations, coalescence, electro fluid dynamics, particles, turbulence (mechanisms), Loginov (V.I.), *6862*

Lapin (A.D.), elastic waves, modal analysis, surface waves, *1297*
- acoustic waves, curved surfaces, rayleigh waves, resonance, ultrasonics, *6335*
- attenuation, free boundary, nonhomogeneous media, surface waves, *7422*

laplace equation, approximations, boundary integral methods, holes, Barone (M.R.), Caulk (D.A.), *4161*
- boundary value problems, mellin transform, singular integral equations, transforms, wedges, Chakrabarti (A.), *4979*

- finite difference methods, relaxation methods, Ponnuswamy (V.), *8138*
- capillary flow, meniscus, Finn (R.), *8520*
- ellipsoids, oscillating bodies, unsteady flow, viscous effects, Geissler (W.), Kienappel (K.), *8539*
- eigenvalue problems, poisson equation, Kuttler (J.R.), *9105*
- boundary value problems, elastic bodies, membranes, variational methods, Lefevere (A.-M.), *10149*

laplace transform, matrix methods, pole zero structure, state space techniques, Verghese (G.), *101*

- gravity waves (surface), propagation, viscous flow, waves, Tkachenko (V.A.), *670*
- fluidized beds, inversion, multiphase flow, numerical analysis, special functions, Petho (A.), Kuhne (J.), *1101*
- convection (free), magneto fluid dynamics, oscillatory flow, plates (perforated), viscous flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *2884*
- dynamic analysis, heat transfer, hyperbolic equations, Korolkov (B.P.), Pupin (A.A.), *3115*
- bearings (slider), lubrication (hydrodynamic), reynolds equation, Macdonald (D.A.), *4107*
- algorithms, queue theory, Ivnitskiy (V.A.), *4262*
- inverse problems, viscoelastic waves, Nigul (U.K.), *5239*
- convection (free), magneto fluid dynamics, plates (vertical), stokes flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *5675*
- computing techniques, convergence, Karimbaev (T.D.), Nozhnitskii (Yu.A.), *6093*
- boundary integral methods, elastodynamics, stress concentration, Manolis (G.D.), Beskos (D.E.), *6160*
- design (optimum), fourier transform, mechanisms, nonlinear mechanics, Sandler (B.Z.), *6565*
- blood flow, circulation, elastic constants, frequency response, Skidmore (R.), Woodcock (J.P.), *7120*
- differential equations (ordinary), initial value problems, nonlinear systems, Brenig (L.), Fairen (V.), *7159*
- matrix methods, pole placement, Seraji (H.), *7229*
- beams (timoshenko), dynamic response, transient effects, Huntley (E.), Zinober (A.S.I.), *7385*
- elastic behavior, singular waves, tauberian theorems, time delay systems, Lokshin (A.A.), *8124*
- boundary value problems, elasticity (linear), Miletic (J.), *8193*
- acceleration, hall effect, magneto fluid dynamics, porous surfaces, Kant (R.), *8815*
- nonlinear waves, pade approximation, singular perturbations, Venkatarangan (S.N.), Narendran (G.), *9109*
- heat transfer, mass transfer, Koprinski (S.Ts.), *10801*
- magneto fluid dynamics, porous surfaces, rotating fluids, unsteady flow, Seth (G.S.), Jana (R.N.), (et al.), *11812*
- infinite medium, magneto plasma dynamics, panels (flat), unsteady flow, Shivamoggi (B.K.), *11814*

Laporte (R.), airfoil theory, deformation, lift, oscillations, potential flow, *7787*

Lappo (S.S.), energy transport, ocean air interaction, tides, Rozhdestvenskiy (A.Ye.), *4064*

Lapshenkov (V.S.), rivers, scour, sediment transport, silting, Boguslavskaya (T.A.), *1899*

Laptev (V.A.), boundary conditions, boundary layer, macroscopic characterization, Nagnibeda (E.A.), *7695*

Lapygin (V.V.), see Burenin (A.A.), *1310*

Larche (M.), see Kretz (M.), *9649*

Larchenko (V.V.), asymptotic behavior, shells (shallow), shells (spherical), stability theory, *8268*

Larcheveque (M.), closure, dispersion, statistical theory, turbulence, Lesieur (M.), *8514*

Lardner (R.W.), nonlinear waves, one dimensional waves, shock waves, wave equations, *36*

- nonlinear waves, self excitation, stability theory, van der pol equations, wave equations, Nicklason (G.), *9103*

Large (E.), airplanes, flight path, optimization, rockets, supersonic flow, wing body combinations, *4671*

- evasion, optimal control, pursuit, variational methods, *7926*
- airplanes, flight path, fuel economy, optimization, subsonic flow, *8544*

Large (W.G.), dissipation, drag coefficient, ocean air interaction, reynolds stresses, wind, Pond (S.), *10872*

large displacement, bending, curved tubes, finite pure bending, shells (nonhomogeneous), tubes, Reissner (E.), *293*

- beams (cantilever), nonlinear theory, Lau (J.H.), *298*
- rings, Watson (L.T.), Wang (C.Y.), *301*
- diaphragms, membranes, Na (T.Y.), Kurajian (G.M.), *323*
- finite element methods (hybrid), shells (nonlinear), Boegershausen (H.), *324*
- beams (sandwich), design (optimum), plates (nonlinear), shear, Gierlinski (J.), Mroz (Z.), *1223*
- shells (nonlinear), shells (plastic), shells (spherical), Kondo (K.), Pian (T.H.H.), *1234*
- finite element techniques, shells (nonlinear), Kanok-Nukulchai (W.), Taylor (R.L.), (et al.), *1240*
- collapse, plastic behavior, postbuckling behavior, rings, Kyriakides (S.), Babcock (C.D.), *1249*
- buckling, lateral stability, pipelines, Angrilli (F.), Bergamaschi (S.), *1255*
- beams (cantilever), Wang (C.-Y.), *2261*
- beam columns, elastic behavior, elastica, Ivanov (B.P.), Ilyukhin (A.A.), *2262*
- shells (nonlinear), strain energy, Libai (A.), Simmonds (J.G.), *2271*
- nailed joints, shells (hyperbolic paraboloid), shells (sandwich), wood structures, Moss (P.J.), Carr (A.J.), (et al.), *2281*
- elastoplasticity, panels (curved), structural stability, Stolyarov (N.N.), Pestrovskii (G.M.), *2307*
- elasticity (nonlinear), waves, Ziv (M.), *2362*
- convergence, finite element techniques, flexible bodies, geometric nonlinearities, Mohr (G.A.), Milner (H.R.), *3142*
- beams (plastic), bearing capacity, indentation, Low (H.Y.), *3286*
- asymptotic behavior, flexible bodies, rods, Oshevsky (K.U.), *3288*
- thin walled structures, tubes, viscoplasticity, Murase (K.), Nishimura (T.), *3291*
- plastic behavior, punch problems, rings, Ghosh (S.K.), Johnson (W.), (et al.), *3296*
- elastic foundations, inclusions, plates, Watanabe (K.), *3303*
- finite element methods (hybrid), finite strain, shells (anisotropic), shells (sandwich), Chang (T.Y.), Sawamiphakai (K.), *3311*
- impulsive loading, plates (circular), viscoplasticity, Idczak (W.), Rymarz (C.), (et al.), *3314*
- nonlinear theory, shells (nonlinear), Galimov (K.Z.), *4376*
- experimental methods, hybrid techniques, plates (circular), Laermann (K.-H.), *4387*
- finite element methods, plates (circular), vibration (nonlinear), Reddy (J.N.), Huang (C.L.), (et al.), *4425*
- beams, nonlinear analysis, Bufler (H.), *5152*
- arches, finite element methods, postbuckling behavior, Lazarov (L.), *5179*
- deformation (finite), nonlinear structures, structural analysis, Giambanco (F.), *6159*
- beams (plastic), deformation (finite), plastic behavior, Kondo (K.), Pian (T.H.H.), *6212*
- beams (elastic), deformation (finite), frames, Milner (H.R.), *6213*
- annuli, axial loading, membranes, Allman (D.J.), Mansfield (E.H.), *6217*
- nonlinear materials, shells (thin), Parisch (H.), *6219*
- bending (elastic), plates, torsion, Simmonds (J.G.), *6222*
- elastoplasticity, nonlinear theory, plates (stiffened), Webb (S.E.), Dowling (P.J.), *6227*
- edge effects, nonlinear theory, plates (annular), Lebrun (M.), Bayada (G.), (et al.), *6231*
- finite element techniques, viscoelastic materials, Guelin (P.), Nowacki (W.K.), (et al.), *6337*
- dynamic analysis, elastoplasticity, pipes, Helfetz (J.), Benjamin (M.), (et al.), *7362*
- galerkin method, plates (orthotropic), plates (rectangular), vibration (free), Pesotskaya (N.K.), *7395*
- plates (circular), plates (nonhomogeneous), Banerjee (B.), *8250*
- dynamic analysis, finite element methods, plates, vibration (free), Akay (H.U.), *8310*
- inelasticity, plastic behavior, strain rate, structural analysis, Symonds (P.S.), *8347*
- numerical analysis, rods, Faulkner (M.G.), Mioduchowski (A.), (et al.), *9257*
- elastic bodies, pertubation methods, rings, stick slip, Benson (R.C.), *9260*
- beams (cantilever), combined loading, Lau (J.H.), *9261*
- plates (circular), plates (holed), Banerjee (B.), *9276*
- beams, beams (heavy), Watson (L.T.), Wang (C.Y.), *10140*
- beams (cantilever), nonlinear materials, Lewis (G.), Monasa (F.), *10141*
- beams (flexural), nonlinear analysis, springs, Watson (L.T.), Wang (C.Y.), *10143*
- concentrated loads, plates, plates (nonlinear), shear stress, Banerjee (B.), *10159*
- buckling, elastoplasticity, pressurized components, shells, Galletly (G.D.), *10185*
- convection (forced), nonlinear characteristics, porous media, saturation, Rudraiah (N.), Srimani (P.K.), *12069*

large scale systems, computing techniques, iterative methods, newton method, nonlinear methods, Geradin (M.), Idelsohn (S.), (et al.), *64*

- graph theory, nonlinear systems, stability theory, Vidyasagar (M.), *123*
- approximation methods, dynamic response, mathematical models, Lamba (S.S.), Rao (S.V.), *183*
- optimal control, simulation, Krasovskii (A.A.), *210*
- algorithms, matrix methods, Sincovec (R.F.), Erisman (A.M.), (et al.), *3039*
- computing techniques, nonlinear analysis, Mochimaru (Y.), Tomita (Y.), *3041*
- design, linear systems, observers, Arbel (A.), Tse (E.), *3084*
- controllability, observability, structural analysis, Sote (W.), *3086*
- autonomous systems, linear systems, stability theory, time lag, Lewis (R.M.), Anderson (B.D.O.), *3154*
- interconnected systems, linear theory, stability theory, Moylan (P.J.), *3166*
- lyapunov's functions, stability theory, Seeki (M.), Araki (M.), *3168*
- algorithms, modal analysis, model reduction, Kabamba (P.T.), *4210*
- aggregation, control, linear systems, model reduction, Galtsgori (V.G.), Pervozvanskii (A.A.), *4227*
- control, nonlinear systems, synthesis, Vukobratovic (M.), Stokic (D.), *4242*
- control stability, design, feedback, interconnected systems, lyapunov's functions, stability theory, Mahalanabis (A.K.), Singh (R.), *4250*

- algorithms, model reduction, Moissenko (G.E.), *4279*
- control, multivariable systems, optimization, Findeisen (W.), Brdys (M.), (et al.), *4289*
- algorithms, optimal control, stochastic control, Chernitser (A.V.), *5056*
- dynamics, existence theorems, limit cycles, Skar (S.J.), Miller (R.K.), (et al.), *8103*
- asymptotic behavior, differential equations (ordinary), singular perturbations, stability theory, Grujic (L.T.), *8105*
- iterative methods, optimal control, regulator problem, time optimal systems, Samovsky (J.), *8165*
- control, multivariable systems, optimal control, power generation, Ikeda (M.), Siljak (D.D.), (et al.), *9175*
- design, multivariable systems, observers, Das Gupta (R.), Fairman (F.W.), *11046*
- control, decoupling, design, manipulators, nonlinear systems, Vukobratovic (M.K.), Stokic (D.M.), *11049*
- design, regulator problem, Viswanadham (N.), Ramakrishna (A.), *11052*
- approximation theory, model reduction, Litz (L.), *11077*
- control, design, feedback, stability theory, Anderson (B.D.O.), Moore (J.B.), *11089*

Larichev (V.D.), see Flierl (G.R.), *8979*

Larina (I.N.), drops, evaporation, kinetics, mass transfer, numerical analysis, Rykov (V.A.), *4726*

Larionov (V.M.), acoustics, burners, excitation, oscillations, *11800*

Larisch (E.), navier stokes equation, turbulence, turbulence (structure), *642*

Larkin (L.A.), beams (thin section), computer programming, elastoplasticity, shells (shallow), *7217*

Larkin (N.A.), burgers equation, regularization, uniqueness, *6074*

Larkin (W.J.), flight control, variable-bend body, Thomas (M.), *2164*

Larrabee (E.E.), aerodynamics, airplanes, engines, propellers, *3750*

Larsen (L.H.), bandwidth, experimental results, finite amplitude, gravity waves, ocean waves, *661*

- gravity waves, surface waves, swell, *4052*

Larson (E.S.), aerodynamic performance, airplanes, design, geometrical properties, wings, *9648*

Larson (T.J.), aerodynamic performance, airplanes, pressure measurement, subsonic flow, Siemers (P.M.) III, *3753*

Larsson (J.), see Hindmarsh (J.), *1964*

Larsson (S.E.), buckling, plates (sandwich), Bengtsson (H.), (et al.), *1238*

Larue (J.C.), grids, mixing layers, thermal diffusion, turbulence, turbulent mixing, Libby (P.A.), (et al.), *10474*

Laryushkin (M.A.), developing flow, jets, turbulent flow, velocity profiles, Dvoinishnikov (V.A.), *6672*

- see Dvoinishnikov (V.A.), *11524*

Las (S.P.), see Smits (A.J.), *8624*

Lasek (A.), see Gokalp (I.), *2864*

laser doppler velocimeters, couette flow, hydrodynamic stability, taylor vortices, Vasilenko (Yu.G.), Kuznetsov (E.A.), (et al.), *639*

- airfoils, boundary layer (turbulent), transonic flow, Johnson (D.A.), Bachalo (W.D.), (et al.), *684*
- design, internal combustion engines, piston driven flow, swirl, Morse (A.), Whitelaw (J.H.), (et al.), *706*
- piston driven flow, unsteady flow, vortices, Bicen (A.F.), Vlachos (N.S.), (et al.), *707*
- flame holders, flames, stabilization, Fujii (S.), Eguchi (K.), *837*
- jets, spectral analysis, velocity measurement, Roberts (J.B.), Downie (J.), (et al.), *1645*
- engines, internal flow, piston driven flow, Morse (A.P.), Whitelaw (J.H.), (et al.), *1758*
- atmosphere, lasers, lidar, meteorology, Gaumet (J.-L.), Renaut (D.), (et al.), *1917*
- lift coefficient, vortex lines, wakes, wings, Orloff (K.L.), *2729*
- jets, three dimensional flow, turbulence, Hjertager (B.H.), Magnussen (B.F.), *2765*
- rotors, turbomachinery, velocity measurement, Schodl (R.), *2766*
- liquids, refraction, stratified flow, turbulence, Mcdougall (T.J.), *2767*
- data analysis, turbulent flow, Schnettler (A.), *3761*
- data analysis, particulate flow, sampling, Edwards (R.V.), *4686*
- experimental methods, fluidized beds, two phase flow, Levy (Y.), Lockwood (F.C.), *5941*
- centrifugal compressors, diffusers, entrance region, optical analysis, rotors, Krain (H.), *6735*
- cavities, closed conduit flow, convection (free), visualization, Linthorst (S.J.M.), Schinkel (W.M.M.), (et al.), *6792*
- anemometers, two phase flow, Lesinski (J.), Mizera-Lesinska (B.), (et al.), *6968*
- drag reduction, laminar flow, polymers, rotating disks, Ulbrecht (J.J.), Gasparetto (C.A.), *7675*
- grids, turbulence, turbulence (structure), Cenedese (A.), Iannetta (S.), (et al.), *8619*
- blood flow, flow measurement, tissues, Nilsson (G.E.), Tenland (T.), (et al.), *9059*
- blood flow, experimental results, stenoses, Khalifa (A.M.A.), Giddens (D.P.), *9062*
- bottom irregularities, ocean bed, oscillatory flow, Du Toit (C.G.), Sleath (J.F.A.), *9617*
- flexible walls, transonic flow, wind tunnels, Davis (S.S.), *9680*
- centrifugal compressors, diffusers, inlet flow, velocity profiles, Flueckiger (G.), Melling (A.), *10628*
- axial compressors, transonic flow, turbomachinery, velocity profiles, Powell (J.A.), Strazisar (A.J.), (et al.), *10537*
- gas-trips, mixing, nozzles, supersonic flow, velocity profiles, Cenkner (A.A.) Jr., *11511*
- anemometers, bubbly flow, two phase flow, Martin (W.W.), Adbelmessih (A.H.), (et al.), *12040*

laser plasma interaction, materials properties, nuclear fusion, power generation, thermal loading, Jaeger (T.A.) eds., Boley (B.A.), *1781, book*

- implosion, nuclear fusion, shells (spherical), turbulence (transport), Lykov (V.A.), Murashkina (V.A.), (et al.), *1782*
- focusing, propagation, theory, wave absorbers, Sodha (M.S.), Sinha (S.K.), (et al.), *2904*
- energy transport, lateral stability, transport phenomena, wires, Ehler (A.W.), Begay (F.), (et al.), *3900*
- focusing, ionized gases, models, radiation pressure, Del Pizzo (V.), Luther-Davies (B.), *3901*
- density, interferometry, measurements (dynamic), transport phenomena, Benattar (R.), Popovics (C.), *5683*
- hybrid construction, radiation properties, reactor structures, thermal effects, Avrorin (E.N.), Zuev (A.I.), (et al.), *5685*
- design criteria, nuclear fusion, reactor structures, thermonuclear energy, Basov (N.G.), Krokhin (O.N.), (et al.), *5686*
- diagnostics, energy spectrum, ionic flow, measurements (dynamic), Chowdhury (S.S.), Clement (R.M.), (et al.), *5687*
- absorption, experimental results, implosion, nuclear fusion, thermonuclear energy, Bekiarian (A.), Decroisette (M.), *5688*
- charged particles, energy spectrum, ionic flow, measurements (dynamic), Clement (R.M.), Davies (R.A.), (et al.), *5689*
- interferometry, measurements (dynamic), schlieren methods, unsteady flow, Klimkin (V.F.), Pikalov (V.V.), *5694*
- absorption, collision models, energy conversion, resonance, Guillaneux (P.), *8832*
- electron beams, energy transport, heat addition, thermodynamic processes, vacuum, Derzhiev (V.I.), Marchenko (V.S.), (et al.), *11840*

lasers, holography, moire methods, optical techniques, stress analysis, Chiang (F.P.), *1393*

- fluid mechanics, lasers (gasdynamic), Wendt (J.F.) ed., *1643, book*
- friction (skin), interferometry, Monson (D.J.), *1644*
- acoustic measurements, diffraction, sound fields, sound propagation, transducers, Kleszczewski (Z.), *1827*
- atmosphere, laser doppler velocimeters, lidar, meteorology, Gaumet (J.-L.), Renaut (D.), (et al.), *1917*
- design, guidance systems, Nulk (R.A.), Pastrick (H.L.), (et al.), *2163*
- autocorrelation function, diffraction, fourier transform, statistical theory, yarn, Toba (E.), *2256*
- photoelasticity, photoelasticity (three dimensional), scattered light, Berghaus (D.G.), *3482*
- defects, layered media, nondestructive tests, residual stresses, ultrasonics, Berger (H.) eds., Linzer (M.), *3505, book*
- convection (free), laminar flow, visualization, Boyd (R.D.), Vest (C.M.), *3831*
- combustion, flames (diffusion), scattering, spectral analysis, Bard (S.), Pagni (P.J.), *3878*
- optical techniques, rotors, turbomachinery, velocity measurement, Smart (A.E.), Wisler (D.C.), (et al.), *4687*
- annular flow, cooling, transient loading, Dulnev (G.N.), Gurev (Yu.L.), (et al.), *5540*
- combustion (turbulent), stokes flow, thermal measurements, turbulence, Eckbreth (A.C.), *5632*
- energy conversion, propulsion, radiation, solar energy, space, Billman (K.W.) ed., *5664, book*
- electron beams, excitation, plasma, spectral analysis, Ono (K.), Kamimoto (G.), (et al.), *5691*
- absorption, sound generation, underwater acoustics, Hunter (S.D.), Jones (W.V.), (et al.), *5717*
- absorption, diffusion, heating, metals, Boiko (V.I.), Bunkin (F.V.), (et al.), *5808*
- atmosphere, lidar, meteorology (physical), moisture, raman scattering, scattering, Zakharov (V.M.), Kalachinskii (S.F.), (et al.), *5959*
- experimental results, eyes, heat transfer (biological), thermal effects, Polhamus (G.D.), *7115*
- holography, interferometry, metrology, surfaces, vibration, Kohler (H.), *7562*
- data acquisition, scattering, velocity measurement, Hirleman (E.D.), *7815*
- conduction (heat), cylindrical bodies, internal flow, unsteady flow, Lakusta (K.V.), *7860*
- displacement, holography, modulated systems, optical techniques, waves, Gilbert (J.A.), Herrick (J.W.), *8424*
- elastodynamics, metals, thermal effects, thermoelasticity (transient), Scruby (C.B.), Dewhurst (R.J.), (et al.), *8877*
- data analysis, stress strain relationships, velocimeters, Duffey (T.A.), Karpp (R.R.), (et al.), *9422*
- mixing layers, smoke tunnels, turbulent flow, visualization, Mensing (P.), Fiedler (H.), *9679*

- cutting, elastic bodies, elastic waves, supersonic flow, Borzykh (A.A.), *10242*
- impact, photoelasticity (dynamic), stress analysis, Grellier (J.P.), Lagarde (A.), *10311*
- conduction (heat), phase changes, radiant interchange, radiation properties, Zscherpe (G.), *10607*

lasers (gasdynamic), compressible flow, numerical methods, phase shifts, Roberts (S.A.), Lamberton (H.M.), *588*

- compressible flow, entrance region, perturbation methods, Kuznetsov (V.M.), *1523*
- fluid mechanics, lasers, Wendt (J.F.) ed., *1643, book*
- radiant interchange, spectroscopy, Dorogov (V.G.), Demenik (I.V.), (et al.), *1708*
- boundary layer, chemically reactive flow, frozen flow, nozzles, supersonic flow, Bassina (I.A.), Dorot (V.L.), (et al.), *2639*
- compressible flow, simulation, Achasov (O.V.), Blaga (Ya.), (et al.), *3641*
- combustion, diagnostics, scattering, Eckbreth (A.C.), Bonczyk (P.A.), (et al.), *3879*
- accelerators, control, vibration, vibrational control, Meerkov (S.M.), *5064*
- condensation, evaporation, excitation, isotopes, mixtures, Druzhinin (A.A.), Ptitsyn (G.A.), (et al.), *5612*
- radiation pressure, shock waves (normal), Chlodzinski (J.), Denus (S.), (et al.), *6338*
- compressible flow, mixing, nozzles, supersonic flow, Efimov (B.G.), Zakhyaziminskii (L.A.), *11403*

Lashuk (N.K.), aging, beryllium, deformation (plastic), hydrogen embrittlement, strength, Tkachenko (V.G.), (et al.), *7502*

Laskin (N.V.), see Virchenko (Yu.P.), *1660*

Lasowska (A.), see Skawinski (R.), *5443*

Lataillade (J.L.), see Pouyet (J.M.), *379*

latent heat, melting, solidification, stefan problem, Solomon (A.), *2814*

- energy conservation, energy storage, solar energy, Shamsundar (N.), Srinivasan (R.), *5604*
- cloud physics, flow obstructions, meteorology (physical), two dimensional flow, Barcilon (A.), Jusem (J.C.), (et al.), *7677*
- adsorption, cooling, energy conservation, solar collectors, Peng (C.S.P.), Howell (J.R.), *8763*
- boundary layer, phase boundaries, stefan problem, Langerholc (J.), *10658*

lateral pressure, design, piles, Bannerjee (R.), *10255*

lateral stability, beams, bending, twisting, Warnick (W.L.), Walston (W.H.) Jr., *1218*

- buckling, large displacement, pipelines, Angrilli (F.), Bergamaschi (S.), *1255*
- hulls, rolling motion, ship design, waves, Burcher (R.K.), *1922*
- beam columns, Ojalvo (M.), *3328*
- beams (cantilever), buckling, shear loading, Reissner (E.), *3330*
- beam columns, buckling (torsional), Hancock (G.J.), Bradford (M.A.), (et al.), *3331*
- beams (cantilever), beams (thin section), buckling (torsional), Zalka (K.), *3332*
- energy transport, laser plasma interaction, transport phenomena, wires, Ehler (A.W.), Begay (F.), (et al.), *3900*
- dynamic stability, vehicles, Huston (J.C.), Johnson (D.B.), *4546*
- airplanes, flight control, space shuttle, stochastics, Stengel (R.F.), *4672*
- airplanes, frequency response, unsteady flow, Wells (W.R.), Banda (S.S.), (et al.), *6730*
- airplanes, control, flight control, longitudinal stability, stability, Etkin (B.), *8646, book*
- beams, buckling (experimental), statistical design, welded joints, Fukumoto (Y.), Itoh (Y.), *9285*

Latiere (H.J.), aluminum alloys, fracture toughness, material testing, *10278*

Latinopoulos (P.), pipe flow, resonance, unsteady flow, wavy walls, Tolikas (D.K.), *3711*

- axisymmetric flow, constrictions, ducts (variable area), pulsatile flow, unsteady flow, Ganoulis (J.), *8582*

Latorre (R.), naval mechanics, ship dynamics, ship towing, towing cables, Bernitsas (M.M.), *8036*

- cavitation, models, noise measurements, propellers (marine), vortices, *8518*

lattices, buckling, combined loading, trusses, Holzer (S.M.), Plaut (R.H.), (et al.), *341*

- buckling, framed structures, structural stability, Anderson (M.S.), *1250*
- minimization, structural optimization, trusses, Bauer (J.), Gutkowski (W.), (et al.), *4522*
- crystals, ductile fracture, forming, fracture mechanics, Chang (Y.W.), Asaro (R.J.), *6433*
- copper, elastic constants, polycrystalline materials, shear, strain, Gairola (B.K.D.), Kroner (E.), *6468*
- crystals, korteweg de vries equation, one dimensional waves, particle dynamics, Askar (A.), *7140*
- approximation theory, continuum mechanics, finite difference methods, Jaberolansar (H.), Peddieson (J.) Jr., *9252*
- prestressed structures, structural response, vibration (free), Anderson (M.S.), *9326*
- high temperature, oxidation, semiconductors, strain, stress analysis, Franz (G.), Hartmann (W.), *9421*

Latyshev (A.V.), coherent structure, turbulence model, turbulent flow, turbulent mixing, Ordanovich (A.E.), *10477*

Lau (H.-S.), see Kottas (J.F.), *2118*

Lau (J.C.), jets, temperature, turbulence, *2672*

Lau (J.H.), beams (cantilever), large displacement, nonlinear theory, *298*

- combined loading, creep, pressurized components, shells (cylindrical), Listvinsky (G.K.), *3252*
- elasticity (linear), plates (corrugated), plates (stiffened), *6230*
- beams (cantilever), combined loading, large displacement, *9261*

Lau (P.C.M.), approximations, derivatives, finite difference methods, *10045*

Lau (S.C.), heat transfer, inlet flow, pipe flow, turbulent flow, Sparrow (E.M.), (et al.), *7751*

Lau (S.L.), dynamic analysis, elastic behavior, variational methods, vibration (nonlinear), Cheung (Y.K.), *6272*

Lau (W.S.), see Venuvinod (P.K.), *7460*

Lau (Y.L.), see Engel (P.), *557*

- dispersion coefficient, mathematical models, mixing, rivers, Krishnappan (B.G.), *9520*

Lau (Y.Y.), galactic system, gravity, waves, Lin (C.C.), *6044*

Laub (A.J.), see Safonov (M.G.), *4226*

- dynamic analysis, kinematics, rigid bodies, Shiflett (G.R.), *8093*

Lauchle (G.C.), bodies of revolution, boundary layer, laminar flow, transition flow, water tunnels, Eisenhuth (J.J.), (et al.), *1541*

Laudadio (F.J.), see Vance (J.M.), *8655*

Laudiero (F.), beams (plastic), computing techniques, dynamic analysis, reinforced bodies, *3279*

launching, design, satellites, O'Neill (G.K.), Kolm (H.H.), *2874*

- ballistics, propellants, shock waves, Taylor (T.D.), Lin (T.C.), *2929*
- ballistics (interior), blast effects, projectiles, solid fuels, Taylor (T.D.), Lin (T.C.), *6891*
- computing techniques, flexible bodies, rockets, spinning bodies, Weeks (G.E.), Cost (T.L.), *7922*
- ballistics (exterior), trajectory optimization, wind loads, Churchyard (J.N.), *7929*
- aerodynamic interference, fins, projectiles, trajectories, Schmidt (E.M.), *10519*
- propulsion, space vehicles, systems, Kayama (A.), Takenaka (Y.), *10728*
- magnetic field, space vehicles, Lemke (E.H.), *11803*

Launder (B.E.), see Gibson (M.M.), *4896*

- turbulence model, turbulent flow, wall jets, Rodi (W.), *10459*

Launder (B.E.) eds., closed conduit flow, flow measurement, heat transfer, recirculation, Humphrey (J.A.C.), *2826, book*

Laura (P.A.A.), approximation methods, edge effects, plates (rectangular), plates (stiffened), vibration, Gutierrez (R.H.), *2330*

- elastic behavior, plates (circular), vibration, Ficcadenti (G.M.), *3366*
- finite element techniques, helmholtz equation, membranes, variational methods, vibration, Sarmiento (G.S.), (et al.), *5025*
- finite element techniques, helmholtz equation, membranes, variational methods, vibration, Gutierrez (R.H.), (et al.), *6097*
- edge effects, elastic foundations, plates (rectangular), rayleigh ritz method, vibration (free), Grossi (R.O.), *7392*
- cladding, conformal mapping, fuel elements, heat transfer, nuclear reactors, Gutierrez (R.H.), (et al.), *8729*
- elastic behavior, plates (circular), rayleigh ritz method, vibration, Avalos (D.R.), (et al.), *9308*
- approximations, conduction (unsteady), conformal mapping, *10037*
- plates (rectangular), rayleigh ritz method, vibration (free), De Irassar (P.V.), (et al.), *10204*
- conduction (heat), conformal mapping, heat transfer, variational methods, Sarmiento (G.S.), *11765, book*

Lausch (W.), diesel engines, prediction, probability theory, wear, Biemann (W.), (et al.), *9024*

Laval (P.), difference equations, hyperbolic equations, shock waves, *9638*

Lavrentev (I.V.), averaging, channel flow, magnetic fluids, magneto fluid dynamics, reynolds number, *3895*

Lavrov (V.Yu.), see Tumanov (Yu.A.), *11332*

Law (C.G.) Jr., laminar flow, mass transfer, rotating disks, turbulent flow, Pierini (P.), (et al.), *2848*

Law (C.K.), boundary layer, chemically reactive flow, ignition, plates, vaporization, Law (H.K.), *3865*

- combustion, drops, vaporization, Chung (S.H.), (et al.), *8790*
- flames (diffusion), ignition, kinetics, laminar mixing, Law (H.K.), *11780*

Law (G.E.), see Bahar (L.Y.), *10223*

Law (H.K.), see Law (C.K.), *3865*

- see Law (C.K.), *11780*

Law (S.S.Y.), see Sinha (N.K.), *10081*

Law (W.K.), see Carstensen (E.L.), *891*

Lawal (M.A.), see Gourishankar (V.), *2174*

Lawlor (J.E.), see Brook (H.W.), *11902*

Lawn (B.R.), elastic constants, elastoplasticity, hardness, indentation, Howes (V.R.), *8433*

Lawnicki (J.J.), bending, butt welding, fatigue, welded joints, welding, Cutler (V.C.), *7638*

Lawrence (F.V.) Jr., see Cox (E.P.), *7527*

Lawrence (P.J.), linear systems, time varying systems, volterra series, *6127*

Lawrie (S.T.), see Butt (J.A.), *12085*

Laws (N.), inclusions, stress analysis, viscoelastic materials, viscoelasticity, *260*
Lawther (K.R.), see Beattie (D.R.H.), *9886*
Lax (P.D.), mathematical theory, scattering, wave equations, Phillips (R.S.), *35*
- see Harten (A.), *8132*

Lay (M.G.), buckling, columns, framed structures, sway, *6530*
layered media, asymptotic behavior, shells, tubes, Widera (G.E.O.), Johnson (M.W.), (et al.), *289*
- elastic waves, prestressed structures, Kalinchuk (V.V.), Poliakova (I.B.), *400*
- conical bodies, impact, simulation, Rimskii (V.K.), Sabodash (P.F.), *405*
- adhesives, bonded joints, ultrasonics, Pilarski (A.), Pawlowski (Z.), *543*
- insulating materials (thermal), optimization, Mikhailov (V.V.), *793*
- convection (free), slots, Wirtz (R.A.), Reddy (C.S.), *819*
- acoustic waves, arctic, sound propagation, Schulkin (M.), Garrison (G.R.), (et al.), *898*
- acoustic measurements, impedance, Klein (C.), Cops (A.), *909*
- elastic foundations, elasticity (linear), half space, Teshigawara (S.), *1178*
- composite materials, yield condition, Sawicki (A.), *1212*
- compressional waves, detonation (two phase), explosives, liquid gas mixture, slurries, Trebinski (R.), Trzcinski (W.), (et al.), *1595*
- analogies, viscoelastic waves, Ting (T.C.T.), Mukunoki (I.), *2364*
- acoustic waves, reflection, transmission, Fokkema (J.T.), *2367*
- anisotropy, soils, strength, Krishna Murthy (M.), Nagaraj (T.S.), (et al.), *2379*
- blades, multilayer, porous surfaces, temperature, turbomachinery, Lokai (V.I.), Zhulkov (V.V.), (et al.), *2822*
- state space techniques, thermoelasticity, Bahar (L.Y.), Hetnarski (R.B.), *2979*
- earthquakes, inverse problems, iterative methods, Hawley (B.W.), Zandt (G.), (et al.), *3392*
- approximation methods, nonlinear waves, Engin (H.), Askar (A.), (et al.), *3393*
- bearing capacity, footings, soils, Satyanarayana (B.), Garg (R.K.), *3405*
- displacement, foundations, soils, Gazetas (G.), *3406*
- defects, lasers, nondestructive tests, residual stresses, ultrasonics, Berger (H.) eds., Linzer (M.), *3505, book*
- bridges, piles, soil structure interaction, Takemiya (H.), Yamada (Y.), *4036*
- bessel functions, one dimensional waves, wave equations, Kard (P.), *4163*
- creep, nonlinear materials, Sumbatian (M.A.), *4347*
- harmonic waves, viscoelastic waves, Tanaka (K.), Kon-No (A.), *4448*
- harmonic waves, viscoelastic waves, Tanaka (K.), Kon-No (A.), *4449*
- inverse problems, uniqueness, Glasko (V.B.), Khudak (Yu.I.), *4451*
- love waves, scattering, Niazy (A.), Kazi (M.H.), *4453*
- foundations, seismic loading, soil structure interaction, Waas (G.), *4847*
- elastic foundations, elasticity (linear), Slivker (V.I.), *5073*
- elasticity (linear), half space, Amenzade (Yu.A.), *5078*
- cylindrical waves, rocks, White (J.E.), Tongtaow (C.), *5241*
- elastic constants, reflection, sh waves, Coen (S.), *5243*
- green function, sound propagation, underwater acoustics, wave equations, Dinapoli (F.R.), Deavenport (R.L.), *5767*
- plates (circular), plates (sandwich), stability theory, Grigolyuk (E.I.), Magerramova (L.A.), *6251*
- elastic waves, strips, Krasnushkin (P.E.), *6333*
- inspection, laminates, nondestructive tests, thermography, Rapoport (D.A.), *6484*
- bonded joints, dispersion, flaw detection, interference, Budenkov (G.A.), (et al.), *6497*
- fluid boundaries, heat addition, rayleigh number, thermal instability, Dowden (J.), *6782*
- half space, interface phenomena, liquids, sound propagation, Bucker (H.P.), *6918*
- half space, porous media, sound propagation, Attenborough (K.), Hayek (S.I.), (et al.), *6919*
- laminates, shear, shells (sandwich), thermal stresses, thermoelasticity, Khoroshun (L.P.), Babich (D.V.), *6963*
- analysis, half space, rayleigh waves, seismic waves, Cara (M.), Minster (J.B.), (et al.), *7020*
- boundary value problems, elliptic equations, green function, sturm-liouville problem, Popov (G.Ya.), Gribnyak (S.T.), *7303*
- composite materials, reinforced bodies, three dimensional formulation, Lee (J.D.), *7305*
- elastic waves, honeycomb structures, Park (S.K.), Bertoni (H.L.), *7429*
- convection (free), diffusion, porous media, Griffiths (R.W.), *7991*
- composite materials, finite element techniques, harmonic waves, variational methods, Minagawa (S.), Nemat-Nasser (S.), (et al.), *8148*
- bending, composite structures, deformation, fibers, stress concentration, Isupov (L.P.), *8223*
- composite structures, conduction (heat), slabs, thermal contact resistance, Duhamel (P.), Gosse (J.), *8732*
- composite materials, conduction (heat), green function, laminates, unsteady flow, Huang (S.C.), Chang (Y.P.), *8733*
- convection (free), heat transfer, porous media, Masuoka (T.), Yokota (Y.), (et al.), *8940*
- insulating materials (thermal), partition walls, thermal loading, transient effects, Devisme (J.-M.), *9740*
- interfaces, jet boundaries, magneto fluid dynamics, transport phenomena, Bashtovoi (V.G.), Krakov (M.S.), *9794*
- galerkin method, half space, surface waves, viscoelasticity, Chiroiu (V.), Nicolae (V.), *10234*
- elastic waves, half space, reflection, scattering, Coen (S.), *10236*
- half space, torsional waves, vibration, viscoelastic materials, Martincek (G.), *10238*
- green function, half space, Eatwell (G.P.), Simmons (J.A.), (et al.), *10239*
- composite materials, conduction (heat), filamentary structures, Zimmerman (R.H.), *10694*
- centrifugation, jets, magneto plasma dynamics, rotating fluids, Levin (V.B.), *10741*
- experimental methods, magneto fluid dynamics, rotating fluids, stabilization, Klyukin (A.A.), Kolesnikov (Yu.B.), (et al.), *10742*
- equilibrium, free boundary, interface phenomena, magneto fluid dynamics, Kiryushin (V.V.), Chung Za Bin, *10744*
- impact, punch problems, shear, viscoelasticity (dynamic), winkler foundation, Aleksandrov (V.M.), Zelentsov (V.B.), *11159*
- moving loads, viscoelasticity (dynamic), Privarnikov (A.K.), Radovskii (B.S.), *11160*
- composite materials, harmonic waves, Nemat-Nasser (S.), Yamada (M.), *11169*
- half space, hydroelasticity, surface waves, Gogna (M.L.), *11697*
- fickian model, porous media, transport phenomena, Matheron (G.), De Marsily (G.), *11776*
- ocean bed, sound propagation, Weinberg (H.), *11896*
- arrays, underwater acoustics, Eliseevnin (V.A.), *11909*
- acoustic waves, reflection, transmission, viscoelasticity, waveguides, Stepanishen (P.R.), Strozeski (B.), *11966*
- acoustic properties, porous surfaces, Ingard (K.U.), *11992*
- infiltration, soils, surface effect, Moore (I.D.), *12064*

Layman (J.T.), see Reid (I.), *1498*
Layrangues (P.), membrane theory, panels (curved), shells (hyperbolic paraboloid), shells (thin), *3306*
- asymptotic methods, conical bodies, moment coefficient, reservoirs, stresses (normal), *10395*

Lazarev (G.P.), fluid injection, nozzles, rockets, thrust, Shaikhutdinov (Z.G.), (et al.), *847*
Lazarev (M.I.), boundary value problems, constraints, elasticity, incompressible media, *6153*
Lazarov (L.), arches, finite element methods, large displacement, postbuckling behavior, *5179*
Lazarus (R.B.), cavities, shock waves, similarity methods, *10493*
Lazic (J.D.), see Lazic (V.B.), *3251*
Lazic (V.B.), beams (composite), creep, reinforced concrete, viscoelasticity, Lazic (J.D.), *3251*
Lazko (V.E.), see Lazko (V.G.), *7534*
Lazko (V.G.), crack resistance, fracture, heat treatment, Lazko (V.E.), (et al.), *7534*
Lazzeri (L.), finite element techniques, pipes, shells (nonlinear), *7346*
- elastoplasticity, elbows, finite element techniques, pipes, *10068*

Le Balleur (J.-C.), see Cousteix (J.), *7703*
Le Balleur (J.C.), aerodynamics, compressible flow, numerical methods, reynolds number (high), survey, Peyret (R.), (et al.), *1527*
- airfoils, compressible flow, numerical methods, separated flow, transonic flow, viscous flow, wakes, *11395*

Le Goff (P.), see Valentin (G.), *803*
Le Khan Chau, see Berdichevskii (V.L.), *8314*
Le May (I.), see Lai (K.M.), *3450*
Le Provost (C.), see Kabbaj (A.), *11610*
Le Quere (P.), cavities, convection (free), laminar flow, unsteady flow, variable thermal properties, Humphrey (J.A.C.), (et al.), *7843*
Le Roy (G.), ductile fracture, nucleation, void growth, Embury (J.D.), (et al.), *4497*
Leach (H.), baroclinic waves, convection, geophysics, rotating fluids, *6788*
Leach (P.G.L.), equations of motion, hamiltonian equations, kepler orbits, mathematical methods, transformation, *6064*
lead, creep, models, ratchetting, stress concentration, thermal shock, Hyde (T.H.), Fessler (H.), (et al.), *10333*
Leadbeater (G.), aluminum alloys, crack initiation, fatigue, fractographic tests, fretting, wear, Kovalevskii (V.V.), (et al.), *5290*
Leader (M.E.), bearings (journal), flexible bodies, lubrication (hydrodynamic), rotors, Fleck (R.D.), (et al.), *3047*
- see Fleck (R.D.), *4433*

leading edge, blunt bodies, reynolds number (small), separated flow, Lane (J.C.), Loehrke (R.I.), *574*
- aerodynamic heating, boundary layer (three dimensional), friction (skin), hypersonic flow, Dudin (G.N.), Nelland (V.Ya.), *598*
- airfoil characteristics, delta wings, drag, flaps, vortex flaps, Marchman (J.F.) III, *683*
- bubble dynamics, cavitation flow, damage, modeling, propellers (marine), Stinebring (D.R.), Holl (J.W.), (et al.), *708*
- blades, cylindrical bodies, film cooling, gas turbines, heat transfer, thermal measurements, Mirhosseini (A.), Barrow (H.), *733*
- bubble dynamics, laminar flow, separated flow, stalling, Van Den Berg (B.), *2635*

- aerodynamic loads, lift, stalling, vortex lines, wings, Anderson (J.D.) Jr., Corda (S.), (et al.), *3737*
- cylindrical bodies, heat transfer, hypersonic flow, shock waves, swept wings, Zemlyanskii (B.A.), Shmanenkova (G.A.), *6767*
- delta wings, pressure distribution, supersonic flow, Ter-Minasyants (S.M.), *8641*
- boundary layer (control), delta wings, drag, subsonic flow, Rao (D.M.), Johnson (T.D.) Jr., *9652*
- airplane performance, stalling, transonic flow, visualization, wind tunnels, wings, Pavelka (J.), Tatum (K.E.), *10499*
- lifting surfaces, separated flow, slender wings, vortices, Wagner (B.), *10505*
- airplane performance, design, flight tests, spin recovery, wind tunnels, Dicarlo (D.J.), Stough (H.P.) III, (et al.), *10512*
- channels, missiles, supersonic flow, wedges, Chushkin (O.I.), *11732*

Leaf (G.A.V.), compression, filamentary structures, materials properties, textiles, yarn, Oxenham (W.), *5131*

Leaf (G.K.), see Kaper (H.G.), *4972*

leak detection, estimation, leaks, pipelines, piping systems, Siebert (H.), Klaiber (T.), *9192*

leaks, channel flow, two dimensional flow, wavy walls, Hasegawa (E.), Fukuoka (N.), *609*
- models, two phase flow, Pinet (B.), *1869*
- friction, lubrication (hydrostatic), seals, wear, Lebeck (A.O.), *3036*
- axial turbines, blades, rotors, Booth (T.C.), Dodge (P.R.), (et al.), *7890*
- axial turbines, blades, numerical analysis, rotors, Wadia (A.R.), Booth (T.C.), *7891*
- diesel engines, piston rings, pressure, Ruddy (B.L.), Dowson (D.), (et al.), *8801*
- estimation, leak detection, pipelines, piping systems, Siebert (H.), Klaiber (T.), *9192*
- groundwater, infiltration, tunnels, unsteady flow, Bouvard (M.), Niquet (J.-J.), *10838*
- axial flow, design, seals, steam turbines, stresses, Abramov (Yu.I.), Smirnov (S.A.), *11746*
- bearings (hydrostatic), friction, piston driven flow, positive displacement pumps, Bakhin (I.I.), (et al.), *11752*

Leal (L.G.), see Chan (P.C.-H.), *2986*
- see Tiefenbruck (G.F.), *4829*
- see Tiefenbruck (G.), *10412*

learning systems, design, pattern recognition, Kittler (J.), *9174*

least squares, algorithms, matrix methods, splines, Best (M.R.), *65*
- ballistics, estimation, trajectories, Chang (C.B.), *130*
- elasticity, finite element techniques, Zamani (N.G.), *1129*
- estimation, state space techniques, statistical control, stochastic processes, Kailath (T.), *2025*
- approximations, conduction (unsteady), variational methods, Djukic (D.S.), Atanackovic (T.M.), *2038*
- differential equations (ordinary), time delay systems, Shih (Y.-P.), Hwang (C.), (et al.), *2054*
- convection, finite element methods (hybrid), viscous flow, Kanarachos (A.), *3144*
- airplanes, guns, identification, mathematical models, Kou (R.S.), Glass (B.C.), (et al.), *3176*
- identification, linear systems, Zhdanov (A.I.), Katsyuba (O.A.), *3181*
- algorithms, gauss method, inequalities, numerical methods, optimization, penalty function, Bellagamba (L.), *4206*
- airfoils, fredholm equations, irrotational flow, singularities, sources, Campbell (G.S.), *4587*
- algorithms, coding, Cornwell (L.W.), Kocman (M.G.), (et al.), *5018*
- axisymmetric flow, bodies of revolution, fredholm equations, singularities, source distribution, Jones (D.J.), *7681*
- convergence, ill posed problems, mathematical models, minimization, Seidman (T.I.), *8133*
- continuous systems, discrete systems, identification, iterative methods, stochastic systems, Vorobeychikov (S.E.), Konev (V.V.), *8163*
- approximations, boundary value problems, compressible flow, difference operator, differential operator, subsonic flow, Danilov (Yu.M.), *11433*

Leavitt (L.D.), see Yetter (J.A.), *3680*

Lebacqz (J.V.), design, flight control, vtol, Radford (R.C.), *2161*

Lebeck (A.O.), friction, leaks, lubrication (hydrostatic), seals, wear, *3036*

Lebedev (A.A.), see Selyutin (A.E.), *2280*
- see Kovalchuk (B.I.), *7287*

Lebedev (A.B.), see Buriko (Yu.Ya.), *5631*

Lebedev (A.D.), burning rate, flame propagation, inert gases, oxidizers, porous media, Sokolov (A.S.), *11791*

Lebedev (A.N.), see Voyt (S.S.), *10854*

Lebedev (L.P.), elasticity, existence theorems, functional analyis, strips, uniqueness, *6152*

Lebedev (O.N.), atomized liquids, jets, turbulent flow, two phase flow, unsteady flow, Solonenko (O.P.), *7734*

Lebedev (P.A.), connecting rods, design, error, linkages, mechanisms, sensitivity, *6559*

Lebedev (V.G.), see Koval (V.I.), *1360*

Lebedeva (I.V.), acoustic measurements, orifices, sound propagation, *6936*

Lebedeva (M.F.), crack growth, low cycle fatigue, plastics, Aleshin (V.I.), (et al.), *9386*

Lebedeva (N.K.), dynamic analysis, plates (circular), vibration (free), *9313*

Leblond (P.H.), ocean waves, oceanography, wind-wave interaction, Mysak (L.A.), *4860*

Lebon (G.), constitutive equations, rheology, thermal properties, thermodynamic properties, viscous effects, Rubi (J.M.), *719*
- buoyant flow, cellular flow, convection (benard), surface tension, thermal instability, Cloot (A.), *757*
- convection, hydrodynamic stability, micropolar media, polar fluids, Perez-Garcia (C.), *1975*
- convection, heat addition, surface tension, variational methods, Perez-Garcia (C.), *8714*

Lebouche (M.), see Vallette (P.), *2644*

Lebrun (M.), edge effects, large displacement, nonlinear theory, plates (annular), Bayada (G.), (et al.), *6231*

Leca (A.), dilute solutions, drag reduction, pipe flow, polymers, pressure drop, Hubert (I.), (et al.), *8578*

Lecerf (J.P.), compressional waves, hydraulic machinery, numerical methods, water hammer, *9624*

Lechner (E.), noise, noise abatement, piston driven flow, positive displacement pumps, sound generation, Stich (B.), *10721*

Leckie (F.A.), see Ranaweera (M.P.), *7514*
- crack opening displacement, creep rupture, j-integral, path integrals, Mcmeeking (R.M.), *8402*

Lecordier (J.C.), flow measurement, heat transfer, hot wire, turbulence, Petit (C.), (et al.), *659*
- see Paranthoen (P.), *2782*
- cold wire, conduction (heat), hot wire, thermal measurements, turbulence, Petit (C.), (et al.), *7757*

Lederman (W.) eds., computer programming, computing techniques, differential equations (ordinary), differential equations (partial), mathematical methods, numerical analysis, Churchhouse (R.F.), *1109, book*

Ledoy (J.P.), see Hrisafovic (N.), *1384*

Leduc (R.), climatology, convection (forced), energy storage, heat loss, radiation properties, Won (T.K.), *2836*

Lee (C.-M.), see Lai (R.Y.S.), *1602*

Lee (C.S.), see Garner (D.R.), *3052*

Lee (D.), numerical methods, sloping bottom, sound propagation, underwater acoustics, wave equations, Papadakis (J.S.), *5788*
- acoustic waves, finite difference methods, parabolic equations, underwater acoustics, wave equations, Botseas (G.), (et al.), *10043*

Lee (D.-H.), see Ando (S.), *9646*

Lee (E.H.), elastoplasticity, forming, plasticity, stress analysis, *273*
- see Lubarda (V.A.), *3258*
- deformation (finite), deformation (plastic), plasticity, strain analysis, *3259*

Lee (E.I.), see Semas (V.), *8769*

Lee (G.C.), beam columns, beams (variable cross section), buckling (plastic), buckling (torsional), flanges, frames, Hsu (T.L.), *5174*
- see Tai (R.C.), *8071*

Lee (G.K.F.), algorithms, automatic control (optimal), design, linear systems, pole placement, *10084*

Lee (G.W.J.), emulsions, optical instruments, particle size, testing equipment, Groves (M.J.), *7002*

Lee (J.), see Mehta (A.J.), *5391*
- flow measurement, scale effects, suspensions, two phase flow, Crowe (C.T.), *8891*

Lee (J.-J.), computing techniques, ocean bed, seismic waves, tsunamis generation, upthrust, Chang (J.-J.), *974*
- flow irregularities, gravity waves (surface), propagation, trenches, Ayer (R.M.), *5472*

Lee (J.C.), see Van Tuyle (G.J.), *8759*
- closed cycle, design, gas turbines, materials properties, thermodynamic properties, working fluids, Campbell (J.) Jr., (et al.), *11740*

Lee (J.D.), composite materials, layered media, reinforced bodies, three dimensional formulation, *7305*

Lee (J.H.), diffusers, jets, shallow water, Jirka (G.H.), *6671*

Lee (J.H.W.), arrays, diffusers, diffusion, jets, mixing, *5454*

Lee (J.J.), see Wilson (N.W.), *4728*

Lee (J.K.), cyclic loading, endurance limit, fatigue, life expectancy, precipitation hardening, softening, Bhat (S.P.), (et al.), *1353*
- see Leissa (A.W.), *10210*

Lee (K.), deposition, self weight effects, soil consolidation, strain, Sills (G.C.), *8357*

Lee (K.D.), computing techniques, simulation, wind tunnels (environmental), *1126*

Lee (K.M.), see Felske (J.D.), *7860*

Lee (L.H.N.), bifurcation, flexural waves, impact, plastic waves, rods, *7419*

Lee (L.L.), see Chung (T.H.), *7821*

Lee (M.H.), acid penetration, exothermic reactions, fracture, rocks, thermal effects, Roberts (L.D.), *10579*

Lee (N.N.), differential equations (ordinary), differential equations (partial), mesh generation, numerical methods, time dependence, Meyers (R.E.), *59*

Lee (P.S.), see Chou (K.H.), *903*
- see Chou (K.H.), *6999*

Lee (S.H.), see Cederquist (J.), *2079*
Lee (S.L.), peclet number, pipe flow, solidification, Hwang (G.J.), *10662*
Lee (S.S.), see Williams (J.H.) Jr., *5140*
- attenuation, thin walled structures, ultrasonics, Williams (J.H.) Jr., *5247*
- see Williams (J.H.) Jr., *8409*

Lee (T.S.), currents, cylindrical waves, dynamic stability, fluid-structure interaction, *6702*
Lee (T.W.), design (optimum), geneva mechanisms, high speed, machine design, *7633*
Lee (W.J.), experimental methods, fracture criteria, pressure change, reservoirs, Holditch (S.A.), *8944*
Lee (Y.), see Kim (A.K.), *1714*
Lee (Y.S.), cylindrical bodies, plane strain, strain rate, work hardening, Patel (M.R.), (et al.), *1200*
Lee-Prampton (J.B.), flexibility, fluoroscopy, inspection, nondestructive tests, x ray techniques, *2502*
Leech (C.M.), see Dockerty (G.J.), *5235*
Leela (S.), see Lakshmikantham (V.), *10014*
Lees (D.E.), see Schuette (W.H.), *7125*
Lefebvre (A.H.), see El-Shanawany (M.S.), *5822*
- atomization, combustion, drops, *8904*

Lefebvre (J.), acoustic waves, nonhomogeneous media, scattering, Frohly (J.), (et al.), *6349*
Lefebvre (J.-P.), axisymmetric flow, doppler effect, ultrasonics, velocity measurement, *9672*
Lefevere (A.-M.), boundary value problems, elastic bodies, laplace equation, membranes, variational methods, *10149*
Lefevre (J.), arteries, blood flow, difference differential equations, Magnus (A.), *1044*
Legendre (R.), boundary layer, experimental results, time delay systems, turbulence (correlations), *2693*
- mathematical models, turbulence, turbulence model, *4649*
- combustion (turbulent), flames (turbulent), noise, noise (combustion), turbulent flow, *10705*
- noise, sound generation, vortex tubes, vortices, *10794*

Legner (H.H.), boundary layer, boundary layer (three dimensional), coordinate systems, optimization, *9572*
Legovich (Yu.S.), see Krug (E.K.), *3182*
Legowski (Z.), gases, ideal gas, refraction, shock waves, Wlodarczyk (E.), *6712*
Legras (B.), dispersion relation, rossby waves, rotating bodies, turbulent flow, *11616*
Legros (J.C.), boussinesq equation, convection, convection (benard), Platten (J.K.), (et al.), *1686*
- see Platten (J.K.), *6786*

Leguillon (D.), see Lene (F.), *10127*
Lehmann (B.), data acquisition, flow measurement, hot wire, velocity measurement, *1640*
Lehmann (D.), bearings, elasticity (nonlinear), elastomers, loads, springs, *3571*
Lehmann (M.), backlash, gear teeth, gears (trochoidal), surface profiles, *9474*
Lehmann (T.), deformation, plasticity, strain analysis, thermoplasticity, viscoplasticity, *6034*
Lehrle (T.), see Hiller (M.), *3082*
Lehtomaki (N.A.), multivariable systems, nyquist theory, robustness, sensitivity, stability theory, *3151*
Leibenzon (A.S.), combustion, exothermic reactions, propagation, thermal waves, *8795*
Leibovich (S.), circulation, currents, wave interactions, *666*
leidenfrost phenomenon, impingement cooling, liquids, sprays, Grissom (W.M.), Wierum (F.A.), *2839*
- convection (forced), transition boiling, water, Ragheb (H.S.), Chang (S.C.), (et al.), *5544*

Leikkonen (I.), see Haugset (K.), *170*
Leipholz (H.H.E.), dynamic stability, hamiltonian equations, stability theory, *1987*
- follower forces, nonconservative systems, pfluger rod, rods, *2291*
- compression, follower forces, nonconservative systems, plates, rods, *5170*
- lyapunov's functions, shells (cylindrical), stability theory, *6258*
- control, dynamic response, elastic bodies, mathematical methods, plates, *8302*
- buckling, follower forces, nonconservative systems, plates (rectangular), simply supported structures, Waddington (D.), *9289*
- buckling, dynamic stability, follower forces, lyapunov's functions, plates, *10175*

Leis (B.N.), crack growth, crack propagation, cyclic loading, fatigue, j-integral, Zahoor (A.), *468*
Leissa (A.), elastic foundations, plates (circular), vibration (free), Narita (Y.), *4426*
Leissa (A.W.), plates, vibration, *8304*
- plates, vibration (free), *8306*
- blades, rayleigh ritz method, shells (cylindrical), vibration (free), Lee (J.K.), (et al.), *10210*
- damping, dynamic response, shells (cylindrical), vibration (forced), Iyer (K.M.), *10213*

Leist (H.), blades, centrifugal fans, noise, noise measurements, *5780*
Leiter (E.), see Tsangaris (S.), *10535*
Leith (D.), filters, pressure drop, pulsejets, Ellenbecker (M.J.), *6995*
Leithner (R.), boilers, flue gases, fluid mechanics, vibration, Hermann (W.), (et al.), *6843*
Leitmann (G.), control, design, deterministic control, feedback, nonlinear methods, nonlinear systems, stability theory, *3174*
- optimal control, optimization, variational methods, *5039, book*
- control, linear systems, lyapunov's functions, nonlinear methods, observers, system uncertainty, *6129*
- see Corless (M.J.), *11090*

Leko (T.D.), existence theorems, plates (holed), *3236*
Lekshminarayanan (H.), see Govindarao (V.M.H.), *826*
Lemant (F.), brittle materials, mixed mode fracture, orthotropic materials, sheet metal, Pineau (A.), *454*
Lemessurier (R.W.), see Macconochie (I.O.), *8643*
Lemke (E.H.), launching, magnetic field, space vehicles, *11803*
Lenard (J.G.), see Scrutton (R.F.), *5276*
- see Murthy (A.), *7456*
- cold working, interface phenomena, pressure peaks, rolling, strips, *8361*

Lene (F.), composite materials, computing techniques, constitutive relations, equivalence techniques, Leguillon (D.), *10127*
Lengrand (J.-C.), free jets, interaction, nozzles, surfaces, Allegre (J.), (et al.), *8596*
Lenk (D.), electrical analogies, friction (solid solid), heat transfer (direct contact), thermal effects, Zscherpel (W.), *933*
Lenkov (V.A.), see Kuzma-Kichta (Yu.A.), *9686*
Lennon (G.P.), boundary integral methods, darcy flow, three dimensional flow, Liu (P.L.-F.), (et al.), *8950*
Lenoe (E.M.) eds., composite structures, laminates, reliability analysis, structural analysis, surveys, Oplinger (D.W.), (et al.), *286, book*
Lenskii (E.V.), see Belov (V.I.), *11665*
Lenskii (V.S.), constitutive equations, materials possessing memory, plasticity, superplastics, *8207*
Leonard (G.), electrostatic precipitators, particulate flow, transport, Mitchner (M.), (et al.), *4821*
Leonard (J.W.), see Kruchoski (B.L.), *4393*
- see Hudspeth (R.T.), *7809*
- see Hudspeth (R.T.), *9511*

Leonards (G.A.), compaction, field tests, granular media, soils, Cutter (W.A.), (et al.), *418*
Leondes (C.T.), estimation, filters, identification, kalman filters, Siu (T.K.), *4218*
Leone (J.M.) Jr., boundary layer, finite element techniques, galerkin method, mesh generation, steps, viscous flow, Gresho (P.M.), *7713*
Leonhard (W.), automatic control (optimal), design, digital control, *9195*
Leonov (A.I.), constitutive equations, polymers, shear flow, viscoelastic fluids, Prokunin (A.N.), *6571*
Leontev (A.I.), see Styrikovich (M.A.), *742*
Leonteva (N.V.), see Kremenetskii (M.D.), *10534*
Leontyeva (T.N.), see Nikolayev (I.V.), *7025*
Lepeletier (T.G.), finite element techniques, harbors, nonlinear waves, shallow water, tsunami, *6609*
Lepik (U.), beam columns, buckling (plastic), dynamic stability, plastic behavior, *3340*
- beams, design (optimum), distributed parameters, impulsive loading, inelasticity, structural support, *6508*

Lepp (R.), algorithms, constraints, optimization, probability, quadratic programming, *49*
Leppington (F.G.), cylindrical bodies, gravity waves (surface), scattering, submerged bodies, Siew (P.F.), *3717*
Lequoc (S.), cams, mechanisms, orifices, pneumatic components, Cheng (R.M.H.), *9483*
Lerat (A.), inviscid fluid, numerical methods, transonic flow, unsteady flow, Sides (J.), *697*
Lerau (J.), anisotropic media, dilatancy, rocks, strain, Saint-Leu (C.), (et al.), *5263*
Lerch (R.), membranes, piezoelectrics, transducers, *11898*
Lerche (I.), blast waves, cylindrical waves, explosions, isothermal processes, similarity methods, *11827*
Lereim (J.), crack arrest, crack initiation, dynamic fracture, fracture mechanics, fracture toughness, *498*
Lerner (D.M.), see Bakhilina (I.M.), *4216*
Lerner (Y.), bubble dynamics, evaporation, photography, Sonn (A.), (et al.), *6991*
Leroy (A.), offshore structures, safety, *6537*
Leroy (O.J.), see Claeys (J.M.), *11648*
Leschziner (M.A.), finite difference methods, jets, turbulence, turbulence model, Rodi (W.), *1581*
Leshchinskiy (G.A.), see Tokar (I.Ya.), *6979*
Lesieur (M.), see Larcheveque (M.), *8614*
Lesinski (J.), anemometers, laser doppler velocimeters, two phase flow, Mizera-Lesinska (B.), (et al.), *6958*
Leslie (F.M.), see Cowin (S.C.), *4*

Lesnichaya (V.A.), dynamic response, plates (stiffened), vibration (free), Manevich (L.I.), *370*
- averaging, eigenvalues, shells (conical), shells (stiffened), vibration (free), Pisanko (A.N.), *10214*

Lesnikovskii (A.A.), see Dyban (E.P.), *8682*
Lesnyak (S.A.), chemical kinetics, deflagration, detonation, explosions, Slutskii (V.G.), *9827*
Lespinard (G.M.), see Achard (J.L.), *8565*
Lessmann (R.C.), see Test (F.L.), *1662*
Letallec (P.), finite element methods (hybrid), navier stokes equation, stability (numerical), variational methods, *2078*
Letter (J.V.) Jr., harbors, hydraulics, models, sedimentation, Mcanally (W.H.) Jr., *1500*
Leuer (A.), see Dorrscheidt (F.), *9169*
Leung (K.C.), see Ko (N.W.M.), *11955*
Leung (K.V.), see Krivoshein (L.E.), *8121*
Leung (R.), diffraction, modes, sound propagation, underwater acoustics, Deferrari (H.A.), *5732*
Leutgob (A.), deformation, forging, materials processing, *10267*
Levadou (F.), see Bosma (J.), *6807*
Levan (M.D.), drops, interfaces, surface tension, *1861*
Levatin (J.), see Van Thiel (M.), *6367*
Levatin (J.L.), see Kang (S.-W.), *7710*
Levchenko (V.Ya.), boundary layer (control), hydrodynamic stability, perturbations, tollmien schlichting waves, Solovev (A.S.), *3699*
Levdanskii (V.V.), adhesion, capillary flow, mass transfer, rarefied gases, Martynenko (O.G.), *11451*
Leventhal (S.H.), multiphase flow, porous media, reservoirs, *5860*
Leventhall (H.G.), see Eghtesadi (K.), *912*
Levesque (M.J.), see Nerem (R.M.), *6017*
Levin (A.I.), damping, oscillations, relaxation, vibration (self excited), *6066*
Levin (A.L.), fracture, particles, shock waves, thermal stresses, Murzinov (I.N.), (et al.), *6946*
Levin (E.M.), beams, dynamic analysis, impulsive loading, vibration (forced), Pankova (N.V.), *4417*
Levin (V.A.), boundary value problems, deformation (finite), elasticity (nonlinear), Tarasev (G.S.), *8183*
- blast waves, chemical kinetics, detonation, explosions, propagation, Svalov (A.M.), *9831*
- acoustic waves, channel flow, ionized gases, propagation, shock waves, *11811*

Levin (V.B.), centrifugation, jets, layered media, magneto plasma dynamics, rotating fluids, *10741*
Levin (V.D.), see Pobedrya (B.E.), *2272*
Levin (V.M.), see Zimont (V.L.), *2865*
Levine (H.), acoustic waves, far field radiation, sound generation, sound propagation, *5765*
Levinson (D.A.), see Kane (T.R.), *7916*
- see Hitzl (D.L.), *9812*

Levinson (M.), beams, eigenvalues, vibration, *4411*
Levitas (V.I.), anisotropic media, brittle materials, plasticity, slip line methods, *6177*
Levitova (F.M.), acoustic waves, anisotropy, high pressure, rocks, *8010*
Levitskii (L.A.), elastic bodies, fluid-structure interaction, sound propagation, waveguides, *6928*
Levitsky (D.N.), constraints, dynamic analysis, mechanisms, *2552*
Levshin (A.L.), see Bukchin (B.G.), *6342*
Levy (A.), elastoplasticity, high temperature, shells (thick), shells (thin), *1205*
- see Bellman (R.) Jr., *3039*
- creep, elastoplasticity, finite element techniques, shells, *4353*
- computing techniques, constitutive equations, creep, plastic behavior, Pifko (A.B.), *5121*

Levy (R.), constraints, design (minimum weight), optimization, trusses, Parzynski (W.), *10342*
Levy (S.), critical flow, critical heat flux, nuclear reactors, two phase flow, Abdollahian (D.), *8692*
Levy (Y.), experimental methods, fluidized beds, laser doppler velocimeters, two phase flow, Lockwood (F.C.), *5841*
Levykin (A.I.), density, elastic waves, high pressure, high temperature, rocks, Vavakin (V.V.), *7026*
Lew (H.G.), combustion products, combustors, gas turbines, hybrid fuels, Decorso (S.M.), (et al.), *10711*
Lewis (B.A.), coding, computer programming, computing techniques, finite element techniques, interaction, Cross (M.), *91*
Lewis (D.), see Holmes (P.), *9097*
Lewis (D.H.) Jr., liquid gas mixture, non newtonian flow, two phase flow, viscosity, Ryason (P.R.), *8899*
Lewis (D.W.), see Allaire (P.E.), *8177*
Lewis (G.), beams (cantilever), large displacement, nonlinear materials, Monasa (F.), *10141*
Lewis (G.N.), boundary value problems, differential equations (ordinary), mathematical methods, resonance, turning point problems, *8125*
Lewis (H.R.), equilibrium, hamilton principle, inhomogeneities, linear theory, plasma, Symon (K.R.), *1780*
Lewis (J.M.), meteorology (synoptic), vorticity, *8991*
Lewis (R.I.), conformal mapping, mixed flow compressors, turbomachinery, vorticity, Fairbairn (G.W.), *2754*
- see Porthouse (D.T.C.), *7678*
- blunt bodies, separated flow, two dimensional flow, vortex sheets, *11389*

Lewis (R.M.), autonomous systems, large scale systems, linear systems, stability theory, time lag, Anderson (B.D.O.), *3154*
Lewis (R.W.), see Morgan (K.), *2402*
- see Strada (M.), *7224*
- see Morgan (K.), *8912*
- computer programming, computing techniques, energy, heat transfer, mathematical models, numerical analysis, Morgan (K.), (et al.), *9149*

Lewis (T.S.), airfoils, numerical methods, supersonic flow, two dimensional flow, Sirovich (L.), *9647*
Lewkowicz (A.K.), boundary layer, hydrodynamic stability, orr sommerfeld equation, roughness, shear flow, stability theory, *2681*
Leyer (J.C.), see Deshaies (B.), *9752*
Leznov (A.N.), differential equations (partial), monopoles, nonlinear systems, soliton theory, volterra equations, Savelev (M.V.), (et al.), *6063*
Lhuillier (D.), couette flow, dilute solutions, hydrodynamic stability, polymers, *11502*
Li (C.), see Soong (T.-C.), *6168*
Li (C.-B.), mathematical methods, vector methods, *10026*
Li (C.-H.), bearings (journal), dynamic behavior, dynamic stability, lubrication (hydrodynamic), Rohde (S.M.), *5981*
Li (G.C.), finite element methods, shear walls, structural response, vibration, Desai (C.S.), *2344*
Li (J.C.M.), see Chu (S.N.G.), *1404*
Li (J.F-J.), arteries, blood flow, compressional waves, pressure measurement, pulsatile flow, Melbin (J.), (et al.), *7118*
Li (L.C.), developing flow, entrance region, numerical analysis, overshoot, velocity profiles, Ludford (G.S.S.), *8585*
Li (R.-M.), see Kouwen (N.), *4569*
Li (S.), see Humphrey (J.A.C.), *5397*
Li (W.-L.), see Yu (Z.-M.), *1269*
Li (Y.-K.), see Mujumdar (A.S.), *10665*
Li (Y.S.), finite element techniques, hydrodynamic stability, poiseuille flow, Kot (S.C.), *9148*
Liapis (N.), boundary value problems, diffraction, ships, slender bodies, wave interactions, Faltinsen (O.M.), *12086*
Liard (G.), see Habermann (H.), *4903*
Liauw (T.-C.), buildings (tall), finite difference methods, tokamak, walls, Luk (W.-K.), *2539*
Libai (A.), large displacement, shells (nonlinear), strain energy, Simmonds (J.G.), *2271*
- dynamic behavior, elastodynamics, shells (nonlinear), *8246*

Libby (P.A.), combustion (turbulent), flames (laminar), models, Bray (K.N.C.), (et al.), *1740*
- flames (turbulent), models, premixed fuel air, *1747*
- see Larue (J.C.), *10474*

Liberzon (M.P.), nonlinear systems, nonlinear theory, stability theory, *3172*
libration theory, asteroids, perturbation methods, regularization, resonance, Garfinkel (B.), *871*
- circumnavigation, lagrangian solution, periodic orbits, three body problem, Broucke (R.), Anderson (J.D.), (et al.), *874*
- periodic orbits, restricted three body problem, Breakwell (J.V.), Brown (J.V.), *876*
- three body problem, topological techniques, Llibre (J.), Simo (C.), *1787*
- restricted three body problem, stability theory, Meire (R.), *2916*
- artificial satellites, averaging, resonance, restricted three body problem, Barkin (Iu.V.), Markov (Iu.G.), *3915*
- artificial satellites, periodic orbits, resonance, restricted three body problem, Barkin (Yu.V.), Markov (Yu.G.), *3916*
- equilibrium, restricted three body problem, Szebehely (V.), Mckenzie (R.), *3917*
- dynamic analysis, mathematical methods, Bolotin (S.V.), Kozlov (V.V.), *4146*
- geomagnetic field, magnetic field, orbit mechanics, Zabluda (S.M.), Yanshin (A.M.), *4759*
- orbit mechanics, rotating bodies, space vehicles, three body problem, Barkin (Yu.V.), *5699*
- nonlinear theory, stability theory, Mckenzie (R.), Szebehely (V.), *6879*
- periodic orbits, planetary theory, restricted three body problem, Richardson (D.L.), *8840*
- restricted three body problem, three dimensional formulation, Richardson (D.L.), *9811*
- bifurcation, circumnavigation, mathematical methods, n body problems, periodic orbits, solar system, Szebehely (V.) ed., *10769, book*

Librovich (V.B.), see Bystrova (T.V.), *2862*
Licht (L.), bearings (foil), bearings (gas lubricated), dynamics, high speed, rotors, Anderson (W.J.), (et al.), *4905*
Lidington (B.H.), see Silk (M.G.), *7583*
Liebig (S.), see Holzweibig (F.), *5231*
Liebman (J.S.), see Garcia-Diaz (A.), *3192*
- see Fox (D.B.), *10346*

Liebowitz (H.), airplane structures, fracture mechanics, stress analysis, survey, Subramonian (N.), (et al.), *2437*
Liem (T.B.), see Lammens (R.F.), *7465*
Lien (E.), see Sigmond (R.S.), *10282*
Lienhard (J.H.), adiabatic lines, conduction (steady), heat transfer, *6795*
Lifanov (I.K.), see Belotserkovskii (S.M.), *10496*
life expectancy, reliability analysis, stochastic systems, weibull statistics, Ishikawa (H.), Tanimoto (T.), (et al.), *47*
- endurance limit, environmental tests, fatigue, high cycle fatigue, nickel alloys, Mowbray (D.F.), Giaquinto (E.V.), (et al.), *443*
- aluminum alloys, crack propagation, fatigue, heat treatment, Chung (D.W.), Chaturvedi (M.C.), *445*
- biaxial loading, crack growth, crack initiation, fatigue, Brown (M.W.), Miller (K.J.), *450*
- creep rupture, cyclic loading, thermoelasticity, Bocek (M.), Hoffmann (M.), *452*
- damage (cumulative), reliability, Bolotin (V.V.), *508*
- offshore structures, risk, Ostergaard (C.), Schellin (T.E.), *527*
- composite materials, fatigue, glass fibers, high cycle fatigue, Kim (H.C.), Ebert (L.J.), *1209*
- machine design, optimization, probability, tools, Sheikh (A.K.), Kendall (L.A.), (et al.), *1346*
- biaxial loading, high temperature, low cycle fatigue, Brown (M.W.), Miller (K.L.), *1351*
- deformation, low cycle fatigue, resistance, welded joints, Daunis (M.A.), Daunene (S.A.), *1352*
- cyclic loading, endurance limit, fatigue, precipitation hardening, softening, Lee (J.K.), Bhat (S.P.), (et al.), *1353*
- airplane structures, fatigue, statistical design, Jost (G.S.), Costolloe (S.P.), *1408*
- accelerated testing, creep, material testing, Fraifeld (V.E.), Sorokin (O.V.), *2229*
- continuum mechanics, damage, materials processing, materials properties, mathematical models, surveys, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- aluminum alloys, combined loading, fatigue, multiaxial fatigue, Sines (G.), Ohgi (G.), *2407*
- ceramics, fracture mechanics, glass, random loading, Jakus (K.), Ritter (J.E.) Jr., *2458*
- cyclic loading, fatigue, random loading, strength, Kruk (B.Z.), Kuzmenko (V.A.), (et al.), *2527*
- alloys, material testing, thermal fatigue, Vashunin (A.I.), Kotov (P.I.), *2976*
- crack growth, design, fatigue, high temperature, Mcgowan (J.J.), Liu (H.W.), *3436*
- damage (cumulative), fatigue, material testing, random loading, Berezovszkij (A.M.), Balter (I.I.), (et al.), *3447*
- creep, deformation maps, fatigue, Priest (R.H.), Ellison (E.G.), *4477*
- creep, thermal fatigue, titanium, Plumbridge (W.J.), *4479*
- crack opening displacement, environmental tests, failure, plastics, stress rupture, Shanahan (M.E.R.), Schultz (J.), *4486*
- curve fitting, fatigue, high temperature, weibull statistics, Hasegawa (N.), Hirose (M.), (et al.), *5283*
- coatings, fatigue, iron, probability, Kalmutskii (V.S.), Frunze (I.P.), *5285*
- composite materials, fatigue, programmed loading, stochastics, Yang (J.N.), Jones (D.L.), *6197*
- composite materials, fatigue, graphite, resins, weibull statistics, Shimokawa (T.), Hamaguchi (Y.), *6203*
- cutting, suspensions, tools, Andreeva (I.A.), Bryukhanova (L.S.), (et al.), *6410*
- acoustic waves, fatigue, fracture mechanics, nondestructive tests, Tittmann (B.R.), Buck (O.), *6417*
- aluminum alloys, crack initiation, fatigue, microcracks, nondestructive tests, Buck (O.), Morris (W.L.), (et al.), *6419*
- anisotropy, fatigue, heat treatment, rolling, strength, Nisitani (H.), Kage (M.), *6422*
- fracture, polymers, Narzullaev (B.N.), Karimov (S.N.), (et al.), *6426*
- creep, elastoplasticity, fatigue, structural design, Nikitenko (A.F.), Zaev (V.A.), *6431*
- fatigue, loads, Proshkovets (I.), Voitishek (Ya.), *6948*
- fracture, probability, random loading, reliability analysis, Bolotin (V.V.), *7468*
- fatigue, fracture mechanics, sensitivity, Fukuda (S.), *7483*
- damage (cumulative), fatigue, fracture, Kuliev (V.D.), Kaplun (A.B.), *7486*
- crack growth, creep, damage, Kachanov (L.), *7497*
- failure, markov processes, reliability analysis, Teodorescu (D.), *7601*
- correlation, fatigue, strength, Romashov (R.V.), Fedorov (V.V.), (et al.), *9385*
- acoustic measurements, brittle fracture, ceramics, probability, risk, Richardson (J.M.), Evans (A.G.), *9437*
- alloys, creep, friction stress, Plumbridge (W.J.), Bartlett (R.A.), *10276*
- damage (cumulative), empirical methods, fatigue, prediction, titanium, Adams (J.H.), *10327*

Lifhits (Yu.B.), see Blynskaya (A.A.), *6628*
Lifshits (A.M.), galerkin method, hartmann flow, magneto fluid dynamics, nonlinear theory, stability theory, two dimensional flow, Shtern (V.N.), *1771*
lift, airplanes, potential flow, sprays, streamlines, trajectories, vortices, Wickens (R.H.), *1620*
- aerodynamic interference, jet propulsion, wings, Maarsingh (R.A.), *2735*
- aerodynamic performance, containers, ejectable containers, falling bodies, pitching, Ramachandra (S.M.), Sudhakar (K.), (et al.), *2743*
- airfoils, porous walls, two dimensional flow, wind tunnels, Sawada (H.), *2769*
- aerodynamic loads, leading edge, stalling, vortex lines, wings, Anderson (J.D.) Jr., Corda (S.), (et al.), *3737*
- aerodynamic interference, spherical bodies, turbulent flow, walls, Willetts (B.B.), Murray (C.G.), *4670*
- aerodynamic coefficients, airfoils, ground effect, potential flow, two dimensional flow, Plotkin (A.), Kennell (C.G.), *5490*
- optimal control, reentry, spinning bodies, topological techniques, Platus (D.H.), *5709*
- aerodynamic performance, automobiles, controllability, crossflow, drag reduction, Gotz (H.), *6725*
- airfoils, slots, unsteady flow, vortices, wakes, Howe (M.S.), *7783*
- airfoil theory, deformation, oscillations, potential flow, Laporte (R.), *7787*
- aerocrane, cranes, flight tests, helicopters, lifting bodies, models, Curtiss (H.C.) Jr., Putman (W.F.), *9650*
- blades, helicopters, rotors, turbulence (geophysical), turbulent flow, Fijimori (Y.), *9664*
- aerodynamic performance, delta wings, drag, flaps, Mattick (A.A.), Stollery (J.L.), *10498*
- aerodynamic loads, cylindrical bodies, incompressible flow, inviscid fluid, Yarmitskii (A.G.), *10500*
- induced drag, optimization, subsonic flow, swept wings, Lobert (G.), *10501*
- airplanes, algorithms, longitudinal stability, unsteady effects, Wells (W.R.), Keskar (D.A.), *11735*

lift coefficient, laser doppler velocimeters, vortex lines, wakes, wings, Orloff (K.L.), *2729*
lifting bodies, aerodynamic loads, nonuniform flow, wakes, Gluck (D.), *2737*
- separation, trailing edge, unsteady flow, vorticity, Zaitsev (A.A.), Tyurev (V.V.), *2913*
- corners, two dimensional flow, variational methods, Djaoua (M.), *8538*
- aerocrane, cranes, flight tests, helicopters, lift, models, Curtiss (H.C.) Jr., Putman (W.F.), *8650*

lifting surfaces, compressible flow, lifting line theory, numerical methods, swept wings, transonic flow, Cheng (H.K.), Meng (S.Y.), (et al.), *2612*
- compressible flow, navier stokes equation, oseen flow, plates, Homentcovschi (D.), *4582*
- aerodynamics, elliptical bodies, three dimensional flow, wings, Kida (T.), *4668*
- airfoils, hydrofoils, mathematical models, Stepanov (G.Yu.), *4669*
- blades, design, mathematical models, propellers, turbomachinery, Brockett (T.E.), *6738*
- leading edge, separated flow, slender wings, vortices, Wagner (B.), *10505*

Liggett (J.A.), see Salmon (J.R.), *7661*
- see Cheng (A.H.-D.), *10391*

Lighthoot (E.), bridges (arch), design (optimum), Hutchinson (G.L.), *2538*
Lighthill (J.), analogies, noise (aerodynamic), sound propagation, *8863*
Lightner (E.B.), artificial satellites, control, satellites, space vehicle structures, structural response, *2178*
Ligrani (P.M.), boundary layer (turbulent), friction (skin), roughness, spherical bodies, stanton number, transpiration cooling, velocity profiles, Kays (W.M.), (et al.), *7824*
Liiri (O.), bonding, composite materials, fibers, Kivisto (A.), (et al.), *1480*
Likhachev (V.A.), see Baranov (N.A.), *6430*
Likhacheva (A.I.), see Kapusta (A.B.), *11808*
Likherzak (E.E.), see Zaryankin (A.E.), *10440*
Lilley (D.G.), combustors, mathematical models, ramjet engines, *8798*
Lilley (J.), see Noble (F.W.), *3437*
Lim (Yu.A.), design, digital control, modeling, modulated systems, *137*
Limarchenko (O.S.), containers (partially filled), nonlinear analysis, reservoirs, sloshing, variational methods, *11683*
limit analysis, linear programming, plasticity, yield criteria, Cannarozzi (A.A.), *6501*
- probabilistic design, random loading, safety, structural design, Murzewski (J.), *7588*
- probabilistic design, random loading, reinforced concrete, Mascarenhas (A.T.), *7605*
- cracking, fracture, reinforced concrete, shells, Coenen (J.H.), *8439*
- buckling (nonlinear), frames, postbuckling behavior, Vlachinos (A.S.), Kounadis (A.N.), *9287*
- collapse, slopes, soils, stability, De Josselin De Jong (G.), *9361*
- joints, rocks, wedges, Chan (H.C.), Einstein (H.), *9372*
- heat addition, ignition, thermal explosions, Dik (I.G.), *9746*
- bearing capacity, plastic behavior, shells (of revolution), shells (stiffened), Dekhtyar (A.S.), *10152*
- collapse, minimization, plates (circular), plates (weakened), Yang (W.H.), *10164*
- mathematical programming, optimization, plasticity, surveys, Maier (G.), Munro (J.), *79999*

limit cycles, asymptotic methods, differential equations (ordinary), nonlinear mechanics, oscillators, van der pol equation, Grasman (J.), *4152*
- differential equations (ordinary), singularities, Wang (M.), Wang (L.), *4155*
- biomechanics, modal analysis, oscillators, time delay systems, van der pol oscillators, Linkens (D.A.), Kitney (R.I.), *7154*

- nonlinear analysis, oscillators, quenching, vibration (nonlinear), Singh (Y.P.), *7389*
- bifurcation, elastic bodies, flutter, modeling, oscillators, Thompson (J.M.T.), Lunn (T.S.), *7910*
- dynamics, existence theorems, large scale systems, Skar (S.J.), Miller (R.K.), (et al.), *8103*
- feedback, on off systems, oscillations, relay systems, stability theory, Balasubramanian (R.), *8161*
- mathematical methods, van der pol equations, Palm (E.), Tveitereid (M.), *9098*

limit design, plates, Dewolf (J.T.), Sarisley (E.F.), *2284*
- design (minimum weight), frames, kinematics, optimization, Brousse (P.), *5345*

Lin (C.-Y.), bubble dynamics, coalescence, drainage, drops, film flow, plates, Slattery (J.C.), *10405*

Lin (C.C.), see Lau (Y.Y.), *6044*

Lin (F.N.), friction, pneumatic components, torque, valves, Moore (W.I.), (et al.), *4571*
- axisymmetric flow, bodies of revolution, boundary layer (thermal), convection (free), heat transfer, laminar flow, Chern (S.Y.), *7837*

Lin (I.-H.), brittle fracture, crack growth, j-integral, Hirth (J.P.), *1372*

Lin (K.C.), see Shen (M.C.), *1042*

Lin (K.Y.), crack tip geometry, finite element methods (hybrid), fracture, notch sensitivity, singularities, Tong (P.), *2071*

Lin (L.), erosion, fluidized beds, particles, Sears (J.T.), (et al.), *8937*

Lin (S.), mathematical models, porous media, sublimation, *3846*

Lin (S.P.), convection (forced), cylindrical bodies, integral methods, navier stokes equation, transient loading, *8683*

Lin (T.C.), see Taylor (T.D.), *2929*
- see Taylor (T.D.), *6891*

Lin (T.D.), see Mah (R.S.H.), *5007*

Lin (T.H.), continuum mechanics, crystals, micromechanisms, plasticity, Ribeiro (G.), *4351*

Lin (W.-H.), acoustic loading, ducts, dynamic response, rods, vibration (forced), *6308*

Lin (W.H.), compressible flow, cylindrical bodies, damping, oscillating bodies, rods, wave absorbers, Chen (S.S.), *3931*
- membranes, plates (circular), plates (holed), vibration (free), wave engines, *8301*
- acoustic loading, oscillating bodies, tube bundles, *11641*

Lin (Y.-H.), boilers, control, design, mathematical models, power generation, Nielsen (R.S.), (et al.), *218*
- see Narendra (K.S.), *2134*

Lin (Y.K.), columns, seismic loading, Shih (T.-Y.), *5889*

Linan (A.), catalyzed ignition, thermal excitation, Williams (F.A.), *8787*

Lind (N.C.), see Grigoriu (M.), *48*

Lindenberg (J.), hydraulics, interaction, soil mechanics, Kenter (C.J.), *8513*

Lindenmeyer (P.H.), equilibrium, fibers, stochastic systems, structure, textiles, thermodynamics, *5133*

Lindgren (G.), automobiles, dynamic analysis, highways, random excitation, *6277*

Lindner (A.), crack initiation, deformation (plastic), frequency response, high cycle fatigue, Bajons (P.), (et al.), *7506*

Lindsey (W.C.), correlation, mellin transform, oscillations, tracking, Chie (C.M.), *2090*

linear equations, inverse problems, matrix methods, optimization, Torkamani (M.A.M.), *17*
- differential equations (ordinary), green function, Pan (H.H.), Hohenstein (R.M.), *23*
- determinants, difference equations, Rizvi (S.A.H.), *46*
- fredholm equations, Hong (I.), Yanagi (T.), *2017*
- iterative methods, matrices, relaxation methods, Hadjidimos (A.), *5009*
- algorithms, computer programming, finite element techniques, matrix methods, Stabrowski (M.M.), *5017*
- elliptic equations, finite element techniques, iterative methods, Bank (R.E.), *5023*
- iterative methods, nonlinear systems, Wellford (L.C.) Jr., Vahdani (B.), *6108*
- differential equations (ordinary), mathematical methods, monodromy deformation, Jimbo (M.), Miwa (T.), (et al.), *7160*
- complex variables, differential equations (partial), integral operators, survey, Kracht (M.), Kreyszig (E.), (et al.), *7162*
- evolution equations, navier stokes equation, nonlinear analysis, Teman (R.), *7170*
- approximations, computing techniques, singular integral equations, Fabrikant (V.), Hoa (S.V.), (et al.), *7184*
- computer programming, finite element techniques, Dessi (M.), Priolo (P.), *7197*

linear programming, mathematical programming, nonlinear programming, optimization, plant location, Uzdemir (A.P.), *2109*
- job scheduling, operations research, optimization, Phillips (K.), *2171*
- algorithms, elastoplasticity, plasticity, wolfe-markowitz algorithm, Smith (D.L.), *2507*
- algorithms, design, functional analyis, optimal control, Bershchanskii (Ya.M.), Meerov (M.V.), *3185*
- algorithms, integer programming, linear theory, Radashevich (Yu.B.), Sidorov (I.M.), *4282*
- design (optimum), experimental design, statistical design, Sedunov (E.V.), Trofimov (A.I.), (et al.), *4290*
- limit analysis, plasticity, yield criteria, Cannarozzi (A.A.), *6501*
- design (optimum), trusses, Kirsch (U.), *6512*
- loads, reliability analysis, structural design, Casciati (F.), Faravelli (L.), *6517*
- computing techniques, dynamic programming, nonlinear programming, optimization, Rao (S.S.), *7177, book*
- air pollution, control, mathematical models, optimization, Kohn (R.E.), *10094, book*
- algorithms, approximation methods, hilbert space, optimal control, Rubio (J.E.), *11051*
- algorithms, optimization, Gray (D.F.), Sutherland (W.R.S.), *11065*
- algorithms, regulator problem, suboptimal control, time delay systems, Kim (B.K.), Bien (Z.), *11088*

linear systems, differential equations (ordinary), oscillations, transition process, Kononyuk (V.A.), *28*
- continuous systems, controllability, sampled data systems, Gibson (J.A.), Ha (T.T.), *109*
- random excitation, stochastic processes, stochastic systems, Klega (V.), *111*
- multivariable systems, regulator problem, tracking, Wolovich (W.A.), Ferreira (P.), *112*
- decoupling, feedback, multivariable systems, time invariant systems, Sinha (P.K.), *113*
- linear theory, observability, scanning observability, Martin (J.-C.E.), *114*
- compression, optimal control, singular control, Vasenin (V.A.), Samsonov (V.A.), *115*
- green function, stochastic systems, Szopa (J.), *142*
- algorithms, queue theory, Kochetkov (E.S.), *153*
- adaptive systems, control, time invariant systems, Kreisselmeier (G.), *188*
- algorithms, identification, kaczmarz algorithm, Avedyan (E.D.), Tsypkin (Ya.Z.), *190*
- constraints, optimal control, trajectory optimization, Pelczewski (W.), Walczak (S.), *199*
- maximum principle, pursuit, rendezvous, time delay systems, Bien (Z.), Chyung (D.H.), *1141*
- regulator problem, synthesis, time delay systems, Vinter (R.B.), Kwong (R.H.), *1142*
- estimation, jump conditions, observers, Caglayan (A.K.), *1144*
- lyapunov's functions, stability theory, time varying systems, Kuznetsov (V.P.), Kukareko (E.P.), *1145*
- design, gauss-poisson processes, jump conditions, stochastic control, Segall (A.), *1154*
- eigenvalues, matrix methods, time varying systems, Wu (M.-Y.), *1991*
- error, inverse problems, statistical theory, Tarantola (A.), *2043*
- computer programming, curve fitting, dynamic response, interpolation, Collings (A.G.), Saunders (L.R.), *2050*
- dynamic analysis, observers, process control, reliability analysis, Mironovskii (L.A.), *2082*
- design, large scale systems, observers, Arbel (A.), Tse (E.), *2084*
- dynamic analysis, identification, Braslavskii (A.D.), Shubladze (A.M.), *2094*
- algorithms, controllability, observability, time invariant systems, Paige (C.C.), *2104*
- mathematical models, process control, range model, Zenkov (V.V.), *2110*
- automatic control, control, nonlinear mechanics, Chernousko (F.L.), Akulenko (L.D.), (et al.), *2115, book*
- optimal control, singular control, Casti (J.), *2116*
- identification, observers, Iwai (Z.), Mano (K.), (et al.), *2133*
- controllability, faithful property, observability, state space techniques, Boretskii (I.V.), Pavlov (V.G.), *3149*
- autonomous systems, large scale systems, stability theory, time lag, Lewis (R.M.), Anderson (B.D.O.), *3154*
- algorithms, continued fraction method, model reduction, state space techniques, Khatwani (K.J.), Tiwari (R.K.), (et al.), *3155*
- discrete systems, eigenvalues, periodic systems, pole placement, Kono (M.), *3156*
- identification, least squares, Zhdanov (A.I.), Katsyuba (O.A.), *3181*
- design, optimal control, Belikov (S.A.), Zak (Yu.A.), *3184*
- control, design, multivariable systems, observers, pole placement, process control, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- adaptive systems, discrete systems, stochastic control, stochastic systems, Yoshimura (T.), Kiyota (M.), (et al.), *3204*
- algorithms, decision theory, identification, Balk (P.I.), *3207*
- eigenvalues, matrix methods, stability theory, Vorotnikov (V.I.), Prokopev (V.P.), *4159*
- decoupling, time lag, time varying systems, Nakanishi (E.), Nanbara (K.), *4204*
- algorithms, digital simulation, matrix methods, numerical methods, simulation, state space techniques, transition matrices, Utz (L.), *4206*
- control, multivariable systems, pole placement, regulator problem, Kimura (H.), *4209*
- complex variables, distributed parameters, extended complex plane, poles, transfer functions, zeros, Ferreira (P.M.G.), *4211*
- lyapunov's functions, stability theory, Bakhilina (I.M.), Lerner (D.M.), *4216*
- algorithms, controllability, model reduction, observability, principal component analysis, Moore (B.C.), *4217*

- algorithms, discrete systems, identification, kalman filters, stochastic systems, Konishi (K.), Inouchi (K.), (et al.), *4219*
- frequency domain techniques, multivariable systems, nyquist theory, stability theory, Postlethwaite (I.), Edmunds (J.M.), (et al.), *4225*
- aggregation, control, large scale systems, model reduction, Gaitsgori (V.G.), Pervozvanskii (A.A.), *4227*
- inverse problems, process control, time invariant systems, time lag, Borukhov (V.T.), *4228*
- convex programming, fractional convex programming, optimal control, synthesis, Pestryakov (A.K.), *4229*
- identifiability, identification, linear theory, Delforge (J.), *4230*
- feedback, multivariable systems, stability theory, time lag, Gosiewski (A.), Olbrot (A.W.), *4231*
- observers, realization, Emre (E.), Silverman (L.M.), *4233*
- computer aided design, multivariable systems, structural analysis, Van Der Weiden (A.J.J.), Bosgra (O.H.), *4235*
- adaptive systems, design, multivariable systems, process control, tracking, Davison (E.J.), *4236*
- algorithms, observers, Parusnikov (N.A.), *4237*
- algorithms, stability theory, Kostyleva (N.E.), *4245*
- control, control stability, feedback, matrix methods, stability theory, Meilakhs (A.M.), *4246*
- algorithms, control stability, design, feedback, stability theory, Tannenbaum (A.), *4249*
- linear theory, robustness, sensitivity, stability theory, Solnechnyi (E.M.), *4251*
- boundary value problems, optimization, regulator problem, stability theory, Tsygankova (L.A.), *4253*
- estimation, identification, matrix methods, Schwarz (R.G.), *4254*
- algorithms, identification, lumped systems, poisson moment functionals, Saha (D.C.), Rao (G.P.), *4256*
- discrete systems, feedback, identification, Sin (K.S.), Goodwin (G.C.), *4259*
- optimization, Krivenkov (Iu.P.), *4287*
- constraints, optimal control, synthesis, Brunovsky (P.), *4291*
- optimal control, stochastic control, Kuznetsov (N.A.), Liptser (L.Sh.), (et al.), *4294*
- filters, optimal control, stochastic control, Uryupin (M.A.), *4295*
- bellman function, dynamic programming, optimal control, Drozdov (A.D.), *4299*
- estimation, nonlinear systems, stochastic systems, Siluyanova (I.D.), *4306*
- algorithms, differential games, Rappoport (I.S.), *4319*
- adaptive systems, design, observers, Westphal (L.C.), *4323*
- algorithms, multivariable systems, optimal control, schur form, Sima (V.), *5055*
- control, design, feedback, multivariable systems, pole placement, Balestrino (A.), Celentano (G.), *6125*
- control, design, feedback, multivariable systems, pole placement, Seraji (H.), *6126*
- time varying systems, volterra series, Lawrence (P.J.), *6127*
- control, lyapunov's functions, nonlinear methods, observers, system uncertainty, Leitmann (G.), *6129*
- control, feedback, pole placement, Shapiro (E.Y.), Fredricks (D.A.), (et al.), *6141*
- cracks, elastic behavior, nonlinear systems, penalty function, plates, Yagawa (G.), Aizawa (T.), (et al.), *6457*
- discrete systems, entropy, linear theory, time invariant systems, Zames (G.), *7231*
- adaptive systems, algorithms, discrete systems, multivariable systems, state space techniques, Goodwin (G.C.), Ramadge (P.J.), (et al.), *7233*
- algorithms, identification, modeling, multivariable systems, pseudoinverse, static model, Mechetnyy (V.S.), *7235*
- control, distributed parameters, spectral analysis, Azarov (V.L.), Lupichev (L.N.), (et al.), *7236*
- algorithms, numerical methods, optimal control, suboptimal control, Kein (V.M.), Parikov (A.N.), (et al.), *7243*
- dynamic analysis, elastic bodies, structural response, structures, vibration isolation, Ryaboi (V.M.), Genkin (M.D.), (et al.), *7244*
- algorithms, identification, lumped systems, time delay systems, Saha (D.C.), Rao (G.P.), *7246*
- control, design, discrete systems, observers, Tomizuka (M.), Auslander (D.M.), (et al.), *7251*
- mathematical theory, optimal control, time optimal systems, Arutyunov (A.V.), *8158*
- linear theory, state space techniques, topological techniques, Petrov (B.N.), Babak (S.F.), (et al.), *8160*
- control, design, multivariable systems, optimization, servomechanisms, Davison (E.J.), Ferguson (I.J.), *8168*
- decision theory, dynamic programming, optimization, time invariant systems, Hess (J.), Kagiwada (H.), (et al.), *8175*
- dynamic analysis, hamilton principle, variational methods, Sarlet (W.), Engels (E.), (et al.), *9086*
- dilute solutions, lyapunov's functions, polymers, stability theory, turbulent flow, Phan-Thien (N.), Atkinson (J.D.), *9094*
- controllability, time delay systems, Manitius (A.), *9154*
- algorithms, attainability sets, control, Bushenkov (V.A.), Lotov (A.V.), *9157*
- control, decoupling, design, multivariable systems, nonlinear systems, synthesis, Mercier (O.), *9165*
- control, feedback, spectral analysis, stability theory, transfer functions, Schober (J.), *9166*
- lyapunov's functions, matrix methods, state space techniques, Bialas (S.), *10075*
- linear theory, matrix methods, multivariable systems, state space techniques, Field (A.D.), Owens (D.H.), *10079*
- controllability, frequency domain techniques, linear theory, observability, Olbrot (A.W.), Zak (S.H.), *10080*
- algorithms, automatic control (optimal), design, pole placement, Lee (G.K.F.), *10084*
- algorithms, guidance, pole placement, pursuit, time varying systems, Solenski (N.), *10092*
- algorithms, eigenvalue problems, linear theory, Van Dooren (P.M.), *11038*
- controllability, dynamic properties, identification, observability, structural response, Udwadia (F.E.), *11048*
- failure, model reduction, Skelton (R.E.), *11053*
- feedback, multivariable systems, nyquist theory, Nwokah (O.D.I.), *11054*
- dynamic analysis, stability theory, Johnson (C.D.), *11056*
- linear theory, noise (random), stability theory, stochastic systems, Prussing (J.E.), *11057*
- adaptive systems, discrete systems, identification, observers, Suzuki (T.), Nakamura (T.), (et al.), *11095*
- algorithms, convergence, identification, iterative methods, Tsypkin (Y.Z.), Avedyan (E.D.), (et al.), *11098*

linear theory, characteristic methods, compressible flow, three dimensional formulation, Hendriks (T.P.M.), *40*

- automatic control, duality, geometric control, time invariant systems, Fuhrmann (P.A.), *99*
- linear systems, observability, scanning observability, Martin (J.-C.E.), *114*
- fatigue, high cycle fatigue, probabilistic design, Wirsching (P.H.), Hsieh (S.), *446*
- differential equations (ordinary), mathematical methods, nonlinear systems, Rama Mohana Rao (M.), *1073, book*
- bridges (highway), finite element techniques, plates (stiffened), Maeda (Y.), Sera (M.), *1136*
- equilibrium, hamilton principle, inhomogeneities, plasma, Lewis (H.R.), Symon (K.R.), *1780*
- interconnected systems, large scale systems, stability theory, Moylan (P.J.), *3166*
- regulator problem, stability theory, Tkachenko (V.A.), *3167*
- iterative methods, piping systems, Isaacs (L.T.), Mills (K.G.), *3597*
- identifiability, identification, linear systems, Delforge (J.), *4230*
- linear systems, robustness, sensitivity, stability theory, Solnechnyi (E.M.), *4251*
- algorithms, integer programming, linear programming, Radashevich (Yu.B.), Sidorov (I.M.), *4282*
- cylindrical bodies, drag, membranes, navier stokes equation, Hughes (B.D.), Pailthorpe (B.A.), (et al.), *4584*
- potential flow, three dimensional flow, vorticity, Hart (R.W.), *5402*
- green theorem, ship resistance, wavemaking resistance, Odabasi (A.Y.), *5961*
- lagrange multiplier, optimization, Nagahisa (Y.), *6138*
- conduction (heat), cylindrical bodies, materials possessing memory, tubes, Fetecau (C.), *6797*
- fredholm equations, planing surfaces, surface tension, Tuck (E.O.), *7076*
- discrete systems, entropy, linear systems, time invariant systems, Zames (G.), *7231*
- floating structures, mooring, nonlinear theory, wave interactions, Natvig (B.J.), Pendered (J.W.), *8049*
- linear systems, state space techniques, topological techniques, Petrov (B.N.), Babak (S.F.), (et al.), *8160*
- crack growth, fracture mechanics, viscoelasticity, Mccartney (L.N.), *8413*
- convergence, minimax techniques, Panin (V.M.), *10051*
- linear systems, matrix methods, multivariable systems, state space techniques, Field (A.D.), Owens (D.H.), *10079*
- controllability, frequency domain techniques, linear systems, observability, Olbrot (A.W.), Zak (S.H.), *10080*
- algorithms, eigenvalue problems, linear systems, Van Dooren (P.M.), *11038*
- linear systems, noise (random), stability theory, stochastic systems, Prussing (J.E.), *11057*
- canals, finite element methods, ship motion, three dimensional flow, Bai (K.J.), *12087*

Linehan (J.H.), see Petrie (D.J.), *10598*

liners, boreholes, contact problems, shells (long), Warren (W.E.), *2270*

Ling (C.K.), see Salama (K.), *10321*

Ling (F.F.), see Roberts (J.C.), *8079*

Ling (H.C.), inclusions, micromechanisms, phase changes, steel, thermoelasticity, Owen (W.S.), *8884*

Ling (Y.L.), missiles, rolling motion, stability theory, Han (K.W.), *693*

Lingaiah (K.), circular arc gears, contact stresses, gears, surface profiles, Ramachandra (K.), *2559*

linkages, algorithms, mechanisms (planes), synthesis, Soni (A.H.), Azeez (S.A.), *540*

- chebyshev approximations, mechanisms, Dijksman (E.A.), *1472*
- cams, gear trains, machine design, mechanisms, transmissions, Kozhevnikov (S.N.) ed., *2549, book*
- dyades, elastodynamics, mechanisms (planes), Pelecudi (C.), Mitsis (S.), *2553*
- kinematics, mechanisms (planes), Kothari (M.), Rao (A.C.), *3083*
- kinematics, mechanisms (planes), synthesis, Erdman (A.G.), *3578*
- kinematics, mechanisms (spatial), Nitescu (P.N.), *3579*
- graphical methods, kinematics, mechanisms (spatial), Nitescu (P.N.), *3580*
- algorithms, mechanisms, synthesis, Jaini (C.K.C.), Rao (A.C.), *4550*
- analysis, computer aided design, mechanisms, sensitivity, Coit (W.G.), Riley (D.R.), *4557*
- four bar linkage, kinematics, machine design, mechanisms (planes), Kimbrell (J.E.), Hunt (K.H.), *4558*
- closure, kinematics, mechanisms (spatial), robotics, Sticher (F.), *4559*
- design, four bar linkage, kinematics, mechanisms, Hain (K.), *4560*
- computer aided design, design (optimum), mechanisms (planes), optimization, Gauchel (H.-J.), *4563*
- four bar linkage, kinematics, mechanisms (planes), synthesis, Sun (J.W.H.), Waldron (K.J.), *5375*
- connecting rods, design, error, mechanisms, sensitivity, Lebedev (P.A.), *6559*
- dynamic analysis, four bar linkage, kinematics, mechanisms (spatial), Oranescu (A.), Bocioaca (R.), *6560*
- cams, mechanisms, synthesis, Singh (Y.P.), Kohli (D.), *6561*
- couplings, four bar linkage, kinematics, mechanisms (planes), Hunt (K.H.), Fichter (E.F.), *6562*
- dynamics, mechanisms (spatial), screws, vector methods, Keler (M.L.), Beran (M.A.), *7626*
- cams, design, dynamics, mechanisms, Kwong (C.W.), Wiederrich (J.L.), (et al.), *7627*
- dynamic analysis, finite element methods, flexibility, matrices, mechanisms (spatial), Sunada (W.), Dubowsky (S.), *7629*
- design, mobility, rigid bodies, structures, Baker (J.E.), *7631*
- kinematics, mechanisms (spatial), screws, Ohwovoriole (M.S.), Roth (B.), *8094*
- burmester configuration, computer aided design, four bar linkage, vector methods, Wolford (J.C.), *8481*
- design, high speed, mechanisms (planes), springs, synthesis, Griffin (J.N.), Matthew (G.K.), *9477*
- balancing, four bar linkage, mechanisms (planes), Tricamo (S.J.), Lowen (G.G.), *9478*
- constraints, mechanisms (spatial), Yu Hon-Cheung, *9480*
- design, mechanisms (planes), mechanisms (spatial), rotational capability, Geise (G.), Modler (K.-H.), *9481*
- balancing, four bar linkage, mechanisms, vibration, Bagci (C.), *10378*
- biological joints, human body, joints, Kinzel (G.L.), *10379*
- kinematics, mechanisms, synthesis, Yu Hon-Cheung, Baker (J.E.), *10380*
- four bar linkage, kinematics, mechanisms, Baker (J.E.), *11341*
- algorithms, kinematics, mechanisms, Garcia De Jalon (J.), Serna (M.A.), (et al.), *11342*

Linkens (D.A.), see Smallwood (R.H.), *2207*
- biomechanics, limit cycles, modal analysis, oscillators, time delay systems, van der pol oscillators, Kitney (R.I.), *7154*

Linthorst (S.J.M.), cavities, closed conduit flow, convection (free), laser doppler velocimeters, visualization, Schinkel (W.M.M.), (et al.), *6792*

Linzenkirchner (E.), adaptive systems, filters, nonlinear systems, nonlinear theory, *9193*

Linzer (M.), see Berger (H.) eds., *3505, book*
- see Sato (T.), *4810*

Lions (J.-L.), see Glowinski (R.), *7176, book*
- see Bensoussan (A.), *10022*

Lions (J.E.), see Glowinski (R.) eds., *1111, book*

Liou (K.-N.), see Ou (S.-C.S.), *4180*

Liou (R.J.), blood flow, numerical analysis, stenoses, three dimensional flow, Clark (M.E.), (et al.), *9063*

Lipitakis (E.A.), elliptic equations, iterative methods, matrices (sparse), three dimensional formulation, Evans (D.J.), *1122*

Lippmann (H.), anisotropic media, granular media, plastic flow, slip line methods, *5107, book*

Lippy (D.), dissociation, gases, porous media, unsteady flow, Evans (R.D.), *5832*

Lips (K.W.), dynamic analysis, flexible bodies, satellites, Modi (V.J.), *1067*
- attitude control, flexible appendages, space vehicle structures, spinning bodies, stability theory, Modi (V.J.), *6884*

Lipson (S.L.), arches, design (optimum), mathematical programming, Haque (M.I.), *1424*

Liptser (L.Sh.), see Kuznetsov (N.A.), *4294*

liquefaction, penetration, soils, Tatsuoka (F.), Iwasaki (T.), (et al.), *3419*
- phase changes, retrograde gases, shock waves, Dettleff (G.), *6753*
- chemical reactions, coal, heat addition, rheology, Khandhadia (P.S.), Forsyth (T.H.), (et al.), *6769*
- densification, sand, texture, Nemat-Nasser (S.), Tobita (Y.), *7437*
- energy methods, sand, seismic loading, Davis (R.O.), Berrill (J.B.), *9922*
- sand, Gupta (M.K.), Prakash (S.), *9923*
- constitutive relations, cyclic loading, sand, strain softening, Tatsuoka (F.), Silver (M.L.), *11177*

liquid crystal, aerodynamics, flow measurement, optical techniques, thermal measurements, Zharkova (G.M.), *725*
- composite materials, flaw detection, laminates, thermography, Wilson (D.W.), Charles (J.A.), *7576*
- constitutive relations, thermodynamic functions, thermodynamics (irreversible), thermodynamics (nonequilibrium), Hess (S.), Pardowitz (I.), *10551*

liquid crystals (cholesteric), flaw detection, glass fibers, laminates, nondestructive tests, thermography, Williams (J.H.), Mansouri (S.H.), (et al.), *7574*

liquid crystals (nematic), continuum theory, micropolar media, stability theory, Straughan (B.), *1056*
- continuum mechanics, nonlocal theory, polar fluids, Demiray (H.), *4139*
- heat addition, magnetic fluids, plates (parallel), thermal instability, Barratt (P.J.), Sloan (D.M.), *11368*

liquid fuels, combustion, combustion chambers, Asoskov (V.A.), Shestakov (N.S.), *1755*
- deflagration, detonation, explosions, thermal explosions, Mitrofanov (V.V.), Pinaev (A.V.), (et al.), *1797*
- cooling, rockets, Price (H.G.), *3884*
- drops, entrainment, pulsatile flow, two phase flow, Low (S.C.), Baruah (P.C.), *6967*
- flow measurement, longitudinal stability, pogo phenomenon, rockets, unsteady flow, Dordain (J.-J.), *9661*
- combustion, evaporation, sprays, Tambour (Y.), *10716*
- bubbly flow, dynamic effects, liquid vapor mixture, longitudinal stability, rockets, Kinelev (V.G.), Shkapov (P.M.), *11801*

liquid gas mixture, pipe flow, transition, two phase flow, Barnea (D.), Shoham (O.), (et al.), *938*
- bubble dynamics, measurements, optical techniques, two phase flow, Kosmowski (I.), Wunderlich (B.), (et al.), *942*
- compressional waves, detonation (two phase), explosives, layered media, slurries, Trebinski (R.), Trzcinski (W.), (et al.), *1595*
- tubes, two phase flow, Wallis (G.B.), Karlin (A.S.), (et al.), *1843*
- helical flow, tubes, two phase flow, Whalley (P.B.), *1845*
- transition, tubes, two phase flow, Taitel (Y.), Bornea (D.), (et al.), *1846*
- heat transfer, liquid vapor mixture, mass transfer, two phase flow, Nigmatulin (R.I.), Khabeyev (N.S.), *1847*
- ducts, one dimensional flow, transient, two phase flow, Hancox (W.T.), Ferch (R.L.), (et al.), *1848*
- pipelines, transition, two phase flow, Weisman (J.), Duncan (D.), (et al.), *1850*
- prediction, two phase flow, Iida (Y.), *1852*
- bends, pipe flow, two phase flow, Hoang (K.), Davis (M.R.), *1853*
- adiabatic processes, annular flow, two phase flow, Andersen (P.S.), Wurtz (J.), *1858*
- gravity, magneto fluid dynamics, separation, Kirko (G.E.), *2895*
- analysis, bubble dynamics, nozzles, Siryi (V.S.), Prikhodko (N.A.), *4627*
- liquid vapor mixture, two phase flow, Bergles (A.E.) eds., Ishigai (S.), *4820, book*
- sound speed, two phase flow, Nguyen (D.L.), Winter (E.R.F.), (et al.), *4823*
- elastic constants, elastic waves, porous media, Vodak (F.), *4837*
- mathematical models, parabolic equations, reaction kinetics, Martin (R.H.) Jr., *4970*
- asymptotic behavior, bubble dynamics, chemically reactive flow, modulated systems, waves, Bagdoev (A.G.), Oganyan (G.G.), *5488*
- slip flow, two phase flow, Chernyy (I.M.), Kuzmenko (L.M.), (et al.), *5813*
- boiling, condensation, modeling, similarity methods, Kutateladze (S.S.), *6758*
- surface tension, two phase flow, Voinov (O.V.), Pukhnachev (V.V.), *6968*
- bubble dynamics, measurements (dynamic), two phase flow, Heijnen (J.J.), Vant Riet (K.), (et al.), *6972*
- inclusions, measurements, two phase flow, void fraction, Shenderov (L.Z.), Kvashnin (A.G.), (et al.), *6977*
- capillary waves, gravity waves, interface waves, Pramanik (A.K.), *7763*
- non newtonian flow, two phase flow, viscosity, Lewis (D.H.) Jr., Ryason (P.R.), *8889*
- deaerators, dynamic stability, power plants, storage, tanks, Cranfield (R.R.), Wilkinson (D.H.), *9625*

liquid liquid interface, holdup, oil-water flow, pipe flow, pressure drop, Mukherjee (H.), Brill (J.P.), (et al.), *1558*
- gravity waves (stratified), propagation, Gabov (S.A.), Castro (R.), *3712*
- acoustic waves, free boundary, immiscible fluids, Bedeaux (D.), Oppenheim (I.), *3713*
- interface phenomena, measurements (dynamic), optical instruments, Piquemal (J.), Barrau (J.J.), *3759*
- gravity waves (internal), gravity waves (shallow water), nonlinear waves, Helal (M.A.), Molines (J.M.), *5471*
- heat transfer, mass transfer, thermal diffusion, Takao (S.), Narusawa (U.), *5619*
- hydrodynamic stability, initial value problems, interface waves, viscous flow, Prosperetti (A.), *6701*
- heat transfer, precipitation, solidification, Moresco (L.L.), Marschall (E.), *8737*
- burners, drops, evaporation, heat transfer, Iida (Y.), Takashima (T.), *8772*
- differential equations (partial), plates, two component flow, viscous flow, Pismen (L.M.), Nir (A.), *9538*
- cavities, channel flow, viscoplasticity, Burde (G.I.), Ilyasov (E.P.), (et al.), *9582*
- channel flow, liquid metals, stratified flow, turbulent flow, Takahashi (M.), Inoue (A.), (et al.), *9691*

- contact problems, dispersed flow, heat transfer, spray columns, sprays, Moresco (L.L.), Marschall (E.), *9731*
- chemical kinetics, convection, interfaces, surface tension, Dalle Vedove (W.), Sanfeld (A.), *11379*
- jets, mixing, pipe flow, Fitzgerald (S.D.), Holley (E.R.), *11492*
- finite amplitude, gravity waves (internal), gravity waves (solitary), Koop (C.G.), Butler (G.), *11575*
- estuaries, finite element techniques, tides, Kawahara (M.), Morihira (M.), (et al.), *11609*
- ferrous metals, films, liquid metals, magneto fluid dynamics, Taktarov (N.G.), Bin (C.Z.), *11817*

liquid liquid systems, bubble dynamics, nucleation, Avedisian (C.T.), Glassman (I.), *1862*

- drops, hydrodynamics, Patel (P.D.), Theofanous (T.G.), *10826*

liquid metals, boundary layer, ducts (curved), magneto fluid dynamics, theory, Arai (S.), Tomita (Y.), (et al.), *853*

- magneto fluid dynamics, numerical analysis, pipe flow, pulsatile flow, Sudou (K.), Tomita (Y.), (et al.), *864*
- cylindrical bodies, magneto fluid dynamics, theory, velocity profiles, Bashtovoi (V.G.), *2880*
- electro fluid dynamics, ion generators, nonlinear waves, theory, Gabovich (M.D.), Poritskii (V.Ya.), *2889*
- cylindrical bodies, magneto fluid dynamics, turbulence, two dimensional flow, Alemany (A.), Moreau (R.), (et al.), *2893*
- containment, magneto fluid dynamics, melting, vessels, Getselev (Z.N.), Martinov (G.I.), *3894*
- evaporation, mass transfer, porous media, Prosvetov (V.V.), *5608*
- composite materials, mass transfer, powder metallurgy, sintered materials, Lisovskii (A.F.), *5624*
- heat transfer, turbulence, turbulence model, Grotzbach (G.), *6688*
- cylindrical bodies, magneto fluid dynamics, nonlinear systems, pumps, Fireteanu (V.), *6865*
- duct flow, magneto fluid dynamics, nonuniform flow, thermoelectric phenomena, Shercliff (J.A.), *8812*
- heat transfer, magneto fluid dynamics, models, welding, Atthey (D.R.), *8818*
- magneto fluid dynamics, measurements (dynamic), unsteady effects, velocity profiles, Chambarel (A.), Ricou (R.), (et al.), *8827*
- channel flow, liquid liquid interface, stratified flow, turbulent flow, Takahashi (M.), Inoue (A.), (et al.), *9691*
- film flow, magneto fluid dynamics, stabilization, transport phenomena, Bashtovoi (V.G.), Denisenko (T.D.), (et al.), *9785*
- damping, films, magneto fluid dynamics, surfactants, Gogosov (V.V.), Naletova (V.A.), (et al.), *9790*
- magneto fluid dynamics, stability theory, theory, thin films, Tsebers (A.O.), Maiorov (M.M.), *9792*
- jets, magneto fluid dynamics, stabilization, theory, Martynov (S.I.), Taktarov (N.G.), *9793*
- approximations, discontinuities, magneto fluid dynamics, propagation, Patsegon (N.F.), *9797*
- ducts (variable area), experimental methods, magneto fluid dynamics, walls, Holroyd (R.J.), *10734*
- ferrous metals, gravity waves, magneto fluid dynamics, theory, Shishkin (L.A.), Slatinskii (N.D.), *10748*
- generators, magneto fluid dynamics, measurements, two phase flow, Dunn (P.F.), *10753*
- magneto fluid dynamics, mixing, unsteady flow, welding, Chernysh (V.P.), Shalda (L.M.), *10754*
- ferrous metals, magneto fluid dynamics, seals, testing equipment, Mikhalev (Yu.O.), Orlov (D.V.), (et al.), *10755*
- ferrous metals, interaction, magneto fluid dynamics, torque, Kashevskii (B.E.), *11816*
- ferrous metals, films, liquid liquid interface, magneto fluid dynamics, Taktarov (N.G.), Bin (C.Z.), *11817*
- magneto fluid dynamics, particles, reactor structures, thermonuclear energy, Muravev (E.V.), *11824*
- eigenvalues, ferrous metals, magneto fluid dynamics, tensor methods, Radojevic (D.), *11828*
- calibration, flow measurement, magneto fluid dynamics, meteorology, Kirshtein (G.Kh.), Kvasnevskii (I.P.), *11833*

liquid solid interface, conduction (heat), energy storage, melting, phase changes, Henze (R.H.), Humphrey (J.A.C.), *768*

- boussinesq equation, convection, melting, solidification, Povkh (I.L.), Zavgorodnii (P.F.), (et al.), *3819*
- freezing, integral methods, solidification, solutions (material), O'Callaghan (M.G.), Cravalho (E.G.), (et al.), *3821*
- numerical methods, reflection, ultrasonics, Ngoc (T.D.K.), Mayer (W.G.), *3944*
- thermal loading, thermal measurements, thermophysical properties, Spirin (G.G.), *5535*
- colloids, numerical methods, surfactants, Gur (Y.), Ravina (I.), Babchin (A.J.), *6585*
- hydrodynamic stability, membranes, viscoelasticity, Steinchen (A.), Gallez (D.), (et al.), *8275*
- damping, heat transfer, rayleigh waves, solid solid interface, Van Der Sluijs (J.C.A.), Van Der Sluijs (M.J.), *9339*
- bubble dynamics, diffusion, freezing, solidification, two phase flow, Petrie (D.J.), Linehan (J.H.), (et al.), *10598*
- acoustic waves, barriers, plane waves, reflection, ultrasonics, Claeys (J.M.), Leroy (O.J.), (et al.), *11648*

liquid vapor interface, electro fluid dynamics, heat pipes, heat transfer, wick, Bologa (M.K.), Kozhukhar (I.A.), (et al.), *791*

- adsorption, immiscible fluids, surface tension, Haung (K.Z.), Chai (C.P.), (et al.), *1657*
- convection, heat pipes, heat transfer, wick, Frolov (V.F.), Vernikov (E.M.), (et al.), *1717*
- bubble dynamics, drops, Mitrovic (J.), Stephan (K.), *1866*
- adsorption, plane surfaces, power law geometrics, Philip (J.R.), *3850*
- binary flow, heat transfer, mixtures, vaporization, Fakhretdinov (I.A.), Chalyi (A.V.), *5611*
- burning rate, combustion, diffusion, Sukhov (G.S.), Yarin (L.P.), *5629*
- evaporation, film cooling, film flow, heat transfer, Wassner (L.), *6779*
- bifurcation, condensation, interface phenomena, Bychkov (Yu.A.), Iordanskii (S.V.), *7871*
- free boundary, shear flow, viscometry, Krieg (R.D.), Son (J.E.), (et al.), *8500*
- convection (free), film boiling, hydrodynamic stability, pipe flow, thermal instability, two phase flow, Sherman (D.C.), Sabersky (R.H.), *8693*
- monte carlo analysis, properties, Borstnik (B.), Janezic (D.), (et al.), *8903*
- asymptotic methods, cylindrical bodies, film flow, plates, Salem (A.), Trad (A.), *9542*
- films, interface phenomena, rotating fluids, two phase flow, Siekmann (J.), Johann (W.), *9877*
- contact problems, evaporation, heat exchangers, mathematical models, Bukharkin (E.N.), *10617*
- hydrodynamic stability, supersonic flow, surface tension, Shivamoggi (B.K.), *11534*
- heat transfer, mass transfer, sound propagation, Azamatov (A.Sh.), Shagapov (V.Sh.), *11923*

liquid vapor mixture, dispersed flow, radiation, two phase flow, void fraction, Ohba (K.), *939*

- heat transfer, liquid gas mixture, mass transfer, two phase flow, Nigmatulin (R.I.), Khabeyev (N.S.), *1847*
- adiabatic processes, centrifugation, helium, two phase flow, Zhukovskiy (A.V.), *4014*
- liquid gas mixture, two phase flow, Bergles (A.E.) eds., Ishigai (S.), *4820, book*
- drops, heat transfer, mass transfer, mathematical models, Monaco (R.), *5610*
- cooling, helium, regulator problem, temperature, valves, Novikov (N.V.), Gorodyskii (N.I.), (et al.), *7575*
- annuli, flooding, nuclear reactors, two phase flow, Richter (H.J.), *8576*
- boilers, channel flow, dynamic stability, vibration, Vlasov (S.M.), Ratnikov (E.F.), (et al.), *10486*
- bubble dynamics, heat transfer, mass transfer, two phase flow, Nigmatulin (B.I.), Kroshilin (A.Ye.), (et al.), *10650*
- bubble dynamics, oscillations, two phase flow, Foody (B.E.), Huber (P.W.), *10821*
- binary flow, critical region, mixtures, thermodynamic properties, Wielopolski (P.), *11759*
- bubbly flow, dynamic effects, liquid fuels, longitudinal stability, rockets, Kinelev (V.G.), Shkapov (P.M.), *11801*

liquids, hydrodynamic stability, jets, surface tension, Bogy (D.B.), *633*

- counterflow, hydrodynamic stability, jets, Entov (V.M.), Yarin (A.L.), *636*
- cylindrical bodies, hydromagnetic stability, perturbations, waves, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *851*
- ferrous metals, magnetoelasticity, oscillations, suspensions, Shishkin (L.A.), *862*
- ferrous metals, magneto fluid dynamics, separation, suspensions, Boguslavskii (V.A.), Dvorchik (S.E.), (et al.), *863*
- acoustic properties, optical techniques, relaxation, spectroscopy, Gladkov (S.M.), Koroteev (N.I.), *919*
- conductivity, physical properties, sound speed, thermal properties, Mamedov (A.M.), *1656*
- laser doppler velocimeters, refraction, stratified flow, turbulence, Mcdougall (T.J.), *2767*
- thermal diffusion, thermal measurements, thermal properties, Farooq (M.M.), Giedt (W.H.), (et al.), *2781*
- impingement cooling, leidenfrost phenomenon, sprays, Grissom (W.M.), Wierum (F.A.), *2839*
- convection, magneto fluid dynamics, stability, walls, Kuang (V.Z.), Kan (N.Z.), *2878*
- chemical reactions, dielectrics, electro fluid dynamics, tubes, Pribylov (V.N.), Chernyi (L.T.), *2879*
- boundary layer, damping, oscillations, slip flow, u-shaped tube, Kozlov (L.F.), Nikitina (G.D.), *3661*
- acoustic measurements, materials properties, molecular properties, Ernst (S.), Glinski (J.), *3968*
- atomization, centrifugation, Klyachko (L.A.), *4017*
- reynolds equation (turbulence), three dimensional flow, turbulent flow, Shablovskii (O.N.), *4650*
- bubble dynamics, Cha (Y.S.), Henry (R.E.), *4828*

- heat transfer, hydrodynamic stability, surface tension, Takashima (M.), *5457*
- hydrodynamics, thermal waves, thermodynamic functions, variable fluid properties, variable thermal properties, Andreev (A.F.), *5516*
- conduction (heat), conductivity, specific heat, Mulyukov (R.R.), Pavlov (P.A.), *5518*
- augmentation, electro fluid dynamics, heat transfer, Jones (T.B.), *5542*
- contact angle, experimental results, thin films, Feijter (J.A.), Vrij (A.), *6584*
- free boundary, hydrodynamic stability, surface tension, Svechkareva (M.A.), Tyuptsov (A.D.), *6675*
- half space, interface phenomena, layered media, sound propagation, Bucker (H.P.), *6918*
- columns, gravity, harmonic waves, hydrodynamic stability, Malik (S.K.), Singh (M.), *7740*
- electromagnetic loading, flow measurement, gases, isotope tracers, vortex shedding, Scott (R.W.W.) ed., *7811, book*
- jets, nonlinear theory, Kiselev (O.M.), Kotlyar (L.M.), *8594, book*
- buoyancy, convection, eigenvalues, hydrodynamic stability, surface tension, Rosenblat (S.), Homsy (G.M.), (et al.), *8603*
- diffusion, thermal instability, thermal waves, Baydakov (V.G.), *8674*
- binary flow, cavities, convection (free), inclined cavity, thermal diffusion, Pinyagin (A.Yu.), Pshenichnikov (A.F.), *8706*
- bubble dynamics, electrolysis, Verhaart (H.F.A.), De Jonge (R.M.), (et al.), *8909*
- constitutive equations, thermodynamic functions, thermodynamic processes, Doolittle (A.K.), *10552*
- mixtures, solutions (material), thermal diffusion, Bukhtilova (M.A.), Gorogush (V.M.), (et al.), *10554*
- hot wire, thermal measurements, thermophysical properties, Filippov (L.P.), Nefedov (S.N.), (et al.), *10555*
- diffusion coefficient, dispersion, Alizadeh (A.), Nieto De Castro (C.A.), (et al.), *10557*
- diffusion coefficient, mass transfer, Rao (D.P.), Rao (G.H.), *10670*
- analysis, containers, discharges, electrical conductivity, Golovko (Yu.N.), *10736*
- capillary flow, hydrodynamic stability, jets, Filyand (L.V.), *11531*
- convection, diffusion, mixtures, optical techniques, two component flow, Ruddick (B.R.), *11755*

Lisenko (S.A.), see Lakota (N.A.), *214*

Lisini (G.G.), ballooning, spinning bodies, textiles, yarn, Nerli (G.), (et al.), *7314*

Lisitsyn (B.M.), conduction (heat), finite element techniques, nonhomogeneous media, thermoelasticity, Bulyga (K.G.), *921*

Lisovskii (A.F.), composite materials, liquid metals, mass transfer, powder metallurgy, sintered materials, *5624*

Lisowski (Z.), contact problems, friction (sliding), friction (solid solid), sliding, Stolarski (T.), *5091*

List (E.J.), jets, plumes, turbulent flow, *6666*

Listvinsky (G.K.), see Lau (J.H.), *3252*

Liszka (T.), finite difference methods, mesh generation, survey, Orkisz (J.), *1124*

Litewka (A.), anisotropic media, indentation, penetration, plasticity, Sawczuk (A.), *3257*

Little (G.H.), aluminum alloys, buckling (nonlinear), collapse, nonlinear materials, nonlinear theory, plates, *6250*

Little (W.J.G.), see Fessler (H.), *1390*

Littlejohn (G.S.), see Rodger (A.A.), *10252*

Litvin (F.L.), curvature, design, gears, gears (hypoid), gears (spiral), surface profiles, synthesis, *4555*

Litvin (O.N.), conduction (heat), contact fronts, mathematical models, *10599*

Litvinov (A.M.), see Timofeyev (B.B.), *2146*

Litvinov (V.G.), optimal control, plates, vibration (free), *1276*

Litz (L.), algorithms, digital simulation, linear systems, matrix methods, numerical methods, simulation, state space techniques, transition matrices, *4206*
- approximation theory, large scale systems, model reduction, *11077*

Liu (A.K.), gravity waves, nonlinear analysis, shear flow, stratified flow, wave trains, *11562*
- gravity waves (internal), nonlinear analysis, resonance, wave interactions, Kubota (T.), (et al.), *11566*

Liu (C.H.), channel flow, convection, heat transfer (combined modes), plates (parallel), radiant interchange, solar collectors, Sparrow (E.M.), *10610*

Liu (C.Y.), asymptotic behavior, convection (free), corners, porous media, Ismail (K.A.R.), *9901*
- condensation (filmwise), laminar flow, porous walls, similarity methods, velocity profiles, Ismail (K.A.R.), (et al.), *11762*

Liu (H.), contamination, dispersion, fickian model, rivers, Cheng (A.H.D.), *10677*

Liu (H.W.), see Mcgowan (J.J.), *2412*
- see Mcgowan (J.J.), *3436*

Liu (I.-S.), chemical kinetics, mixtures, porous media, *8897*

Liu (J.Q.), see Chen (Y.M.), *7855*

Liu (J.T.C.), see Mankbadi (R.), *7752*

Liu (J.Y.), beams, shear strength, weibull statistics, wood structures, *1433*

Liu (K.C.), random media, stochastic systems, waves, *11168*

Liu (P.L.-F.), see Lozano (C.), *665*
- see Lennon (G.P.), *8950*
- see Salmon (J.R.), *11698*

Liu (S.C.), see Yang (J.N.), *7048*

Liu (T.-F.), ocean air interaction, surface waves, wind, Ma (F.-S.), *10668*

Liu (T.C.), axial loading, design (ultimate strength), flexure, hydraulic structures, reinforced concrete, Gleason (S.), *7609*

Liu (V.C.), combustion (turbulent), explosions, heat transfer, ignition, turbulence, *8788*

Liu (W.K.), see Hughes (T.J.R.), *7337*
- containers (partially filled), finite element techniques, fluid-structure interaction, seismic loading, storage, *7768*
- see Hughes (T.J.R.), *9141*

Liu (X.-Z.), bessel functions, dynamic analysis, mathematical methods, vibration (free), *9307*

Liu (Y.-Z.), dynamic analysis, dynamic response, gyrodynamics, *6058*

Liubushin (E.A.), differential equations (ordinary), dynamic stability, structural analysis, *7147*

Livesey (V.B.), crack initiation, fatigue, fracture mechanics, notch sensitivity, stress intensity factor, Knott (J.F.), *2408*

Livshits (L.D.), anisotropic media, microstresses, polycrystalline materials, pressure, stresses, Prishchepov (V.F.), *1877*

Livshits (Yu.E.), fluidized beds, solid fuels, velocity profiles, Tamarin (A.I.), *7988*

Lizarev (A.D.), dynamic behavior, shells (sandwich), shells (spherical), vibration (free), Rostanina (N.B.), *378*

Ljuboja (M.), buoyant flow, prediction, turbulent flow, wall jets, Rodi (W.), *1571*

Ljutzkanov (D.), see Tepavitcharov (A.), *9271*

Llewellyn (G.J.), see Stanley-Wood (N.G.), *12058*

Llibre (J.), libration theory, three body problem, topological techniques, Simo (C.), *1787*
- circumnavigation, restricted three body problem, three body problem, Simo (C.), *4953*
- see Simo (C.), *10770*

Lloyd (G.J.), crack initiation, crack propagation, high temperature, thermal loading, Wood (D.S.), *8372*

Lo (H.C.), see Carlson (R.L.), *11316*

Lo Bianco (M.), design (optimum), prestressed concrete, ultimate strength, Mazzarella (C.), *10341*

Lo Schiavo (M.), entropy, thermodynamic functions, thermodynamics (statistical), Maschio (G.), *6745*

Lo Surdo (C.), equilibrium, fredholm equations, magneto fluid dynamics, resistance, toroids, *4748*

loads, torsion, wind loads, Kareem (A.), *515*
- beams, euler equations, Tahiani (C.), Srivastava (N.K.), *1219*
- random loading, stochastic processes, Chalk (P.L.), Corotis (R.B.), *1432*
- design, reinforced concrete, Noakowski (P.), *1442*
- load transfer, piles, porous media, saturation, soils, Niumpradit (B.), Karasudhi (P.), *2385*
- elastoplasticity, incremental analysis, stress analysis, Cheng (S.Y.), Hsu (T.R.), (et al.), *3271*
- convergence, iterative methods, radial loading, Gorodetskii (A.V.), *3273*
- highways, soils, wheels, Corapcioglu (M.Y.), Ural (A.N.), *3416*
- ice mechanics, offshore structures, probabilistic design, Wheeler (J.D.), *3524*
- dynamic response, fatigue, foundations, offshore structures, resonance, Smith (I.M.), Molenkamp (F.), *3558*
- bearings, elasticity (nonlinear), elastomers, springs, Lehmann (D.), *3571*
- dynamic analysis, seismic loading, structural analysis, thermal effects, wave loads, Brebbia (C.A.) eds., Gould (P.L.), (et al.), *4536, book*
- damping, flutter, optimization, Claudon (J.-L.), Sunakawa (M.), *5342*
- ice, offshore structures, ship structures, Hysing (T.), *5364*
- composite materials, fatigue, material testing, Oldyrev (P.P.), *6204*
- linear programming, reliability analysis, structural design, Casciati (F.), Faravelli (L.), *6517*
- fatigue, life expectancy, Proshkovets (I.), Voitishek (Ya.), *6948*
- bridges, probabilistic design, random loading, Buckland (P.G.), Navin (F.P.D.), (et al.), *8454*
- friction (sliding), steel, vacuum, Gamulya (G.M.), Dobrovolskaya (G.V.), (et al.), *9321*
- bearings (gas lubricated), discharges, lubricants (gas), lubrication (hydrostatic), Shatokhin (S.N.), Kodnyanko (V.A.), *9969*
- bearing capacity, bearings (gas lubricated), lubricants (gas), lubrication (hydrodynamic), surface flaws, Balasanyan (V.S.), *9975*
- bearing capacity, bearings (roller), computer aided design, design, Dziurski (A.), Kania (L.), (et al.), *9977*

Lobachev (A.G.), see Proshutinskii (A.P.), *1713*

Lobanov (E.V.), see Voronovich (A.G.), *11590*

Lobas (L.G.), see Goncharenko (V.I.), *9088*

Lobert (G.), induced drag, lift, optimization, subsonic flow, swept wings, *10501*

Lobkovskii (L.I.), see Karakin (A.V.), *8931*

Lockner (D.), see Solberg (P.), *5884*

Lockwood (F.C.), see Levy (Y.), *5841*

locomotion, gait, stabilization, walking apparatus, Bordyug (B.A.), *539*
- gait, human body, shock absorbers, shock waves, Voloshin (A.), Wosk (J.), (et al.), *4117*
- biocontrol, gait, optimization, Beletskii (V.V.), Kovaleva (E.D.), (et al.), *7111*
- biodynamics, biomechanics, gait, Tibarewala (D.N.), Ghosh (A.K.), (et al.), *9055*
- gait, human body, rigid bodies, Hardt (D.E.), Mann (R.W.), *9056*

locomotives, damage (cumulative), spectral analysis, stochastic processes, suspension systems, Garivaltis (D.S.), Garg (V.K.), (et al.), *4485*

Loehrke (R.I.), see Lane (J.C.), *574*
Loewenthal (S.H.), see Anderson (N.E.), *2560*
- see Rohn (D.A.), *8473*
- see Savage (M.), *10929*

Lof (G.O.G.), see Kreith (F.), *5605*
Loftus (F.P.), see Ryley (D.J.), *2752*
Logan (J.D.), compressible flow, group theory, shock waves, similarity methods, Perez (J. De J.), *9640*
Loginov (P.M.), see Malgun (M.M.), *3488*
Loginov (V.I.), see Lapiga (E.Ya.), *6862*
Loginov (V.M.), chaotic modulation, modulated systems, oscillators, stochastics, Shapiro (V.E.), *4955*
Loh (H.-T.), damping, ducts, sound fields, vibration, walls, Reethof (G.), *11928*
Loiacono (N.J.), see Russo (E.P.), *2545*
Lokai (V.I.), blades, layered media, multilayer, porous surfaces, temperature, turbomachinery, Zhuikov (V.V.), (et al.), *2822*
Lokshin (A.A.), interface waves, materials possessing memory, scattering, viscoelastic waves, *6341*
- elastic behavior, laplace transform, singular waves, tauberian theorems, time delay systems, *8124*

Lokshin (V.A.), see Chebulaev (V.V.), *3881*
Lomakin (V.A.), elasticity (nonhomogeneous), thermal properties, thermoelasticity, El-Karamani (A.M.), *2969*
Lombardero (M.), polar fluids, rheology, statistical continuum mechanics, Lago (S.), *6581*
- see Lago (S.), *6582*

London (S.), inertial waves, ray method, rotating bodies, shells (fluid-filled), spherical bodies, Shen (M.C.), *1599*
Long (G.E.), see Miksad (R.W.), *3127*
Long (M.B.), axisymmetric flow, jets, turbulence, turbulent mixing, Chu (B.T.), *9605*
- concentration, jets, mixing, particle fluid flow, scattered light, Chu (B.T.), (et al.), *10539*

Long (R.B.), data analysis, ocean waves, spectra, stochastic processes, surface waves, *7058*
Long (R.R.), boundary layer, mesolayer, shear flow, turbulence, turbulence model, Chen (T.C.), *645*
Longcope (D.B.), see Forrestal (M.J.), *4457*
- conical bodies, penetration, porous media, rocks, Forrestal (M.J.), *6358*

Longeron (D.G), see Bardon (C.), *8929*
longitudinal stability, airplane performance, control, swept wings, Dzygadlo (Z.), Szendzielorz (C.), *1621*
- aerodynamic interference, aerodynamic performance, subsonic flow, visualization, wing body combinations, Lamar (J.E.), Frink (N.T.), *5494*
- design, dynamic loads, landing gears, stabilization, Allen (R.R.), O'Massey (R.C.), *8462*
- airplanes, control, flight control, lateral stability, stability, Etkin (B.), *8646, book*
- flow measurement, liquid fuels, pogo phenomenon, rockets, unsteady flow, Dordain (J.-J.), *9661*
- aerodynamic interference, aerodynamic performance, airplanes, boundary layer (control), stol, thrust, Paulson (J.W.) Jr., *10511*
- airplanes, algorithms, lift, unsteady effects, Wells (W.R.), Keskar (D.A.), *11735*
- bubbly flow, dynamic effects, liquid fuels, liquid vapor mixture, rockets, Kinelev (V.G.), Shkapov (P.M.), *11801*

Longuet-Higgins (M.S.), boundary conditions, free boundary, potential flow, time dependence, two dimensional flow, *567*
- gravity waves (solitary), gravity waves (surface), korteweg de vries equation, velocity profiles, *9619*
- finite amplitude, gravity waves (breaking), nonlinear analysis, *11581*

Lopez (J.L.), constrictions, experimental results, hydrodynamic stability, pipe flow, reynolds number (critical), *3705*
Lopez (R.), bottom irregularities, drag, erosion, icebergs, ocean, Chari (T.R.), (et al.), *6611*
Lord (A.E.) Jr., acoustic emission, soils, Koerner (R.M.), *5255*
Lord (P.R.), adhesives, textiles, twisting, yarn, Parson (J.R.), (et al.), *7312*
- damping, dynamic effects, textiles, twisting, yarn, Stuckey (W.C.), *7313*

Lordi (N.J.), atmospheric circulation, heat transfer (atmospheric), simulation, waves, Kasahara (A.), (et al.), *9929*
Lortz (D.), cylindrical bodies, equilibrium, magneto fluid dynamics, modes, pressure gradient, Nuhrenberg (J.), *6860*
Lorusso (J.A.), see Kaiser (E.W.), *7882*
Losco (L.), collision models, hamiltonian equations, periodic orbits, three body problem, Marchal (C.), *7914*
Loset (O.), see Furnes (O.), *4544*
Loskutov (G.S.), see Grishin (A.M.), *2853*
Losonci (P.), combustion, diesel engines, flow irregularities, geometrical properties, *8802*
Lotov (A.V.), see Bushenkov (V.A.), *9157*
Lotstedt (P.), kinematics, mathematical models, mechanical systems, rigid bodies, *9083*
Lottati (I.), see Nissim (E.), *2183*
- oscillatory flow, subsonic flow, two dimensional flow, wings, Nissim (E.), *7782*
- see Nissim (E.), *7906*

Loudon (R.), compressibility, conductivity, surface effect, thermal excitation, *8677*
Louis (J.F.), see El-Masri (M.A.), *5657*
Loukakis (T.A.), bending (elastic), moment distribution, ship design, wave interactions, Grivas (S.B.), *994*
Lourenco (L.), density, measurements, particle fluid flow, two phase flow, Riethmuller (M.L.), *4831*
Lovachev (L.A.), chemical kinetics, flame propagation, flames (laminar), *10704*
Love (M.D.) 47034, burgers equation, eddies, turbulence model, *658*
love waves, layered media, scattering, Niazy (A.), Kazi (M.H.), *4453*
- excitation, experimental methods, transducers (ultrasonic), Gulyaev (Yu.V.), Kurach (T.N.), (et al.), *6332*
- harmonic waves, nonhomogeneous media, Bukchin (B.G.), Levshin (A.L.), *6342*
- anisotropic media, elastic bodies, nonhomogeneous media, Chander (S.), Gogna (M.L.), *7423*
- half space, interface phenomena, prestressed structures, viscoelastic materials, Chattopadhyay (A.), De (R.K.), *9342*
- edge effects, elastic waves, Pyatakov (P.A.), *11171*

Lovegrove (J.M.), crack growth, fatigue, materials properties, reinforced concrete, Salah El Din (A.S.), (et al.), *2420*
- see Salah El Din (A.S.), *7489*

Lovett (J.R.), ocean, sound speed, underwater acoustics, *5761*
Low (C.K.), see Coull (A.), *6211*
Low (G.C.), nondestructive tests, response, transducers (ultrasonic), transient, ultrasonics, *1417*
Low (H.T.), see Newman (B.G.), *11632*
Low (H.Y.), beams (plastic), bearing capacity, indentation, large displacement, *3286*
Low (S.C.), drops, entrainment, liquid fuels, pulsatile flow, two phase flow, Baruah (P.C.), *6967*
low cycle fatigue, crack growth, hysteresis, Radhakrishnan (V.M.), *449*
- cyclic testing, experimental methods, random loading, Makhutov (N.A.), Zatsarinnyi (V.V.), (et al.), *491*
- biaxial loading, high temperature, life expectancy, Brown (M.W.), Miller (K.L.), *1351*
- deformation, life expectancy, resistance, welded joints, Daunis (M.A.), Daunene (S.A.), *1352*
- material testing, metals, plastic flow, Hatanaka (K.), Yamada (T.), (et al.), *1406*
- deformation, measurements, Kochetov (V.T.), Erofeev (V.I.), (et al.), *1414*
- fractographic tests, high temperature, notch tests, steel, triaxial loading, Marloff (R.H.), Johnson (R.L.), *2411*
- crack growth, fatigue, high temperature, Saxena (A.), *2417*
- cyclic loading, deformation, high temperature, Zhitkyavichene (V.P.), Medeksha (G.G.), *3269*
- alloys, crack growth, fatigue, rotors, Shih (T.T.), Donald (J.K.), *3439*
- notch sensitivity, steel, Maruyama (T.), Maruyama (S.), (et al.), *3446*
- high temperature, steel, vacuum, Maiya (P.S.), *4480*
- creep, cyclic testing, fatigue, turbines, Kloos (K.H.), Granacher (J.), (et al.), *5282*
- crack propagation, deformation (plastic), high temperature, Ivanova (V.S.), Gintsler (Ya.), (et al.), *6415*
- fracture criteria, polymers, probability, rubber, Valanis (K.C.), Yilmazer (U.), *6458*
- alloys, environmental tests, high cycle fatigue, high temperature, Soo (P.), Chow (J.G.Y.), *7478*
- aluminum alloys, crack growth, material testing, stress intensity factor, vacuum, Kirby (B.R.), Beevers (C.J.), *7484*
- corrosion fatigue, crack growth, hydrogen embrittlement, stress intensity factor, Endo (K.), Komai (K.), (et al.), *7495*
- damage (cumulative), micromechanics, nuclear radiation, De Vries (M.I.), Tjoa (G.L.), (et al.), *7501*
- acoustic emission, aluminum alloys, fatigue, nondestructive tests, tension, Baram (J.), Rosen (M.), *7559*
- creep, cyclic loading, metals, Pisarenko (G.S.), Troshchenko (V.T.), (et al.), *8213*
- composite structures, high cycle fatigue, reinforced bodies, Rosenkranz (G.), Gerold (V.), *9245*
- crack growth, plastics, Lebedeva (M.F.), Aleshin (V.I.), (et al.), *9386*
- creep, deformation, fracture, titanium, Strizhalo (V.A.), *9428*
- crack initiation, data analysis, gas turbines, prediction, stresses, Doner (M.), Bain (K.R.), (et al.), *10328*
- cyclic testing, high temperature, steel, strain softening, Gardiner (T.), *10329*

low gravity, metals, schlieren methods, solidification, Owen (R.B.), Johnston (M.H.), *10659*
low temperature, crack propagation, fatigue, magnesium alloys, Serdyuk (V.A.), *3438*
- deformation (plastic), steel, work hardening, Gurev (A.V.), Alkhimenkov (T.B.), *4352*
- experimental results, steel, work hardening, Novikov (N.V.), Gorodyskii (N.I.), *5118*
- thermal measurements, Novogrudskii (L.S.), Gorodyskii (N.I.), (et al.), *5530*
- beams (flexural), bending, reinforced concrete, Goto (Y.), Miura (T.), *6955*
- crack propagation, fatigue, rocks, steel, Mubeen (A.), *7480*
- fluids, high pressure, molecular theory, transport properties, Chung (T.H.), Lee (L.L.), (et al.), *7821*

- cryogenics, exergy analysis, thermodynamic properties, thermodynamics, Brodyanskii (V.M.), Semenov (A.M.), *8679*
- deformation, fracture, twinning, Tot (L.), *10277*
- composite materials, crack propagation, glass fibers, interlaminar stresses, Han (K.S.), Koutsky (J.), *10309*
- absorption, air conditioning, dehumidifying system, drying, evaporated films, film flow, fins, Peng (C.S.P.), Howell (J.R.), *10641*

low temperature properties, conduction, multiphase media, superconductors, Kogan (V.G.), *5531*

low thrust engines, artificial satellites, optimal control, two body problem, Vasilev (V.V.), *10779*

Lowe (A.), see Wall (T.F.), *10708*

Lowen (G.G.), see Tricamo (S.J.), *8475*

- see Tricamo (S.J.), *9478*

Lozano (C.), diffraction, gravity waves, sloping bottom, surface waves, Liu (P.L.-F.), *665*

Lozano (C.J.), see Lui (P.L.-F.), *1887*

- breakwater, gravity waves (finite depth), gravity waves (surface), scattering, *2705*
- mathematical models, numerical methods, stefan problem, Reemtsen (R.), *8740*

Lu (C.C.), boundary layer, critical heat flux, cylindrical bodies, drops, trajectories, two phase flow, Heyt (J.W.), *9690*

Lu (P.-C.), heat transfer, perturbation methods, porous media, *4029*

Lu (S.C.H.), containers (partially filled), containment, flexible walls, nuclear reactors, toroids, Mccauley (E.W.), (et al.), *11674*

Lubarda (V.A.), deformation (plastic), kinematics, plasticity, strain analysis, Lee (E.H.), *3258*

Lubliner (J.), axiomatic models, continuum mechanics, plasticity, thermodynamics (nonequilibrium), *8206*

Lubock (P.), brain, cavitation, head, impact, injuries, Goldsmith (W.), *6007*

Lubonski (J.), see Kalita (W.), *8561*

lubricants, bearings, bearings (hydrodynamic), bearings (hydrostatic), lubrication, Gross (W.A.), Matsch (L.A.), (et al.), *4110, book*

- adhesion, chemical reactions, friction, lubrication, wear, Buckley (D.H.), *5972, book*
- ductility, lubricants (liquid), steel, upset forging, Doraivelu (S.M.), Gopinathan (V.), *5991*
- friction (sliding), lubrication (boundary), Kajdas (C.), Nita (J.), (et al.), *7080*
- bearings, machinery, prediction, wear, Godet (M.), *9017*
- grease, threaded joints, Gansheimer (J.), *9038*

lubricants (dry film), adhesives, friction (sliding), lubrication (boundary), metals, thin films, Iliuc (I.), *4889, book*

- high pressure, phase changes, thermophysical properties, Rolle (K.C.), Crisp (J.N.), (et al.), *10564*

lubricants (gas), bearings (gas lubricated), bearings (thrust), lubrication (hydrostatic), shock waves, Boffey (D.A.), Wilson (P.M.), *8056*

- carbides, coatings, friction (sliding), gases, high pressure, wear, Skinner (J.), *9948*
- bearings (gas lubricated), bearings (journal), bearings (porous metal), lubrication (hydrostatic), Rao (N.S.), *9954*
- bearings (gas lubricated), bearings (thrust), reynolds equation, vibration, Wernerowski (K.), *9966*
- bearings (gas lubricated), discharges, loads, lubrication (hydrostatic), Shatokhin (S.N.), Kodnyanko (V.A.), *9969*
- bearings (gas lubricated), bearings (journal), deformation, lubrication (hydrodynamic), Grudskaya (E.G.), Zablotskii (N.D.), *9971*
- bearings (gas lubricated), bearings (journal), lubrication (hydrodynamic), Bezrodnyi (V.G.), *9972*
- balancing, bearings (gas lubricated), bearings (spherical), rotors, Karpov (V.S.), Prokulevich (L.A.), *9973*
- balancing, bearings (gas lubricated), bearings (spherical), Lyusin (V.M.), Smirnov (B.I.), (et al.), *9974*
- bearing capacity, bearings (gas lubricated), loads, lubrication (hydrodynamic), surface flaws, Balasanyan (V.S.), *9975*
- bearings (gas lubricated), bearings (spherical), optimization, Emelyanova (L.S.), *9976*

lubricants (liquid), debris, friction (sliding), high speed, lubrication (boundary), wear, Conor (P.C.), Mcrobie (D.E.), *997*

- film thickness, gears (spur), oil films, wear, Hirano (F.), Ichimaru (K.), (et al.), *1016*
- bearings (liquid lubricated), machine design, reliability design, Bushe (N.A.), Zakharov (S.M.), *1020*
- additives, friction, lubrication (boundary), wear, Kragelskii (I.V.), Rybakova (L.M.), (et al.), *1021*
- bearings (journal), machine design, pumps, rotors, Ruddy (A.B.), *1028*
- dielectrics, viscoelasticity, viscosity, Bair (S.), Winer (W.O.), *1940*
- bearings (ball), high speed, lubrication, Schuller (F.T.), Signer (H.R.), *3577*
- internal combustion engines, temperature, viscometry, Shaub (H.), Murphy (C.K.), *3757*
- bearings (journal), lubrication (hydrodynamic), Michau (B.), *4902*
- lubrication (hydrodynamic), reynolds number, squeeze films, Hamza (E.A.), Macdonald (D.A.), *5980*
- pressure, viscosity, So (B.Y.C.), Klaus (E.E.), *5989*
- ductility, lubricants, steel, upset forging, Doraivelu (S.M.), Gopinathan (V.), *5991*
- cutting, metals, Bhattacharyya (S.K.), Jetley (S.K.), *5992*
- bearings (journal), lubrication (hydrodynamic), reynolds equation, whirling shafts, Murata (S.), Miyake (Y.), (et al.), *5995*
- bearings (roller), high speed, lubrication (elastohydrodynamic), Coe (H.H.), Schuller (F.T.), *5998*
- friction (sliding), metals, scoring, viscosity, wear, Drozdov (Yu.N.), Archegov (V.G.), *7081*
- friction (sliding), heat transfer (direct contact), lubrication (boundary), scoring, Fujita (K.), Obata (F.), *7097*
- jets, non newtonian flow, polymers, squeeze films, Oliver (D.R.), Shahidullah (M.), *7103*
- bearings (thrust), inertia, lubrication (hydrostatic), viscoelastic fluids, Sinha Roy (J.), Biswal (B.), *8058*
- bearings (journal), lubrication (hydrodynamic), Kumar (V.), *8060*
- additives, friction, lubrication (boundary), scoring, Matveeskii (R.M.), Buyanovskii (I.A.), (et al.), *9036, book*
- ferrography, lubrication, particles, wear, Kjer (T.), *9949*
- bearings (journal), lubrication (hydrodynamic), power law fluids, squeeze films, viscosity, Shukla (J.B.), Prasad (K.R.), (et al.), *9952*
- bearings (journal), friction (solid fluid), lubrication (hydrodynamic), mathematical models, Usov (P.P.), Toder (I.A.), (et al.), *9970*
- additives, lubrication (boundary), oil films, polar fluids, Okabe (H.), Kanno (T.), *10893*
- heat transfer, thermal effects, viscosity, Constantinescu (V.N.), Smith (R.N.), (et al.), *10895*

lubricants (solid), friction, polymers, roughness, Ainbinder (S.B.), *1003*

- friction (sliding), polymers, wear, Sviridenok (A.I.), Savkin (V.G.), *1004*
- friction (sliding), lubrication (solid), Ravindran (K.A.), Ramasamy (P.), (et al.), *4112*
- bearings (unlubricated), friction (sliding), friction (solid solid), lubrication (boundary), Kato (S.), Yamaguchi (K.), (et al.), *9018*

lubrication, adhesion, bearings, friction, traction, Dowson (D.) eds., Taylor (C.M.), (et al.), *1924, book*

- friction, survey, wear, Rundesanstalt Fur Materialprufung, *1925, book*
- bearings (ball), high speed, lubricants (liquid), Schuller (F.T.), Signer (H.R.), *3577*
- bearings, bearings (hydrodynamic), bearings (hydrostatic), lubricants, Gross (W.A.), Matsch (L.A.), (et al.), *4110, book*
- coatings, dies, drawing, glass fibers, Eichenbaum (B.R.), *4681*
- adhesion, chemical reactions, friction, lubricants, wear, Buckley (D.H.), *5972, book*
- bearings, friction, machine design, wear, Cameron (A.), Ettles (C.M.Mc.), *7078, book*
- ferrography, lubricants (liquid), particles, wear, Kjer (T.), *9949*
- energy conservation, friction, tribology, wear, Jost (H.P.), Schofield (J.), *9980*

lubrication (boundary), debris, friction (sliding), high speed, lubricants (liquid), wear, Conor (P.C.), Mcrobie (D.E.), *997*

- friction (sliding), metals, wear, Rabinowicz (E.), *1008*
- additives, friction, lubricants (liquid), wear, Kragelskii (I.V.), Rybakova (L.M.), (et al.), *1021*
- additives, chemical reactions, friction, metals, Sanin (P.I.), *1022*
- additives, adsorption, friction, thermal effects, Matveeskii (R.M.), *1942*
- additives, aluminum alloys, corrosion, wear, Poole (W.), Sullivan (J.L.), *3041*
- friction (rolling), friction (sliding), steel, wear, Aksenov (A.F.), Belyanskii (V.P.), (et al.), *3042*
- adhesives, friction (sliding), lubricants (dry film), metals, thin films, Iliuc (I.), *4889, book*
- friction (sliding), lubrication (hydrodynamic), roughness, steam turbines, Rohde (S.M.) eds., Cheng (H.S.), *4895, book*
- human body, joints, lubrication (elastohydrodynamic), lubrication (hydrostatic), Mamell (P.), White (R.K.), *5996*
- friction (sliding), lubricants, Kajdas (C.), Nita (J.), (et al.), *7080*
- bearings (liquid lubricated), friction, wear, Habig (K.-H.), Broszeit (E.), (et al.), *7094*
- cold working, friction (rolling), friction (sliding), wear, Sethuramiah (A.), Shukla (B.M.), (et al.), *7096*
- friction (sliding), heat transfer (direct contact), lubricants (liquid), scoring, Fujita (K.), Obata (F.), *7097*
- bearings (unlubricated), friction (sliding), friction (solid solid), lubricants (solid), Kato (S.), Yamaguchi (K.), (et al.), *9018*
- friction (sliding), friction (solid fluid), lubrication (elastohydrodynamic), testing equipment, Capone (E.), Capone (G.), (et al.), *9034*
- additives, friction, lubricants (liquid), scoring, Matveeskii (R.M.), Buyanovskii (I.A.), (et al.), *9036, book*
- abrasion, friction (sliding), wear, Jahanmir (S.), *9947*
- additives, friction (rolling), friction (sliding), wear, Martin (J.-M.), Georges (J.-M.), *9979*
- additives, lubricants (liquid), oil films, polar fluids, Okabe (H.), Kanno (T.), *10893*
- bearings (ball), bearings (thrust), contact problems, Sen Gupta (S.K.), *10896*

lubrication (elastohydrodynamic), contact stresses, continuum mechanics, friction, rolling contact, wear, Cheng (H.S.) eds., Keer (L.M.), *996, book*
- gears, oil films, rolling contact, wear, Flamand (L.), Foucher (D.), (et al.), *1027*
- contact problems, micropitting, rolling contact, roughness, surface profiles, Berthe (D.), Flamand (L.), (et al.), *1931*
- film thickness, rolling contact, viscosity, Gecim (B.), Winer (W.O.), *1941*
- dynamic loads, film thickness, gears (spur), surfaces, temperature, Wang (K.L.), Cheng (H.S.), *2561*
- design, seals, stirling cycles, Etsion (I.), *2570*
- grease, squeeze films, Wada (S.), Tsukijihara (M.), *3045*
- friction (sliding), gears, transmissions, wear, Drozdov (Yu.N.), *3049*
- friction, gears (spur), Martin (K.F.), *3573*
- oscillations, rubber, squeeze films, variational methods, Hori (Y.), Kato (T.), (et al.), *4897*
- bearings (ball), experimental methods, film thickness, high speed, Coy (J.J.), Zaretsky (E.V.), *4899*
- elastic bodies, magneto fluid dynamics, rolling contact, Pytko (S.), Wierzcholski (K.), *4900*
- film thickness, friction (rolling), friction (sliding), rolling contact, Conry (T.F.), *5984*
- film thickness, rolling contact, rotating cylinders, squeeze films, Wada (S.), *5987*
- film thickness, rolling contact, Koye (K.A.), Winer (W.O.), *5988*
- human body, joints, lubrication (boundary), lubrication (hydrostatic), Marnell (P.), White (R.K.), *5996*
- bearings (roller), high speed, lubricants (liquid), Coe (H.H.), Schuller (F.T.), *5998*
- fatigue, film thickness, rolling contact, surface profiles, Tallian (T.E.), *7100*
- contact problems, rheology, thermal effects, traction, Houpert (L.), Flamand (L.), (et al.), *8064*
- contact problems, film thickness, reynolds number, viscosity, Evans (H.P.), Snidle (R.W.), *9027*
- bearings (ball), fatigue, lubrication (hydrodynamic), rolling contact, Hamrock (B.J.), Dowson (D.), *9032, book*
- bearings (roller), couple stresses, non newtonian flow, rolling contact, Sinha (P.), Singh (C.), *9033*
- friction (sliding), friction (solid fluid), lubrication (boundary), testing equipment, Capone (E.), Capone (G.), (et al.), *9034*
- film thickness, rolling contact, roughness, surfaces, Terauchi (Y.), Nonishi (T.), *9035*
- failure, friction (sliding), oil films, thin films, viscosity, Begelinger (A.), De Gee (A.W.J.), *9037*
- additives, antiwear films, chemical reactions, fatigue, films, rolling contact, wear, Sakurai (T.), *9961*
- film thickness, friction (solid fluid), seals, Kaisi (M.S.), *9962*
- bearings (slider), elastoplasticity, finite element methods, iterative methods, Curnier (A.R.), Taylor (R.L.), *10894*

lubrication (hydrodynamic), bearings (hydrodynamic), bearings (journal), reynolds equation, Banerjee (M.B.), Gupta (R.S.), (et al.), *1012*
- bearings (journal), laminar flow, Hinton (R.E.), Roberts (J.B.), *1019*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), Wadhwa (S.S.), Sinhasan (R.), (et al.), *1935*
- bearings (journal), oil films, vibration, Parkins (D.W.), *1937*
- bearings (journal), galerkin method, reynolds equation, Schmidt (J.), *3044*
- bearings (journal), flexible bodies, rotors, Leader (M.E.), Flack (R.D.), (et al.), *3047*
- high speed, rotating shafts, tools, Gaillard (M.), Boudet (R.), *3048*
- bearings (journal), rotating shafts, turbomachinery, vibration, Ruddy (A.V.), SummersSmith (D.), *3051*
- bearings (journal), damping, surface profiles, whirling shafts, Gamer (D.R.), Lee (C.S.), (et al.), *3052*
- bearings (journal), reynolds equation (lubrication), Knoll (G.), Peeken (H.), (et al.), *3146*
- bearings (slider), laplace transform, reynolds equation, Macdonald (D.A.), *4107*
- reynolds equation, turbulent flow, Kumar (V.), *4108*
- bearings (journal), thermal effects, turbulent flow, Wada (S.), Hashimoto (H.), (et al.), *4109*
- friction (sliding), lubrication (boundary), roughness, steam turbines, Rohde (S.M.) eds., Cheng (H.S.), *4895, book*
- bearings (slider), bearings (thrust), turbulent flow, Venkateswarlu (K.), Rodkiewicz (C.M.), *4898*
- bearings (journal), lubricants (liquid), Michau (B.), *4902*
- bearings (journal), design, design (optimum), lubrication (hydrostatic), Koshal (D.), Rowe (W.B.), *5979*
- lubricants (liquid), reynolds number, squeeze films, Hamza (E.A.), Macdonald (D.A.), *5980*
- bearings (journal), dynamic behavior, dynamic stability, Li (C.-H.), Rohde (S.M.), *5981*
- bearings (porous metal), bearings (thrust), non newtonian flow, temperature, Gorla (R.S.R.), *5982*
- bearings (slider), couple stresses, friction, non newtonian flow, Ramanaiah (G.), Sarkar (P.), *5986*
- bearings (journal), lubricants (liquid), reynolds equation, whirling shafts, Murata (S.), Miyake (Y.), (et al.), *5995*
- bearings (journal), turbulent flow, Kumar (V.), *7092*
- bearings (journal), finite element methods, friction (solid fluid), non newtonian flow, Tayal (S.P.), Sinhasan (R.), (et al.), *7093*
- channel flow, incompressible flow, navier stokes equation, plates (parallel), squeeze films, Verma (R.L.), *8057*
- bearings (tilted pad), dynamics, rotors, Malik (M.), Sinhasan (R.), *8059*
- bearings (journal), lubricants (liquid), Kumar (V.), *8060*
- finite element methods, galerkin method, navier stokes equation, non newtonian flow, Tayal (S.P.), Sinhasan (R.), (et al.), *8062*
- poiseuille flow, reynolds number, roughness, stokes flow, surfaces, Phan-Thien (N.), *8063*
- film flow, perturbation methods, rotating disks, stokes flow, Phan-Thien (N.), Antonia (R.A.), (et al.), *8633*
- bearings (journal), damping, rotors, stiffness, vibration (self excited), Michalopoulos (D.), Dimarogonas (A.), *9020*
- inertia, oscillating bodies, plates (parallel), squeeze films, viscoelastic fluids, Roy (J.S.), Biswal (B.), *9026*
- bearings (thrust), lubrication (hydrostatic), turbulence, Wilcock (D.F.), *9029*
- film thickness, reynolds equation, squeeze films, Vora (K.H.), *9031*
- bearings (ball), fatigue, lubrication (elastohydrodynamic), rolling contact, Hamrock (B.J.), Dowson (D.), *9032, book*
- bearings (thrust), film thickness, friction, pressure distribution, Safar (Z.S.), *9043*
- bearings (porous metal), magneto fluid dynamics, squeeze films, Patel (K.C.), *9044*
- bearings (journal), cavitation, numerical methods, reynolds equation, Meyer (G.H.), *9045*
- bearings (journal), lubricants (liquid), power law fluids, squeeze films, viscosity, Shukla (J.B.), Prasad (K.R.), (et al.), *9952*
- bearings (porous metal), bearings (slider), finite element methods, Malik (M.), Sinhasan (R.), (et al.), *9953*
- cartilage, human body, joints, squeeze films, viscoelasticity, Manohar (K.), Nigam (K.M.), *9958*
- bearings (journal), cavitation, seals, squeeze films, Pan (C.H.T.), Ibrahim (R.A.), *9959*
- additives, bearings (journal), micropolar media, reynolds equation, Singh (C.), Sinha (P.), *9963*
- bearings (journal), computer aided design, finite difference methods, reynolds equation, thermal effects, Cowking (E.W.), *9964*
- bearings (journal), friction (solid fluid), lubricants (liquid), mathematical models, Usov (P.P.), Toder (I.A.), (et al.), *9970*
- bearings (gas lubricated), bearings (journal), deformation, lubricants (gas), Grudskaya (E.G.), Zablotskii (N.D.), *9971*
- bearings (gas lubricated), bearings (journal), lubricants (gas), Bezrodnyi (V.G.), *9972*
- bearing capacity, bearings (gas lubricated), loads, lubricants (gas), surface flaws, Balasanyan (V.S.), *9975*
- bearings (journal), bearings (tilted pad), whirling shafts, Malik (M.), Sinhasan (R.), (et al.), *10376*
- bearings (journal), design, optimization, Mokhtar (M.O.A.), *10377*
- contact stresses, friction (sliding), hardness, scoring, viscosity, Drozdov (Yu.N.), Archegov (V.G.), *10888*
- bearings (porous metal), roughness, squeeze films, surfaces, Prakash (J.), Tiwari (K.), *10889*
- bearings (journal), non newtonian flow, squeeze films, Singh (C.), Sinha (P.), *10890*
- algorithms, bearings (hydrodynamic), cavitation, Elrod (H.G.), *10891*
- navier stokes equation, reynolds number, squeeze films, variational methods, Verma (R.L.), *10892*
- friction (solid fluid), geometrical properties, seals, Dhagat (S.K.), Sinhasan (R.), (et al.), *12091*
- reynolds equation, roughness, seals, surfaces, thermoelasticity, Wu (Y.-T.), Burton (R.A.), *12092*
- bearings (conical), bearings (hydrodynamic), friction (solid fluid), oil films, stiffness, Murthy (T.S.R.), *12094*

lubrication (hydrostatic), bearings (hydrostatic), film thickness, non newtonian flow, oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1013*
- bearings (hydrostatic), film thickness, non newtonian flow, thermal effects, El-Kayar (A.), Salem (E.A.), (et al.), *1014*
- bearings (hydrostatic), film thickness, non newtonian flow, oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1015*
- bearings (gas lubricated), bearings (thrust), stability, Etsion (I.), Green (I.), *1024*
- bearings (porous metal), bearings (thrust), inertia, magneto fluid dynamics, Zaheeruddin (K.), *1025*
- bearings (gas lubricated), bearings (journal), lubrication (hydrodynamic), Wadhwa (S.S.), Sinhasan (R.), (et al.), *1935*
- bearings (gas lubricated), bearings (journal), surface profiles, Pande (S.S.), Somasunderam (S.), *1936*
- bearings (gas lubricated), bearings (journal), reynolds equation, stiffness, Kamala (V.), *1943*
- friction, leaks, seals, wear, Lebeck (A.O.), *3036*

- bearings (thrust), shear flow, turbulent flow, Harada (M.), Aoki (H.), (et al.), *3043*
- bearings (gas lubricated), bearings (liquid lubricated), bearings (thrust), stiffness, Nakahara (T.), Kurisu (T.), (et al.), *4896*
- bearings (journal), design, design (optimum), lubrication (hydrodynamic), Koshal (D.), Rowe (W.B.), *5979*
- bearings (spherical), bubbly flow, Khalil (M.F.), Rhodes (E.), *5990*
- human body, joints, lubrication (boundary), lubrication (elastohydrodynamic), Marnell (P.), White (R.K.), *5996*
- bearings (gas lubricated), bearings (journal), finite difference methods, reynolds equation, Pande (S.S.), Somasundaram (S.), *7098*
- bearings (gas lubricated), bearings (thrust), Chen (N.N.S.), Ho (K.W.), *7099*
- bearings (gas lubricated), bearings (journal), dynamic stability, rotors, Gudskaya (E.G.), *7101*
- bearings, inertia, viscoelastic fluids, Rout (B.), Sinha Roy (J.), *7102*
- flexibility, seals, squeeze films, vibration, Etsion (I.), Dan (Y.), *7628*
- bearings (gas lubricated), bearings (thrust), lubricants (gas), shock waves, Boffey (D.A.), Wilson (P.M.), *8056*
- bearings (thrust), inertia, lubricants (liquid), viscoelastic fluids, Sinha Roy (J.), Biswal (B.), *8058*
- bearings (thrust), bearings (tilted pad), design, Safar (Z.S.), *8061*
- bearings (gas lubricated), bearings (journal), dynamic behavior, whirling shafts, Mori (A.), Aoyama (K.), (et al.), *8066*
- bearings (gas lubricated), bearings (journal), dynamic behavior, perturbation methods, Murata (S.), Miyake (Y.), (et al.), *8067*
- bearings (thrust), lubrication (hydrodynamic), turbulence, Wilcock (D.F.), *9029*
- bearings (porous metal), bearings (thrust), pressure distribution, temperature, viscosity, Yadav (J.S.), Kapur (V.K.), *9030*
- bearings (gas lubricated), bearings (journal), bearings (porous metal), lubricants (gas), Rao (N.S.), *9954*
- bearings (thrust), damping, film thickness, inertia, stiffness, Prabhu (T.J.), Ganesan (N.), *9956*
- bearings (hydrostatic), finite element methods, reynolds equation, Belousov (A.I.), Goryunov (L.V.), (et al.), *9960*
- bearings (gas lubricated), bearings (thrust), design (optimum), optimization, Shevchenko (A.V.), Fedotov (V.A.), (et al.), *9968*
- bearings (gas lubricated), discharges, loads, lubricants (gas), Shatokhin (S.N.), Kodnyanko (V.A.), *9969*
- bearings (gas lubricated), bearings (porous metal), bearings (thrust), stiffness, Singh (K.C.), Rao (N.S.), *10887*
- bearings (hydrostatic), laminar flow, optimization, stiffness, Debailleux (C.), Flamme (J.M.), *12095*

lubrication (solid), friction (sliding), lubricants (solid), Ravindran (K.A.), Ramasamy (P.), (et al.), *4112*
- bearings (unlubricated), contact problems, friction (solid solid), Floquet (A.), Play (D.), *5993*

Lucas (E.J.), see Fanning (A.E.), *8642*

Lucas (G.), detonation (condensed phase), explosives, impact, piercing, Sorel (J.), (et al.), *6893*
- see Sorel (J.), *8856*

Lucas (J.M.), failure, rocks, wedges, *428*

Lucas (R.J.), eigenvalue problems, helical flow, magneto fluid dynamics, modes, stability theory, *2877*

Lucchesi (M.), see Cella (A.), *1130*

Luchinin (A.G.), ocean waves, optical instruments, optical techniques, surface waves, *7054*

Lucjanek (W.), blades, dynamic analysis, helicopters, vibration (forced), Narkiewicz (J.), *9317*

Lucking (P.), see Ispas (I.), *9671*

Luco (J.E.), see Iguchi (M.), *3375*

Lucotte (J.-P.), see Goliger (J.), *2928*

Ludford (G.S.S.), see Matalon (M.), *7879*
- see Li (L.C.), *8585*

Ludtke (K.), compressors, energy conservation, exhaust gases, gas turbines, heat engines, heat exchangers, pipelines, *10547*

Ludwig (F.L.), atmospheric circulation, numerical methods, Byrd (G.), *3031*

ludwig tubes, design, orifices, reservoirs, Matsuo (K.), Kawagoe (S.), (et al.), *2763*
- transonic flow, unsteady flow, wind tunnels, Takashima (K.), *2770*

Luenberger (D.G.), see Feinstein (C.D.), *11069*

Lugovskiy (P.P.), see Mironov (B.P.), *11778*

Lugovtsov (A.A.), gravity waves (finite depth), korteweg de vries equation, nonlinear analysis, sloping bottom, *6695*

Lugovtsov (B.A.), see Vladimirov (V.A.), *4647*

Lugt (H.J.), diffusion, parabolic equations, vector methods, *4966*

Luh (J.Y.S.), control, digital control, manipulators, robotics, Walker (M.W.), (et al.), *9186*

Lui (P.L.F.), breakwater, diffraction, ocean waves, refraction, shallow water, Lozano (C.J.), (et al.), *1887*

Luijkx (J.M.), cellular flow, channel flow, convection (free), numerical methods, thermodynamics (nonequilibrium), Platten (J.K.), *2800*

Luk (W.-K.), see Liauw (T.-C.), *2539*

Lukerchenko (N.N.), compressible flow, jets, mixing, numerical methods, *8545*

Lukosevicius (K.K.), see Katinas (V.I.), *10767*

Lukovskii (I.A.), approximations (higher order), containers (partially filled), nonlinear analysis, sloshing, *11679*

Lula (R.A.) ed., ferrous metals, fracture toughness, mechanical properties, micromechanisms, stainless steels, toughness, *3501, book*

Lummus (J.R.), engines, jets, near ground effects, vtol, *687*

lumped systems, finite element techniques, fluid-structure interaction, numerical methods, Bathe (K.-J.), Sonnad (V.), *1608*
- algorithms, identification, time varying systems, Saha (D.C.), Rao (G.P.), *2088*
- models, vibration (flow induced), Naudascher (E.), Rockwell (D.), *2717*
- algorithms, identification, linear systems, poisson moment functionals, Saha (D.C.), Rao (G.P.), *4256*
- algorithms, identification, linear systems, time delay systems, Saha (D.C.), Rao (G.P.), *7246*
- beams, distributed systems, finite element techniques, Surana (K.S.), *8230*

Lunardini (V.J.), cylindrical bodies, freezing, melting, phase changes, *6800*
- cold climates, heat transfer, *7030, book*
- cylindrical bodies, heat transfer, phase changes, pipes, stefan problem, underground, variable thermal properties, *7854*

Lund (J.W.), bearings, damping, dynamic stability, rotors, *3053*

Lunde (P.J.), heat transfer, solar collectors, solar energy, *9738*

Lunderstadt (R.), airplanes, design, feedback, feedforward control, interception, optimal control, pursuit, *8169*

Lunev (V.V.), see Znamenskii (V.V.), *5607*
- see Zemlyanskii (B.A.), *10428*

lungs, respiratory system, spirometry, volumetric meters, Jones (D.P.), O'Connor (S.A.), (et al.), *1962*
- biomaterials, tissues, viscoelastic materials, Grotberg (J.B.), Davis (S.H.), (et al.), *3060*
- biomaterials, rheology, tissues, Fung (Y.C.), *3062*
- biomechanics, deformation, mechanical properties, tissues, Tai (R.C.), Lee (G.C.), *8071*
- blood flow, porous surfaces, pulsatile flow, Gopalan (N.P.), *8076*
- bronchi, flow measurement, respiratory system, Horsfield (K.), Thurlbeck (A.), *9061*

Lunkin (Yu.P.), see Golovachov (Yu.P.), *2992*

Lunn (T.S.), see Thompson (J.M.T.), *7773*
- see Thompson (J.M.T.), *7910*

Luo (S.J.), compressible flow, finite difference methods, potential flow, transonic flow, Zheng (Y.W.), (et al.), *6627*

Luong (L.H.S.), friction (solid solid), hot working, oxidation, steel, Heijkoop (T.), *7079*
- deformation (finite), deformation (plastic), microcracks, micromechanisms, Brown (R.H.), *8209*

Luongo (A.), cables, finite difference methods, vibration (free), Rega (G.), *3350*
- see Rega (G.), *6287*

Lupichev (L.N.), see Azarov (V.L.), *7236*

Lurie (K.A.), see Olhoff (N.), *2508*

Lushchaev (G.A.), nickel alloys, resistance, resistance thermometers, thermal measurements, Karchkov (V.A.), (et al.), *7822*

Lustman (L.), acoustic waves, alfven number, magneto fluid dynamics, nonlinear characteristics, shock waves, Geffen (N.), *2892*
- acceleration waves, elasticity (nonlinear), nonlinear waves, *4441*

Lutes (L.D.), approximations, first-passage approximations, oscillators, probabilistic design, probability theory, Chen (Y.-T.T.), (et al.), *2019*
- see Spanos (P.-T.D.), *7374*

Luther-Davies (B.), see Del Pizzo (V.), *3901*

Luti (F.M.), crossflow, fire, mathematical models, two dimensional flow, *843*

Lutikov (A.I.), interfaces, rayleigh waves, reflection, refraction, seismic waves, *5866*

Lutmanov (S.V.), differential games, guidance, interception, *3201*

Lutskiv (N.M.), design, feedback, modal control, multivariable systems, synthesis, Strepko (I.T.), *4221*

Lutton (R.J.), armor, impact, rocks, strength, Houston (B.J.), (et al.), *3414*

Lutze (F.H.), see Hreha (M.A.), *2744*

Lutzky (M.), conservation laws, lagrange equations, mechanics, particle dynamics, *7131*

Luu (T.S.), cascades, finite difference methods, incompressible flow, separated flow, viscous flow, Ta Phuoc Loc, *8593*

Luus (R.), see Wang (B.-C.), *132*
- model reduction, optimization, transfer functions, *4993*

Lux (R.A.), see Thomas (J.H.), *4053*

Luz (H.), cracking, experimental methods, flaw detection, instruments, magnetic field, testing equipment, *5338*

Lvov (G.I.), see Burlakov (A.V.), *3307*

Lvov (V.S.), couette flow, hydrodynamic stability, tollmien schlichting waves, transition, waves (azimuthal), Predtechensky (A.A.), *11487*
- nonlinear characteristics, sound flow interaction, turbulent flow, Mikhailov (A.V.), *11965*

Lvova (E.A.), rings, sound fields, sound generation, Khimunin (A.S.), *6937*

Ly (B.L.), beams, seismic loading, *9920*

Ly (D.P.), see De Saint Victor, *11506*

Lyakhov (A.G.), compressional waves, flow irregularities, shock waves, two phase flow, *11639*

Lyakhov (G.M.), explosions, explosive loading, explosive solid interactions, impulsive loading, impulsive transfers, Kovalenko (V.A.), (et al.), *9840*

Lyakhovka (G.V.), magneto fluid dynamics, orbit mechanics, oscillations, perturbation methods, *9821*

Lyamshev (L.M.), optical techniques, sound generation, thermal effects, Sedov (L.V.), *11915*

Lyapidevskii (V.Yu.), channel flow, elliptic equations, hyperbolic equations, unsteady flow, vortex flow, *8507*

Lyapkov (A.A.), cracks, fatigue, flaw detection, pipes, reflection, threaded joints, Spektorov (I.Sh.), *6494*

lyapunov's functions, differential equations (partial), mathematical methods, Bhat (M.S.), Shrivastava (S.K.), *12*

- lorentz model, mechanical systems, stability theory, Roshchin (N.V.), *30*
- control, optimization, power plants, Yamashita (K.), Taniguchi (T.), *173*
- adaptive systems, algorithms, control, Fradkov (A.L.), *187*
- mechanical systems, resonance, stability theory, Tkhai (V.N.), *1077*
- differential equations (ordinary), nonlinear mechanics, stability theory, Martinyuk (A.A.), *1081*
- linear systems, stability theory, time varying systems, Kuznetsov (V.P.), Kukareko (E.P.), *1145*
- matrix methods, optimization, Geromel (J.C.), Bernussou (J.), *1147*
- design, structural analysis, structural design, Carmichael (D.G.), *1153*
- artificial satellites, magnetic stabilization, Takezawa (S.), Ninomiya (K.), *1791*
- algorithms, stochastic control, tracking, trajectories, wiener-hopf technique, Afanasev (V.N.), Danilina (A.N.), *2137*
- oscillations, periodic orbits, satellites, Sarychev (V.A.), Sazonov (V.V.), (et al.), *2918*
- dynamic analysis, rotating bodies, Arkhangelskaya (M.Yu.), *3089*
- periodic orbits, stability theory, Krechetov (G.S.), *3098*
- nonlinear theory, stability theory, Cook (P.A.), *3148*
- large scale systems, stability theory, Saeki (M.), Araki (M.), *3168*
- power generation, stability theory, transient effects, transient stability, Ohsawa (Y.), Hayashi (M.), *3170*
- adaptive systems, model reference systems, optimal control, stability theory, Yadykin (I.B.), *3206*
- differential equations (ordinary), stability theory, Kosolapov (V.I.), *4156*
- linear systems, stability theory, Bakhilina (I.M.), Lerner (D.M.), *4216*
- control stability, design, feedback, interconnected systems, large scale systems, stability theory, Mahalanabis (A.K.), Singh (R.), *4250*
- nonlinear mechanics, oscillations, periodic orbits, poincare method, Proskuryakov (A.P.), *4945, book*
- dynamics, hamiltonian equations, stochaspic systems, Benettin (G.), Galgani (L.), (et al.), *4954*
- Afanasev (V.N.), Danilina (A.N.), *2137*
- oscillations, periodic orbits, satellites, Sarychev (V.A.), Sazonov (V.V.), (et al.), *2918*
- dynamic analysis, rotating bodies, Arkhangelskaya (M.Yu.), *3089*
- periodic orbits, stability theory, Krechetov (G.S.), *3098*
- nonlinear theory, stability theory, Cook (P.A.), *3148*
- large scale systems, stability theory, Saeki (M.), Araki (M.), *3168*
- power generation, stability theory, transient effects, transient stability, Ohsawa (Y.), Hayashi (M.), *3170*
- adaptive systems, model reference systems, optimal control, stability theory, Yadykin (I.B.), *3206*
- differential equations (ordinary), stability theory, Kosolapov (V.I.), *4156*
- linear systems, stability theory, Bakhilina (I.M.), Lerner (D.M.), *4216*
- control stability, design, feedback, interconnected systems, large scale systems, stability theory, Mahalanabis (A.K.), Singh (R.), *4250*
- nonlinear mechanics, oscillations, periodic orbits, poincare method, Proskuryakov (A.P.), *4945, book*
- dynamics, hamiltonian equations, stochastic systems, Benettin (G.), Galgani (L.), (et al.), *4954*
- bilinear systems, control, control stability, design, observers, Derese (I.), Noldus (E.), *5040*
- bilinear systems, control, design, Franke (D.), *5042*
- control, linear systems, nonlinear methods, observers, system uncertainty, Leitmann (G.), *6129*
- control, discontinuities, nonlinear systems, nonlinear theory, stability theory, Stalford (H.), *6131*
- adaptive systems, algorithms, design, discrete systems, observers, Tamaki (S.), Omatu (S.), (et al.), *6132*
- shells (cylindrical), stability theory, Leipholz (H.H.E.), *6258*
- artificial satellites, damping, flexible bodies, gravitational stabilization, Hablani (H.B.), Shrivastava (S.K.), *6886*
- control, design, gas turbines, model reference systems, Monopoli (R.V.), *7256*
- elastic bodies, rods, stability theory, Chiorescu (G.), *7354*
- rigid bodies, spinning bodies, stabilization, Kern (G.), *8097*
- matrix inversion, stability theory, systems, Ikeda (M.), Siljak (D.D.), *8102*
- dilute solutions, linear systems, polymers, stability theory, turbulent flow, Phan-Thien (N.), Atkinson (J.D.), *9094*
- asymptotic behavior, boundary conditions, hyperbolic equations, nonlinear analysis, Radzikowski (J.), Sadkowski (W.), *9104*
- difference equations, stability theory, stochastics, Bitmead (R.R.), Anderson (B.D.O.), *9119*
- restricted three body problem, stochastics, Gonczi (R.), Froeschle (C.), *9810*
- mathematical methods, vector methods, Lakshmikantham (V.), Leela (S.), (et al.), *10014*
- linear systems, matrix methods, state space techniques, Bialas (S.), *10075*
- buckling, dynamic stability, follower forces, plates, Leipholz (H.H.E.), *10175*
- algorithms, matrix methods, numerical methods, riccati equation, Balzer (L.A.), *11042*
- differential games, evasion, pursuit, Getz (W.M.), Pachter (M.), *11086*

Lychak (M.M.), see Kuntsevich (V.M.), *176*

- see Kuntsevich (V.M.), *4301*

Lykin (A.S.), see Yevstratov (V.F.), *3278*

Lykosov (V.N.), heat transfer (atmospheric), hydrology, mass transfer, meteorology (physical), soils, Palagin (E.G.), *1907*

Lykoudis (P.S.), see Wagner (L.Y.), *741*

Lykov (V.A.), implosion, laser plasma interaction, nuclear fusion, shells (spherical), turbulence (transport), Murashkina (V.A.), (et al.), *1782*

Lykyanenko (P.D.), filament winding, reinforced openings, shells (nonlinear), stress analysis, Makarenkov (A.G.), *251*

Lyle (C.D.), absorption, acoustic properties, acoustic waves, decay, reverberation, *10787*

- reverberation, sound fields, transient effects, *11937*
- acoustics, decay, reverberation, *12001*

Lynch (J.F.), arrays, reflection, sonar, underwater acoustics, Pitt (S.P.), (et al.), *3958*

- arrays, focusing, underwater acoustics, Stokes (R.H.), *12000*

Lynn (P.P.), fluid mechanics, infinite medium, interpolation, rock mechanics, soil mechanics, Hadid (H.A.), *3132*

- see Hadid (H.A.), *3300*

Lyrio (A.), see Bardina (J.), *1567*

Lysak (N.V.), see Plakhtienko (N.P.), *1261*

Lysanov (Yu.P.), see Ivakin (A.N.), *11912*

Lysenko (V.I.), frost, reynolds number, transition (reverse), transition flow, Maslov (A.A.), *1539*

Lysov (M.I.), deformation (plastic), geometric nonlinearities, materials processing, metals, plastic behavior, Sosov (N.V.), *3421*

Lytle (R.J.), see Laine (E.F.), *6396*

Lyubarov (B.I.), beams (flexural), cyclic loading, flexural loading, plastic behavior, *7319*

Lyubchak (V.A.), see Filshtinskii (L.A.), *325*

- anisotropic media, boundary value problems, cracks, plates (weakened), Filshtinskii (L.A.), *3249*

Lyusin (V.M.), balancing, bearings (gas lubricated), bearings (spherical), lubricants (gas), Smirnov (B.I.), (et al.), *9974*

M

Ma (B.M.), cladding, nuclear fuels, thermoelasticity (transient), *8878*

Ma (F.), difference equations, stability theory, stochastic systems, Caughey (T.K.), *1097*

- difference equations, stability theory, stochastic systems, Caughey (T.K.), *2018*

Ma (F.-S.), see Liu (T.-F.), *10868*

Ma (Y.-C.), capillary waves, evolution equations, gravity waves, nonlinear analysis, plasma, soliton solutions, *1094*

- bifurcation, finite amplitude, gravity waves, three dimensional formulation, *11561*
- resonance, scattering, wave interactions, *11621*

Maa (J.R.), boiling, drops, nucleate boiling, water, Tunc (C.Y.), *3791*

Maalouf (A.), see Sigli (D.), *8505*

Maamoun (A.), see Megahid (A.), *10358*

Maarsingh (R.A.), aerodynamic interference, jet propulsion, lift, wings, *2735*

Maattanen (M.), dynamic stresses, experimental mechanics, ice mechanics, *6309*

Macagno (E.), see Stavitsky (D.), *2642*

- see Stavitsky (D.), *3131*

Macagno (E.O.), see Stavitsky (D.), *7219*

Macavei (F.), eigenvalue problems, matrix methods, rayleigh method, *4150*

Macchi (E.), aerodynamic performance, aerodynamics, axial turbines, geometrical properties, optimization, Perdichizzi (A.), *6736*

Macco (A.), see Camisetti (C.), *5229*

Macconochie (I.O.), aerodynamic heating, aerodynamic loads, delta wings, space shuttle, structural analysis, Lemessurier (R.W.), (et al.), *8643*

Macdonald (D.A.), bearings (slider), laplace transform, lubrication (hydrodynamic), reynolds equation, *4107*

- see Hamza (E.A.), *5980*

Mace (B.R.), fluid-structure interaction, plates (stiffened), radiation, sound generation, *11942*

Maceri (A.), see Toscano (R.), *1230*

- see Toscano (R.), *2295*

Macey (J.P.), see Freudenstein (F.), *6553*

Macgregor (J.G.), see Mirza (S.A.), *9445*

mach stem, shock waves, spherical waves, trajectories, triple-point trajectory, Takayama (K.), Sekiguchi (H.), *2721*

Macha (J.M.), boundary layer, entrainment, interface phenomena, sprays, Norton (D.J.), *8910*

Machen (P.C.), see Halliwell (A.R.), *12072*

machinability, metallurgy, particles, steel, surface effect, Kalley (N.), Matijevic (E.), *552*

- aluminum alloys, damping capacity, materials properties, metallic composites, Deonath, Narayan (R.), (et al.), *5123*
- indentation, slip line methods, wedges, Petryk (H.), *8406*

machine design, dynamic behavior, vibration, Major (A.), *385, book*

- algorithms, contact problems, finite element methods, mechanical joints, Sachdeva (T.D.), Ramakrishnan (C.V.), *541*
- bearings (liquid lubricated), lubricants (liquid), reliability design, Bushe (N.A.), Zakharov (S.M.), *1020*
- bearings (journal), lubricants (liquid), pumps, rotors, Ruddy (A.B.), *1028*
- life expectancy, optimization, probability, tools, Sheikh (A.K.), Kendall (L.A.), (et al.), *1346*
- cams, gear trains, linkages, mechanisms, transmissions, Kozhevnikov (S.N.) ed., *2549, book*
- gears (spur), transmissions, Anderson (N.E.), Loewenthal (S.H.), *2560*
- machining (electrochemical), mathematical methods, optimization, Erden (A.), Kaftanoglu (B.), *3430*
- four bar linkage, kinematics, linkages, mechanisms (planes), Kimbrell (J.E.), Hunt (K.H.), *4558*
- bearings, spindles, stiffness, Shuzi (Y.), *4561*
- generators, retaining rings, rotors, steel, Viswanathan (R.), *5372*
- copper alloys, disks, springs, steel, Curti (G.), Orlando (M.), (et al.), *5374*
- contact problems, irregular elements, rotating bodies, stress analysis, Bagci (C.), Wong (J.C.), (et al.), *6117*
- bearings, friction, lubrication, wear, Cameron (A.), Ettles (C.M.Mc.), *7078, book*
- design, mechanisms (planes), structure, Miller (S.), Gronowicz (A.), (et al.), *7625*
- design (optimum), geneva mechanisms, high speed, Lee (T.W.), *7633*
- chip formation, metallography, temperature, tools, Wright (P.K.), Mccormick (S.P.), (et al.), *8363*
- balancing, flexible bodies, rotors, variable mass, vibration, Cveticanin (L.J.), *8478*
- elastoplasticity, interference fits, rotating bodies, Kollmann (F.G.), *9467*

machine elements, design criteria, flanges, pressure vessels, Waters (E.O.), Schneider (R.W.), *3570*

- connected bodies, contact stresses, joints, thermoelasticity, Attia (M.H.), Kops (L.), *3989*
- dynamics, pneumatic components, Gogrichiani (G.V.), *4549*
- contact problems, rings, Teplyi (M.I.), Chernets (M.V.), *7327*
- bimetallic materials, coatings, probability theory, reliability, strength, Kalmutskii (V.S.), *7600*
- damage (cumulative), design, fatigue, Proshkovets (I.), Voitishek (Ya.), *7634*

machinery, acoustic measurements, noise abatement, sound propagation, Schirmer (W.), *1818*

- numerical control, turning, Kudinov (V.K.), Taranenko (V.A.), (et al.), *2190*
- numerical control, turning, Yampolskiy (L.S.), Trotsenko (V.V.), (et al.), *2191*
- noise, simulation, spectra, Sasaki (K.), Sato (T.), (et al.), *2957*
- algorithms, nonlinear systems, optimization, sequential machines, Baibatshaev (M.Sh.), Popkov (Yu.S.), *3189*
- noise, noise abatement, Koss (L.L.), *3952*
- marine engineering, ships, Theremin (H.) eds., Robke (H.), *4104, book*
- cutting, numerical control, optimization, Cirp Annals 1981, *4468, book*
- flywheels, high speed, shafts, vibration, Pandey (R.C.), Midha (A.), *5371*
- dynamic response, tools, vibration (self excited), Soavi (F.), *6315*
- balancing, high speed, pitching, rotating shafts, yawing, Freudenstein (F.), Macey (J.P.), (et al.), *6553*
- hardness, particles, wear, Grosse (S.), *8053*
- noise, noise abatement, Koopmann (G.H.), Benner (H.), *8868*
- bearings, lubricants, prediction, wear, Godet (M.), *9017*
- boundary layer (three dimensional), disks, fluid mechanics, rotational flow, Toren (M.), Solan (A.), (et al.), *9559*
- acoustic measurements, damping, vibration, Koss (L.L.), Moffatt (J.A.), *9851*
- automation, computer aided manufacturing, manipulators, robotics, Whitney (D.E.), *10093*
- acoustics, flaw detection, noise measurements, Chaturvedi (G.K.), Thomas (D.W.), *10374*
- finite element techniques, noise, radiation, Thompson (B.S.), *11943*

machining (electrochemical), electric spark discharge, water, Jeswani (M.L.), *3428*

- finite element techniques, tools, Jain (V.K.), Pandey (P.C.), *3429*
- machine design, mathematical methods, optimization, Erden (A.), Kaftanoglu (B.), *3430*
- grain size, material testing, metallurgy, Krishnaiah Chetty (O.V.), Radhakrishnan (V.), *4472*
- residual stresses, strain measurement, surfaces, Chadwick (F.J.), *5321*

Mack (L.M.), boundary layer, stability theory, suction, swept wings, transition flow, *9570*

Mackenzie (K.V.), ocean, sound speed, underwater acoustics, *8858*

Mackertich (S.S.), elastic bodies, impulse, plates, sound generation, Hayek (S.I.), *4766*

Macklis (H.), optimization, orbit transfer, payloads, space shuttle, thrusters, Sackheim (R.L.), (et al.), *7892*

Maclaine-Cross (I.L.), heat transfer, regenerators, specific heat, *10624*

- cooling, crossflow, evaporation, heat exchangers, regenerators, Banks (P.J.), *11767*

Macmanus (R.K.), see Vito (R.P.), *7112*

Macmillan (N.H.), see Rickerby (D.G.), *6365*

Macmillan (R.D.C.), see Hill (P.G.), *1655*

Macpherson (H.), buried structures, ocean bed, pipelines, porous media, potential flow, wave loads, *562*

Macpherson (M.K.), modes, ocean bed, underwater acoustics, Frisk (G.V.), *6906*

macroscopic characterization, crack propagation, fractography, moisture, polymers, Bretz (P.E.), Hertzberg (R.W.), (et al.), *3434*

- heating, plasma (toroidal), tokamak, turbulence (mechanisms), Mitarai (O.), *3902*
- micromechanics, porous media, Burridge (R.), *5851*
- boundary conditions, boundary layer, Laptev (V.A.), Nagnibeda (E.A.), *7695*
- aluminum alloys, cyclic loading, deformation, metallography, microstructures, Wang (Z.G.), Ke (T.S.), *8429*

Maczuga (T.), channel flow, finite difference methods, free boundary, one dimensional flow, open channels, unsteady flow, *1501*

Madan (V.P.), beam columns, structural stability, viscoelastic materials, *357*

Maddox (A.R.), airplanes, containers, ejectable containers, ejectors, falling bodies, separation, trajectories, *8645*

Madejski (J.), drops, drying, tubes, two phase flow, *12037*

Madigosky (W.), see Fiorito (R.), *4779*

- acoustic waves, modes, reflection, resonance, transmission, viscoelastic materials, Fiorito (R.), *4787*
- see Fiorito (R.), *5738*

Madigosky (W.M.), see Kligman (R.L.), *9341*

Madrid (G.A.), estimation, kalman filters, navigation, space vehicles, Bierman (G.J.), *194*

Madsen (E.L.), acoustic waves, focusing, oscillating bodies, transducers, Goodsitt (M.M.), (et al.), *11970*

Maeda (K.), bearings (roller), crack propagation, cracking, failure, x ray techniques, Tsushima (N.), (et al.), *2410*

Maeda (Y.), bridges (highway), finite element techniques, linear theory, plates (stiffened), Sera (M.), *1136*

Maekawa (S.), acoustic loading, airplane structures, fatigue, galerkin method, monte carlo analysis, panels, *8434*

Maes (M.A.), see Decraemer (W.F.), *1951*

Maewal (A.), see Murakami (H.), *5575*

- conduction (heat), mathematical models, transient effects, transport properties, variable thermal properties, *6799*

- gyrodynamics, rings, rotating bodies, structural response, vibration (nonlinear), *7368*

Maga (L.J.), see Maidanik (G.), *11930*

Magaard (L.), see Gallagher (B.), *6685*

Magallon (D.), convection (free), heat transfer, laminar flow, tube bundles, *10587*

Magerramova (L.A.), see Grigolyuk (E.I.), *6251*

Maggs (F.A.P.), see Capon (A.), *2254*

Magiawala (K.R.), see Strand (L.D.), *5638*

- burners, energy methods, flow irregularities, sound fields, Culick (F.E.C.), *10793*

Maginu (K.), diffusion, periodic orbits, reaction kinetics, reaction-diffusion systems, travelling waves, *7168*

Magliozzi (B.), airplane structures, noise (random), turbojet engines, *10803*

magnesium alloys, crack propagation, fatigue, low temperature, Serdyuk (V.A.), *3438*

magnetic field, piezomagnetic field, volcanology, Sasai (Y.), *973*

- cracks, flaw detection, nondestructive tests, Edwards (C.), Palmer (S.B.), *1418*
- control stability, equilibrium, thermonuclear energy, tokamak, Rubin (I.K.), *2903*
- geomagnetic field, libration theory, orbit mechanics, Zabluda (S.M.), Yanshin (A.M.), *4759*
- elastodynamics, fracture, rods, Golovin (Yu.I.), Finkel (V.M.), (et al.), *5087*
- cracking, experimental methods, flaw detection, instruments, testing equipment, Luz (H.), *5338*
- earth, error, magnetometers, measurements, Gu (Z.-M.), Huang (H.-I.), *5868*
- earth, gravity, processing, Antonov (Yu.), *5871*
- earth, gravity, Strakhov (V.N.), *5878*
- earth, gravimagnetic anomalies, gravity, inverse problems, Nikonova (F.I.), Tsurilskiy (A.V.), *5879*
- non newtonian flow, porous surfaces, suction, Abdel-Gaid (M.A.), Khider (M.A.), (et al.), *6645*
- earth, electromagnetic field, prospecting, Enenshteyn (B.S.), *7031*
- earth, elasticity, tectonics, Sasai (Y.), *8000*
- earth, earth's crust, mantle, Pecherskiy (D.M.), Nazarova (E.A.), (et al.), *8001*
- continental drift, displacement, earth, paleomagnetism, Khramov (A.N.), *8002*
- adhesion, cutting, diffusion, tool wear, wear, Muju (M.K.), Ghosh (A.), *8055*
- geophysics, numerical methods, Slutskin (M.A.), Tsirel (V.S.), *9916*
- inspection, mechanical properties, rolling, sheet metal, Timoshenko (N.N.), Pyatunin (G.A.), (et al.), *10322*
- launching, space vehicles, Lemke (E.H.), *11803*
- generators, models, rotors, spherical bodies, Barash (Yu.S.), Kropachev (E.P.), *11830*
- drift waves, nonhomogeneous media, plasma, stability theory, Shivamoggi (B.K.), *11839*

magnetic fluids, high speed, magneto fluid dynamics, seals, Raj (K.), Stahl (P.), (et al.), *1944*

- averaging, channel flow, magneto fluid dynamics, reynolds number, Lavrentev (I.V.), *3895*
- convection (free), magneto fluid dynamics, Seki (M.), Kawamura (H.), (et al.), *5563*
- magneto fluid dynamics, seals, Orlov (L.P.), Fertman (V.E.), *5999*
- bearings (journal), magneto fluid dynamics, roughness, surfaces, Wierzcholski (K.), *6000*
- heat addition, liquid crystals (nematic), plates (parallel), thermal instability, Barratt (P.J.), Sloan (D.M.), *11368*

magnetic stabilization, magnetic levitation, simulation, transportation devices, vehicles, Cherchas (D.B.), *211*

- design, optimal control, rotor layer, Ulbrich (H.), *212*
- hydrodynamic stability, interface phenomena, mathematical models, Egorushkin (S.A.), Tsypkin (A.G.), *1578*
- artificial satellites, lyapunov's functions, Takezawa (S.), Ninomiya (K.), *1791*
- calibration, electromagnetic loading, flow measurement, geometrical properties, Smigielski (J.), *4683*
- automatic control, design, magnetic levitation, transportation devices, vehicles, Breinl (W.), *10082*

magneto fluid dynamics, pool boiling, Wagner (L.Y.), Lykoudis (P.S.), *741*

- chandrasekhar number, convection, electro fluid dynamics, rayleigh number, Riahi (N.), *760*
- generators, hall effect, nonhomogeneous media, nonlinear analysis, Kuo (S.), Cheo (B.), (et al.), *852*
- boundary layer, ducts (curved), liquid metals, theory, Arai (S.), Tomita (Y.), (et al.), *853*
- bounded media, cylindrical bodies, oscillatory flow, viscoelastic fluids, Varshneya (N.K.), *854*
- acceleration, convection (free), plates (vertical), suction, Raptis (A.A.), Tzivanidis (G.J.), (et al.), *855*
- boundary layer, numerical methods, plates (perforated), thermal effects, Drymonitou (M.A.), Geroyannis (V.S.), (et al.), *856*
- boundary layer (turbulent), combustion, discharges, waves, Okazaki (K.), Mori (Y.), (et al.), *857*
- nonlinear characteristics, rotating fluids, spherical bodies, vessels, Kiriushin (V.V.), *858*
- convection (free), plates (perforated), rotating bodies, slip flow, Vidyanidhi (V.), Raju (G.K.), (et al.), *859*
- boundary layer, induced drag, perturbation methods, rotating fluids, Sneyd (A.D.), *860*
- boundary layer (thermal), heat transfer, hydromagnetic stability, theory, Bashtovoi (V.G.), Pavlinov (M.I.), *861*
- ferrous metals, liquids, separation, suspensions, Boguslavskii (V.A.), Dvorchik (S.E.), (et al.), *863*
- liquid metals, numerical analysis, pipe flow, pulsatile flow, Sudou (K.), Tomita (Y.), (et al.), *864*
- bearings (porous metal), bearings (thrust), inertia, lubrication (hydrostatic), Zaheeruddin (K.), *1025*
- bearings (journal), bearings (magnetic), ferrofluids, non newtonian flow, Wierzcholski (K.), *1026*
- convection (free), geostrophic flow, heat, rotating fluids, Soward (A.M.), *1514*
- galerkin method, hartmann flow, nonlinear theory, stability theory, two dimensional flow, Lifshits (A.M.), Shtern (V.N.), *1771*
- analytical methods, couette flow, plates (parallel), two dimensional flow, Kishan (H.), Sharma (G.C.), *1772*
- elliptical bodies, porous media, pressure gradient, tubes, Gupta (G.D.), *1773*
- coordinate systems, geometrical properties, three dimensional formulation, vortex lines, Gangwar (S.S.), Babu (R.), *1775*
- high speed, magnetic fluids, seals, Raj (K.), Stahl (P.), (et al.), *1944*
- rotational flow, streamlines, theory, two dimensional flow, Chandna (O.P.), Toews (H.), (et al.), *2875*
- axisymmetric flow, computing techniques, finite difference methods, turbulent flow, Mikelson (Yu.Ya.), Pavlov (S.I.), (et al.), *2876*
- eigenvalue problems, helical flow, modes, stability theory, Lucas (R.J.), *2877*
- convection, liquids, stability, walls, Kuang (V.Z.), Kan (N.Z.), *2878*
- cylindrical bodies, liquid metals, theory, velocity profiles, Bashtovoi (V.G.), *2880*
- convection, cylindrical bodies, heat sources, numerical analysis, Chukhrov (A.Yu.), *2881*
- diffusion, dispersion, plates (parallel), solutions (material), Annapurna (N.), Gupta (A.S.), *2882*
- boundary layer, disks, hall effect, torsional waves, Krishna (D.V.), Prasada Rao (D.R.V.), *2883*
- convection (free), laplace transform, oscillatory flow, plates (perforated), viscous flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *2884*
- convection (free), friction (skin), plates, similarity methods, Brar (G.S.), *2885*
- boundary layer, cylindrical bodies, differential equations (partial), transport, Venkatachala (B.J.), Nath (G.), *2886*
- differential equations (ordinary), nonlinear theory, rotating disks, viscoelastic fluids, Bhatnagar (R.K.), *2887*
- approximations, rotating bodies, spherical bodies, torque, Natyaganov (V.L.), *2889*
- gravity, stability theory, theory, waves, Kochar (G.T.), Jain (R.K.), *2891*
- acoustic waves, alfven number, nonlinear characteristics, shock waves, Lustman (L.), Geffen (N.), *2892*
- cylindrical bodies, liquid metals, turbulence, two dimensional flow, Alemany (A.), Moreau (R.), (et al.), *2893*
- cylindrical bodies, duct flow, pumps, theory, Kapusta (A.B.), Shamota (V.P.), *2894*
- gravity, liquid gas mixture, separation, Kirko (G.E.), *2895*
- continuum mechanics, multicomponent flow, plasma, radiation properties, Pai (S-I.), *2896, book*
- ferrous metals, rotating bodies, seals, suspensions, Morris (W.D.), *3888*
- analytical methods, statistical theory, Taktarov (N.G.), *3889*
- bounded media, linearization, rotating fluids, stratified flow, Prasada Rao (D.R.V.), Krishna (D.V.), *3891*
- boussinesq equation, dispersion relation, gravity waves, propagation, El Sawi (M.), Eltayeb (I.A.), *3892*
- containment, liquid metals, melting, vessels, Getselev (Z.N.), Martinov (G.I.), *3894*
- averaging, channel flow, magnetic fluids, reynolds number, Lavrentev (I.V.), *3895*
- magnetoelasticity, polar fluids, suspensions, Suiazov (V.M.), *4137*
- couette flow, hall effect, heat transfer, rotating disks, Vidyanidhi (V.), Krishnam Raju (G.), (et al.), *4745*
- ducts (constant area), fourier series, pressure gradient, viscoelastic fluids, Sengupta (P.R.), Bhattacharyya (S.K.), *4746*
- approximations, duct flow, elliptic equations, singularities, Nye (V.A.), *4747*
- equilibrium, fredholm equations, resistance, toroids, Lo Surdo (C.), *4748*
- elastic bodies, lubrication (elastohydrodynamic), rolling contact, Pytko (S.), Wierzcholski (K.), *4900*
- free boundary, plasma (toroidal), tokamak, Berestycki (H.), Brezis (H.), *4969*
- convection (forced), ferrous metals, suspensions, thermophysical properties, Shulman (Z.P.), Kordonskiy (V.I.), (et al.), *5548*
- convection (free), magnetic fluids, Seki (M.), Kawamura (H.), (et al.), *5563*
- arcjet engines, space shuttle, thrusters, Kuriki (K.), *5668*
- duct flow, fins, fredholm equations, velocity profiles, Ariel (P.D.), Aggarwala (B.D.), *5672*
- axisymmetric flow, nonuniform flow, turbulent flow, velocity profiles, Gelfgat (Yu.M.), Gorbunov (L.A.), *5673*

M

- convection (free), laplace transform, plates (vertical), stokes flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *5675*
- capillary flow, inhomogeneities, mass transfer, porous media, Panasyuk (A.L.), Panchenko (M.S.), (et al.), *5677*
- discharges, metallurgy, models, vortex flow, Boyarevich (V.V.), *5678*
- anisotropic media, models, perturbation theory, turbulence, Montgomery (D.), Turner (L.), *5679*
- magnetic fluids, seals, Orlov (L.P.), Fertman (V.E.), *5999*
- bearings (journal), magnetic fluids, roughness, surfaces, Wierzcholski (K.), *6000*
- asymptotic behavior, hyperbolic equations, wave equations, Gustafsson (B.), *6060*
- linearization, measurements (dynamic), models, navier stokes equation, Bondarenko (N.F.), Gak (M.Z.), (et al.), *6856*
- compressible flow, cylindrical bodies, dynamic behavior, optimal control, Pavlov (E.G.), *6857*
- permeability, pulsatile flow, theory, two dimensional flow, Varshney (C.L.), *6859*
- cylindrical bodies, equilibrium, modes, pressure gradient, Lortz (D.), Nuhrenberg (J.), *6860*
- computing techniques, convection (benard), diffusion coefficient, penetration, Drobyshevski (E.M.), Kolesnikova (E.N.), (et al.), *6861*
- analysis, currents, experimental results, power generation, Pan (Y.-C.), Doss (E.D.), *6863*
- free boundary, induced drag, propellers, theory, Yakovlev (V.I.), *6864*
- cylindrical bodies, liquid metals, nonlinear systems, pumps, Fireteanu (V.), *6865*
- electro fluid dynamics, film thickness, squeeze films, Gupta (J.L.), Vora (K.H.), *7094*
- bearings (porous metal), electro fluid dynamics, film thickness, squeeze films, Gupta (J.L.), Patel (K.C.), (et al.), *7095*
- channel flow, plates (parallel), theory, velocity profiles, Belogrivtsev (V.M.), *7895*
- cylindrical bodies, pressure gradient, suspensions, transforms, Gupta (S.C.), Agarwal (M.C.), *7896*
- axisymmetric flow, electrical properties, mass transfer, solids with liquids, Polyanin (A.D.), Pryadko (P.A.), *7897*
- kelvin-helmholtz instability, porous media, streams, Sharma (R.C.), Singh (H.), (et al.), *7901*
- combustors, heat transfer (combined modes), mass transfer, three dimensional flow, Im (K.H.), Ahluwalia (R.K.), *8811*
- duct flow, liquid metals, nonuniform flow, thermoelectric phenomena, Shercliff (J.A.), *8812*
- boundary layer (thermal), heat transfer (combined modes), stability, surface effect, Bashtovoi (V.G.), Pavlinov (M.I.), *8813*
- compressible flow, plates (skew), stream function, theory, Chandna (O.P.), Barron (R.M.), *8814*
- boundary layer, generators, insulation, walls, Rankin (R.R.), Self (S.A.), (et al.), *8815*
- earth, modes, rotating bodies, spherical bodies, Gubbins (D.), *8816*
- heat transfer, liquid metals, models, welding, Atthey (D.R.), *8818*
- acceleration, hall effect, laplace transform, porous surfaces, Kant (R.), *8819*
- fluid injection, non newtonian flow, pressure gradient, stream function, Cobbie (M.H.), *8820*
- earth, energy conversion, geophysics, models, Olson (P.), *8821*
- gravity waves, planetary atmospheres, shear flow, wind, El Mekki (O.M.), *8822*
- convection, oscillatory flow, porous media, theory, Sharma (R.C.), Sharma (K.N.), *8824*
- boundary layer (thermal), channel flow, heat transfer, performance, Ahluwalia (R.K.), Doss (E.D.), *8826*
- liquid metals, measurements (dynamic), unsteady effects, velocity profiles, Chambarel (A.), Ricou (R.), (et al.), *8827*
- equilibrium, generators, hall effect, nonuniform flow, Rosenbaum (M.), Shamma (S.E.), (et al.), *8830*
- bearings (porous metal), lubrication (hydrodynamic), squeeze films, Patel (K.C.), *9044*
- boundary layer (thermal), rotating disks, similarity methods, Glazov (O.A.), *9710*
- heat addition, numerical methods, plates, similarity methods, Soundalgekar (V.M.), Takhar (H.S.), (et al.), *9784*
- film flow, liquid metals, stabilization, transport phenomena, Bashtovoi (V.G.), Denisenko (T.D.), (et al.), *9785*
- boundary layer, electrical conductivity, numerical analysis, vortex flow, Kalis (Kh.E.), Kolesnikov (Yu.B.), *9786*
- engines, marine engineering, propulsion, superfluids, Khonichev (V.I.), Yakovlev (V.I.), *9787*
- helical flow, modes, streamlines, two dimensional flow, Rakhimov (A.A.), *9788*
- insulation, numerical methods, panels (flat), shear flow, Sastry (S.R.N.), *9789*
- damping, films, liquid metals, surfactants, Gogosov (V.V.), Naletova (V.A.), (et al.), *9790*
- liquid metals, stability theory, theory, thin films, Tsebers (A.O.), Maiorov (M.M.), *9792*
- jets, liquid metals, stabilization, theory, Martynov (S.I.), Taktarov (N.G.), *9793*
- interfaces, jet boundaries, layered media, transport phenomena, Bashtovoi (V.G.), Krakov (M.S.), *9794*
- relaxation, stability theory, stress analysis, tensor methods, Simkhovich (S.L.), *9795*
- approximations, discontinuities, liquid metals, propagation, Patsegon (N.F.), *9797*
- barriers, impact, streams, waves, Berkovskii (B.M.), Bashtovoi (V.G.), (et al.), *9798*
- alfven number, generators, pinch effect, pumps, Rutkowski (J.), *9799*
- orbit mechanics, oscillations, Kuznetsov (L.I.), Chikova (N.V.), *9820*
- orbit mechanics, oscillations, perturbation methods, Lyakhovka (G.V.), *9821*
- convection, nonlinear materials, prandtl number, Riahi (N.), *10584*
- heat transfer (combined modes), mie scattering, radiant interchange, radiating flow, scattering, three dimensional flow, Ahluwalia (R.K.), Im (K.H.), *10612*
- annular flow, numerical methods, pipe flow, porous walls, Verma (P.D.S.), Singh (M.), *10732*
- ducts (variable area), experimental methods, liquid metals, walls, Holroyd (R.J.), *10734*
- end effects, interface phenomena, pipe flow, thermoelectric phenomena, Shercliff (J.A.), *10735*
- couette flow, plates (parallel), porous walls, unsteady flow, Mishra (S.P.), Muduli (J.C.), *10738*
- convection (free), oscillating bodies, plates (vertical), unsteady flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10739*
- convection (free), oscillating bodies, plates (vertical), stokes flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10740*
- experimental methods, layered media, rotating fluids, stabilization, Klyukin (A.A.), Kolesnikov (Yu.B.), (et al.), *10742*
- alfven number, equilibrium, rotating fluids, theory, Zeitunyan (R.Kh.), *10743*
- equilibrium, free boundary, interface phenomena, layered media, Kiryushin (V.V.), Chung Za Bin, *10744*
- decomposition, experimental methods, interfaces, jets, Arkhipenko (V.I.), Barkov (Yu.D.), *10745*
- annular flow, couette flow, rotating cylinders, stability theory, Antimirov (M.Ya.), Kolyshkin (A.A.), *10746*
- energy conservation, navier stokes equation, nonlinear theory, uniqueness, Bershadskii (A.G.), *10747*
- ferrous metals, gravity waves, liquid metals, theory, Shishkin (L.A.), Slatinskii (N.D.), *10748*
- boundary value problems, green function, integral methods, waves, Aleksandrova (A.A.), Khiznyak (N.A.), *10749*
- convection, plates (vertical), semi infinite media, theory, Soundalgekar (V.M.), Takhar (H.S.), *10750*
- ionic flow, power generation, steam, unsteady flow, Pozwolski (A.E.), *10751*
- channel flow, end effects, numerical methods, walled structures, Sarma (P.R.L.), Mittal (M.L.), (et al.), *10752*
- generators, liquid metals, measurements, two phase flow, Dunn (P.F.), *10753*
- liquid metals, mixing, unsteady flow, welding, Chernysh (V.P.), Shaida (L.M.), *10754*
- ferrous metals, liquid metals, seals, testing equipment, Mikhalev (Yu.O.), Orlov (D.V.), (et al.), *10755*
- channel flow, helical flow, pumps, two dimensional flow, Kapusta (A.B.), Zibold (A.F.), (et al.), *10756*
- differential equations (ordinary), diffusion, nonlinear analysis, reaction kinetics, Bishop (A.), Campbell (D.), (et al.), *10931*
- heat transfer, porous walls, rotating disks, Sarojamma (G.), Krishna (D.V.), *11508*
- boilers, convection, experimental results, heat transfer, radiation, Im (K.H.), Ahluwalia (R.K.), *11805*
- channel flow, electrical conductivity, temperature, theory, Vishnyakov (V.I.), Sultanov (I.F.), *11806*
- channel flow, mathematical models, pumps, stability theory, Poklonskii (E.V.), Elkin (A.I.), *11807*
- channel flow, drag coefficient, helical flow, pumps, Kapusta (A.B.), Likhacheva (A.I.), (et al.), *11808*
- channel flow, elastoplasticity, stability theory, tensor methods, viscous flow, Simkhovich (S.L.), Ionochkina (L.I.), (et al.), *11809*
- couette flow, heat transfer, plates (parallel), theory, Karimov (I.K.), Ryadno (A.A.), *11810*
- laplace transform, porous surfaces, rotating fluids, unsteady flow, Seth (G.S.), Jana (R.N.), (et al.), *11812*
- boundary layer (control), jet boundaries, laminar mixing, walled structures, Kiryushchenko (E.V.), Sheryazdanov (G.B.), *11813*
- ferrous metals, interaction, liquid metals, torque, Kashevskii (B.E.), *11816*
- ferrous metals, films, liquid liquid interface, liquid metals, Taktarov (N.G.), Bin (C.Z.), *11817*
- suspensions, thermal effects, two phase flow, vortex flow, Miroshnikov (V.K.), *11818*
- bubble dynamics, gravity, mixtures, models, Golosov (V.V.), Naletova (V.A.), (et al.), *11819*
- mass transfer, spherical bodies, surface effect, two phase flow, Oreper (G.M.), *11820*

- drops, gravity, stability theory, theory, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *11821*
- drops, equilibrium, shape, stability theory, Barkov (Yu.D.), Berkovskii (B.M.), *11822*
- bubble dynamics, experimental results, interfaces, stability theory, Tsebers (A.O.), Maiorov (M.M.), *11823*
- liquid metals, particles, reactor structures, thermonuclear energy, Muravev (E.V.), *11824*
- spherical bodies, stokes flow, transport phenomena, two phase flow, Miroshnikov (V.A.), *11825*
- eigenvalues, ferrous metals, liquid metals, tensor methods, Radojevic (D.), *11826*
- dilatancy, non newtonian flow, shear waves, theory, Pavlov (K.B.), *11829*
- analytical methods, electrical conductivity, velocity profiles, vortex flow, Kalis (Kh.E.), Kolesnikov (Yu.B.), *11832*
- calibration, flow measurement, liquid metals, meteorology, Kirshtein (G.Kh.), Kvasnevskii (I.P.), *11833*

magneto plasma dynamics, numerical methods, polar fluids, shock waves, similarity methods, Pushkar (E.A.), *2890*
- adiabatic processes, nonequilibrium effects, theory, variational methods, Pletnev (V.D.), Skuridin (G.A.), *2897*
- alfven number, dispersion relation, earth, solar wind, Guleimi (A.V.), *2899, book*
- accelerators, discharges, shock tubes (electromagnetic), similarity methods, Beloshitskii (V.V.), Komelkov (V.S.), (et al.), *2900*
- integral methods, transforms, two dimensional flow, viscid inviscid flow, Gorskii (V.B.), *5676*
- boilers, combustors, heat exchangers, open loop systems, Johnson (T.R.), Berry (G.F.), (et al.), *5680*
- channels, design criteria, generators, open loop systems, Kessler (R.), *5681*
- earth, nonlinear waves, plasma, shock waves, Chang (T.T.S.), *5682*
- astrophysics, convection, models, stability theory, Sankhla (V.D.), Bhatia (P.K.), *6867*
- hypervelocity, interaction, pulsatile flow, shock waves, Oliver (D.A.), Swean (T.F.) Jr., (et al.), *7898*
- energy conversion, filamentary structures, inhomogeneities, nonequilibrium effects, Petit (J.-P.), Billiotte (M.), *7899*
- energy conversion, nonequilibrium effects, perturbations, three dimensional flow, Artemov (V.I.), Sinkevich (O.A.), *7900*
- conformal mapping, hypersonic flow, solar wind, three dimensional flow, Belotserkovskii (O.M.), Mitnitskii (V.Ya.), *7902*
- hall effect, models, plates (perforated), rotating fluids, Shivamoggi (B.K.), *8817*
- approximations, expansion, radiation, waves, Shyam (R.), Sharma (J.), (et al.), *8823*
- finite difference methods, mathematical models, nonlinear analysis, two dimensional flow, Schnack (D.), Killeen (J.), *9791*
- existence theorems, isentropic processes, one dimensional flow, theory, Sulem (C.), Sulem (P.L.), *10733*
- channel flow, circuits, heat transfer, rarefied gases, Soundalgekar (V.M.), Akolkar (S.P.), *10737*
- centrifugation, jets, layered media, rotating fluids, Levin (V.B.), *10741*
- infinite medium, laplace transform, panels (flat), unsteady flow, Shivamoggi (B.K.), *11814*
- acceleration, hall effect, panels (flat), unsteady flow, Borkakati (A.K.), Pop (I.), *11815*
- discontinuities, propagation, radiating flow, shock waves, Shankar (R.), Jain (S.K.), *11826*

magnetoelastic waves, continuum theory, magnetoelasticity, Maugin (G.A.), Pouget (J.), *1054*
- cylindrical waves, thermal waves, thermoelasticity (transient), Chian (C.T.), Moon (F.C.), *6945*

magnetoelasticity, ferrous metals, liquids, oscillations, suspensions, Shishkin (L.A.), *862*
- continuum theory, magnetoelastic waves, Maugin (G.A.), Pouget (J.), *1054*
- anelasticity, elasticity (nonhomogeneous), micropolar media, vibration, Hsieh (R.K.T.), Voros (G.), *1058*
- cylindrical bodies, thermoelasticity (transient), thermomagnetic phenomena, Maruszewski (B.), *3238*
- magneto fluid dynamics, polar fluids, suspensions, Suiazov (V.M.), *4137*
- continuum theory, ferrous metals, waves, Maugin (G.A.), *4140*
- electroelasticity, piezoelectrics, thermoelectric phenomena, Parkus (H.) ed., *7265, book*
- cracks, plates (weakened), thermomagnetic phenomena, Kudriavtsev (B.A.), Parton (V.Z.), (et al.), *7266*
- plates, shells (thin), surveys, Ambartsumian (S.A.), *79999*

Magnucki (K.), postbuckling behavior, shells (conical), shells (sandwich), *2289*
Magnus (A.), see Lefevre (J.), *1044*
Magnussen (B.F.), see Hjertager (B.H.), *2765*
Magrab (E.B.), elastodynamics, structural analysis, vibration, *364, book*
Mah (R.S.H.), algorithms, newton method, nonlinear systems, Lin (T.D.), *5007*
Mahajan (R.L.), see Gebhart (B.), *9701*
Mahalanabis (A.K.), control stability, design, feedback, interconnected systems, large scale systems, lyapunov's functions, stability theory, Singh (R.), *4250*
- see Prasad (S.), *5865*

Mahalingam (S.), see Bishop (R.E.D.), *5189*
Mahapatra (G.B.), distributed parameters, optimal control, optimization, *1150*
Mahapatra (R.B.), composite materials, crack growth, crazing, penny shaped crack, stress intensity factor, Satapathy (P.K.), (et al.), *3473*
Mahdavian (S.M.), reynolds equation, rolling contact, rolling contact, temperature, viscosity, *9040*
Mahieu (A.P.), see Ooms (G.), *8028*
Mahin (S.A.), see Popov (E.P.), *2535*
Mahony (J.J.), boundary value problems, computer programming, differential equations (ordinary), stiff systems, Shepherd (J.J.), *7153*
- boundary value problems, differential equations (ordinary), eigenvalues, singular perturbations, stiff systems, Shepherd (J.J.), *7157*

Mahulikar (D.), see Slagle (W.P.), *5310*
- see Tsai (S.-D.), *9255*

Maidanik (G.), absorption, damping, noise abatement, statistical theory, *4807*
- acoustics (architectural), energy methods, statistical mechanics, *10792*
- acoustics, energy methods, reverberation, Maga (L.J.), *11930*

Maier (G.), see Kaneko (I.), *3515*
- see Konig (J.A.), *8436*
- see Gioda (G.), *9369*
- limit analysis, mathematical programming, optimization, plasticity, surveys, Munro (J.), *79999*

Mailliat (A.), diffusion, particle dynamics, turbulence, turbulence (transport), Duhamel (P.), *9614*
Maine (R.E.), computer programming, data analysis, dynamic response, fortran program, statistical theory, *2055*
- computing techniques, data analysis, flight control, stochastic processes, Iliff (K.W.), *6885*

Maiorov (M.M.), see Tsebers (A.O.), *9792*
- see Tsebers (A.O.), *11823*

Maiorov (V.A.), see Vasilev (L.L.), *8924*
- evaporation, porous media, resistance, two phase flow, *12067*

Maiorova (E.G.), see Kotlyarevskii (V.A.), *7440*
Maiti (M.), cracks, elasticity (linear), inclusions, Paramguru (R.), *3237*
- crack penetration, edge cracks, infinite medium, stress intensity factor, Paramguru (R.), *4492*
- crack opening displacement, dislocations, wedges, Paramguru (R.), *9396*

Maiti (M.K.), see Radhakrishnamacharya (G.), *8895*
Maiti (S.K.), crack propagation, cutting, edge cracks, fracture criteria, prediction, *2460*
Maiya (P.S.), high temperature, low cycle fatigue, steel, vacuum, *4480*
Maizenberg (T.L.), see Kolmanovskii (V.B.), *9173*
Majda (A.), see Engquist (B.), *2622*
Majewski (L.), algorithms, dynamic analysis, friction, gears, *9475*
Majhi (S.N.), bodies of revolution, drag, navier stokes equation, rotating bodies, secondary flow, Vasudeviah (M.), *2603*
Majid (K.I.), bending, panels (flat), reinforced concrete, shear, torsion, ultimate strength, Celik (T.), *3534*
Majima (Y.), see Sugimoto (N.), *11156*
Majithia (J.C.), see Yu (W.), *11093*
Major (A.), dynamic behavior, machine design, vibration, *386, book*
Majumdar (A.J.), see West (J.M.), *291*
Majumdar (A.K.), discharges, elliptic equations, finite difference methods, flow measurement, manifolds, *4589*
- see Datta (A.B.), *7725*

Majumdar (S.), finite difference methods, flame holders, models, recirculation, Bhaduri (D.), *1748*
Majumdar (S.R.), rotating bodies, stokes flow, toroids, O'Neill (M.E.), *3624*
Mak (A.F.), see Keer (L.M.), *8239*
Makarenko (I.P.), navier stokes equation, stratified flow, thermal instability, viscous effects, Simuni (L.M.), *10569*
Makarenkov (A.G.), see Lykyanenko (P.D.), *251*
Makarewicz (R.), air pollution, correlation, noise (traffic), noise abatement, Green (A.E.S.), *1815*
Makarov (A.L.), see Gledzer (Ye.B.), *6682*
- see Gledzer (Ye.B.), *7743*

Makarov (A.M.), nozzles, thermal stresses, thermoelasticity (transient), Kuranov (B.A.), (et al.), *3994*
- contact resistance, heat exchangers, heat exchangers (membrane), thermal contact resistance, Romanovskii (V.R.), *11769*

Makarov (G.I.), see Vinokurov (V.A.), *469*
Makarov (V.L.), see Kuzmin (A.V.), *11427*
Makarov-Mironov (A.M.), see Bekoryukov (V.I.), *4060*
Makarova (T.I.), acoustic measurements, atmospheric circulation, flow measurement, wind, *1919*
Makarovskii (E.L.), see Stoyan (Yu.G.), *2336*
Makashev (N.K.), boltzmann equation, combustion, kinetic theory, mathematical models, *5634*
- see Abramov (A.A.), *11442*

Makeev (E.M.), bending (elastic), shells (cylindrical), structural stability, thin walled structures, *6256*
- elastic foundations, plates, rings, structural analysis, structural optimization, Semenenko (V.P.), *11111*

Makeshri (J.C.), see Palmer (H.J.), *3849*
Makeyeva (L.K.), see Kosaryev (G.L.), *5869*
Makhmudov (A.A.), computing techniques, conductivity, ionized gases, shock waves, Popov (A.P.), *1613*
• see Aristov (V.V.), *11434*
Makhnenko (V.I.), elastoplasticity, plates (circular), thermal loading, welded joints, work hardening, Oleinik (V.A.), (et al.), *5796*
Makhnitskii (R.N.), see Pelekh (B.L.), *1180*
Makhutov (N.A.), cyclic testing, experimental methods, low cycle fatigue, random loading, Zatsarinnyi (V.V.), (et al.), *491*
• see Basko (E.M.), *4519*
Makhviladze (G.M.), see Kidin (N.I.), *5633*
• combustion, convection, navier stokes equation, Shcherbak (S.B.), *7888*
Maki (H.), design, floating bodies, flow measurement, pulsatile flow, unsteady flow, Ikeda (Y.), *5508*
Makin (V.K.), ocean air interaction, surface waves, wind-wave interaction, Chalikov (D.V.), *1902*
• energy transport, ocean air interaction, surface waves, wind-wave interaction, *4987*
Makino (M.), see Mitsumura (Y.), *3929*
Makishima (K.), see Komori (T.), *6201*
Maksimov (E.I.), chemical reactors, heat transfer, *827*
• see Butakov (A.A.), *828*
Maksimov (R.D.), see Sokolov (E.A.), *2228*
Malaichuk (V.P.), control, error, inspection, manufacturing, nondestructive tests, *5337*
Malanotte Rizzoli (P.), hydrodynamic stability, nonlinear analysis, rossby waves, solitary waves, Hendershott (M.C.), *11617*
• bottom irregularities, nonlinear analysis, rossby waves, solitary waves, *11618*
Malbakhov (V.M.), see Pushistov (P.Yu.), *8029*
Malcolm (D.G.), convection (forced), heat transfer, hot film, thermal measurements, transient effects, Verma (V.), *7846*
Malcolm (J.M.), see Russell (G.T.), *4322*
Malek-Madani (R.), constitutive equations, deformation (finite), elasticity (nonlinear), shock waves, thermodynamics (nonequilibrium), *4925*
Malek-Zavarei (M.), sensitivity, suboptimal control, time delay systems, time varying systems, *9182*
Malgun (M.M.), deformation, error, impact, strain gages, strain measurement, Loginov (P.M.), *3488*
Malhotra (A.), convection, nusselt number, solar collectors, solar energy, Garg (H.P.), (et al.), *6821*
Malik (M.), bearings (tilted pad), dynamics, lubrication (hydrodynamic), rotors, Sinhasan (R.), *8069*
• bearings (porous metal), bearings (slider), finite element methods, lubrication (hydrodynamic), Sinhasan (R.), (et al.), *9963*
• bearings (journal), bearings (tilted pad), lubrication (hydrodynamic), whirling shafts, Sinhasan (R.), (et al.), *10376*
Malik (M.R.), duct flow, heat transfer, turbulence, turbulence model, Pletcher (R.H.), *5467*
Malik (S.K.), columns, gravity, harmonic waves, hydrodynamic stability, liquids, Singh (M.), *7740*
• gravity waves, nonlinear waves, schrodinger equation, wave interactions, Singh (M.), *9621*
Malikova (T.A.), foundations, nonhomogeneous soils, slabs, *3407*
Malinin (N.I.), see Zezin (Yu.P.), *262*
Malkin (F.), experimental methods, floors, friction (sliding), measurements, Harrison (R.), *487*
Malkus (D.S.), eigenvalue problems, elasticity, finite element techniques, lagrange multiplier, stability (numerical), *76*
• constraints, finite element techniques, inelasticity, newton method, penalty function, *3134*
• elasticity, finite element techniques, finite strain, nonlinear characteristics, Fuller (E.R.) Jr., *4200*
Mall (S.), crack propagation, cracks, dynamic analysis, finite element techniques, *8421*
Mallinson (G.D.), laminar flow, rayleigh number, thermosyphons, three dimensional flow, Graham (A.D.), (et al.), *8702*
Malloy (J.F.), see Turner (W.C.), *6823*
Malmuth (N.D.), transonic flow, wall jets, wings, Murphy (W.D.), (et al.), *2668*
Malone (F.D.), finite element techniques, gravity waves (shallow water), integration (semi-implicit), Kuo (J.T.), *11693*
Malsch (H.), approximation theory, numerical methods, vibration, *2324*
Malte (P.C.), chemical kinetics, combustion, diffusion, exhaust gases, Schmidt (S.C.), (et al.), *3877*
Maltsev (L.E.), see Dorogin (A.D.), *1040*
Malushitsky (Yu.N.), centifuge tests, centrifugation, embankments, scale models, stability, *1329, book*
Malygin (A.F.), composite materials, inclusions, nonhomogeneous media, thermal fatigue, Yankovskii (Yu.V.), *7954*
Malyi (I.N.), see Korobko (V.I.), *11512*
Malyi (V.I.), elastoplasticity, functional analyis, polycrystalline materials, *8208*
Malyshenko (S.P.), see Strikovich (M.A.), *7835*
Malyshev (A.P.), dynamic analysis, shells, structural response, transient effects, *11139*
Malyshev (I.A.), algorithms, mathematical models, probability theory, simulation, Palagin (Yu.I.), *10060*
Malyshev (V.A.), algorithms, control, design, manipulators, robotics, Timofeyev (A.V.), *201*
Malyutin (I.S.), eigenvalue problems, fourier transform, stability theory, *4987*
• cylindrical bodies, shells (stiffened), vibration (forced), Nedbai (A.Ya.), *11135*
Mamaev (V.S.), blades, compliance, cutting, turbines, Dmitriev (S.N.), (et al.), *8364*
Mamalyga (V.M.), cranes, design, optimal control, oscillations, *3219*
Mamedov (A.M.), conductivity, liquids, physical properties, sound speed, thermal properties, *1656*
Mameeva (E.N.), see Volmir (E.A.), *2301*
Mamonov (V.N.), boundary layer (turbulent), fluid injection, heat transfer, porous media, turbulence, *655*
man machine systems, control, design, Pavlov (V.V.), Yakovlev (O.S.), (et al.), *217*
• control, design, ergatic control, Pavlov (V.V.), Voronin (A.N.), *2185*
• biocontrol, bones, Paciga (J.E.), Richard (P.D.), (et al.), *3069*
• identification, mathematical models, Krug (E.K.), Legovich (Yu.S.), (et al.), *3182*
• eyes, night vision, ocular system, Stone (L.W.), Sanders (M.G.), (et al.), *4329*
• automobiles, digital simulation, human engineering, maneuverability, Garrott (W.R.), Wilson (D.L.), (et al.), *5020*
• adaptive systems, control, Slutskii (L.I.), *5065*
• manipulators, prosthetic devices, robotics, Rovetta (A.), *7121*
• biocontrol, optimization, rowing, time optimal systems, Senator (M.), *7258*
• mathematical models, process control, simulation, stochastic systems, Hajnal (M.), Revesz (G.), *8172*
Manabe (K.), distributed parameters, dynamic analysis, pantographs, vibration (forced), Morikawa (T.), *4416*
Manak (J.J.), aorta, blood vessels, stress strain relationships, *3059*
Mandal (B.N.), elliptical bodies, vibration (torsional), *10036*
Mandel (J.), constitutive equations, deformation (finite), elastoplasticity, strain rate, *1051*
Manders (P.W.), failure, fibers, glass fibers, hybrid construction, micromechanisms, stochastics, Bader (M.G.), *3277*
Mandorini (V.), acoustic emission, crack growth, crack propagation, energy density, Ghelardoni (E.), (et al.), *7528*
Manelis (G.B.), see Strunin (V.A.), *9775*
Manero (O.), approximations (higher order), pipe flow, unsteady flow, viscoelastic fluids, Walters (K.), *2647*
maneuverability, automobiles, dynamic behavior, steering, vehicles, Panik (F.), Drosdol (J.), (et al.), *1459*
• dynamic analysis, gyrodynamics, rotating bodies, Chen (J.), Kane (T.R.), *3923*
• controllability, rudders, ship maneuvers, steering, Van Amerongen (J.), De Goeij (W.F.), (et al.), *4102*
• automobiles, digital simulation, human engineering, man machine systems, Garrott (W.R.), Wilson (D.L.), (et al.), *5020*
• kinematics, quaternions, space vehicles, Mayo (R.A.), *5715*
• towed body dynamics, Mudie (J.D.), Kastens (K.A.), *5963*
• automobiles, dynamic response, dynamic stability, steering, El-Gindy (M.), Ilosvai (L.), *7616*
• attitude control, optimal control, Junkins (J.L.), Turner (J.D.), *7924*
• artificial satellites, control, guidance systems, tethered satellites, Bschorr (O.), *7930*
• response, steering, vehicles, El-Gindy (M.), Ilosvai (L.), *8463*
• aerodynamic performance, airplanes, optimization, stalling, Well (K.H.), Faber (B.), (et al.), *9660*
• automobiles, brakes, digital simulation, Mitchell (B.), Abrams (R.), (et al.), *10057*
Manevich (L.I.), see Lesnichaya (V.A.), *370*
• dynamic analysis, mechanical systems, vibration (nonlinear), Pilipchuk (V.N.), *10191*
Manfride (G.), bearings (journal), finite element methods, reynolds equation, stability, Martelli (F.), *2567*
• see Martelli (F.), *9028*
Mang (H.A.), see Cedolin (L.), *2348*
Mang (Kh.), dynamic analysis, finite element methods, solid mechanics, Fisher (U.), (et al.), *9138*
Mangel (M.), algorithms, randomly moving object, search, statistical theory, tracking, *2177*
Mangeron (D.), dynamic behavior, rigid bodies, Irimiciuc (N.), *3085, book*
Mangiarotty (R.A.), boundary layer, noise, stability, wings, *4808*
• see O'Keefe (J.V.), *8867*
Mani (R.), ducts, shear flow, sound propagation, *6910*
• ducts (variable area), one dimensional flow, sound propagation, *7936*
manifolds, discharges, elliptic equations, finite difference methods, flow measurement, Majumdar (A.K.), *4589*
• finite difference methods, flow reversal, Datta (A.B.), Majumdar (A.K.), *7725*
manipulators, algorithms, control, design, robotics, Malyshev (V.A.), Timofeyev (A.V.), *201*
• control, mechanics, mechanisms, robotics, Morecki (A.), Bianchi, (et al.), *209, book*

- algorithms, control, design, robotics, trajectories, Lakota (N.A.), Lisenko (S.A.), (et al.), *214*
- algorithms, control, design, robotics, trajectories, Vereschagin (A.F.), Generozov (V.L.), *216*
- design, robotics, Shishigin (M.I.), Khomeriki (T.L.), *223*
- control, design, Ivkin (A.M.), Kudryashov, (et al.), *1159*
- dynamic analysis, robotics, vibration (forced), Yudin (V.I.), *3357*
- kinematics, mechanisms (planes), mechanisms (spatial), robotics, Duffy (J.), *3568, book*
- kinematics, robotics, structural support, Nitescu (P.N.), *4141*
- kinematics, robotics, Nitescu (P.N.), *4934*
- kinematics, robotics, Nitescu (P.N.), *4935*
- geometrical properties, kinematics, robotics, Sugimoto (K.), Duffy (J.), *6048*
- design, mechanical joints, mechanisms, robotics, Derby (S.), *6563*
- design, mechanisms, robotics, synthesis, Orlandea (N.), Berenyi (T.), *6564*
- man machine systems, prosthetic devices, robotics, Rovetta (A.), *7121*
- analog simulation, robotics, simulation, Backhouse (C.), Jones (J.R.), *7253*
- algorithms, design, robotics, Sugimoto (K.), Duffy (J.), *7630*
- control, decoupling, design, robotics, Freund (E.), Hoyer (H.), *8176*
- error, robotics, surfaces, Kumar (A.), Waldron (K.J.), *8469*
- algorithms, design, mechanisms (planes), robotics, Murata (H.), Hayashi (I.), *8480*
- kinematics, mechanisms (spatial), optimization, robotics, Benati (M.), Morasso (P.), (et al.), *9084*
- algorithms, robotics, Schmieder (L.), *9155*
- control, digital control, robotics, Luh (J.Y.S.), Walker (M.W.), (et al.), *9186*
- control, position control, robotics, servomechanisms, Hopfengartner (H.), *9189*
- algorithms, control, design, mechanisms (planes), robotics, Hewit (J.R.), Burdess (J.S.), *9482*
- control, mathematical models, robotics, Totani (T.), Miyakawa (S.), *10011*
- automation, computer aided manufacturing, machinery, robotics, Whitney (D.E.), *10093*
- control, decoupling, design, large scale systems, nonlinear systems, Vukobratovic (M.K.), Stokic (D.M.), *11049*

Manitius (A.), controllability, linear systems, time delay systems, *9154*

Mankbadi (R.), coherent structure, jets, multiple scales, turbulence, Liu (J.T.C.), *7752*

Mann (R.W.), see Rushfeldt (P.D.), *4907*
- see Patriarco (A.G.), *9052*
- see Hardt (D.E.), *9056*

Mann-Nachbar (P.), approximation methods, diffusion, singular perturbations, transient effects, *1105*

manned satellites, artificial satellites, reentry, weather satellites, Rex (D.), *10780*

Mano (K.), see Iwai (Z.), *2133*

Manocha (B.L.), see Dawood (A.S.), *753*
- transport phenomena, unsteady state, Al-Ali (B.M.A.), *833*

Manohar (K.), cartilage, human body, joints, lubrication (hydrodynamic), squeeze films, viscoelasticity, Nigam (K.M.), *9958*

Manolescu (N.I.), see Dranga (M.), *4551*

Manolis (G.D.), boundary integral methods, elastodynamics, laplace transform, stress concentration, Beskos (D.E.), *6160*

manometers, experimental methods, pressure, Taborek (P.), Goodstein (D.), *3777*

Manor (H.), see Adams (G.G.), *5143*

Manrique (J.A.), radiant interchange, solar collectors, thermal properties, Suarez (R.), *781*

Mansell (D.S.), see Pavlovic (M.), *347*

Mansfield (E.G.), design (optimum), pressure vessels, shells (of revolution), *1231*

Mansfield (E.H.), see Allman (D.J.), *6217*
- deformation (finite), springs, strips, torsion, *6218*
- gravity, membranes, wrinkling, *8245*

Mansfield (L.), computing techniques, finite element techniques, newton method, nonlinear analysis, *2064*
- finite element techniques, shells (nonlinear), shells (shallow), *8256*

Manson (N.), see Bowen (J.R.), *4734, book*

Mansoori (G.A.), corresponding states principle, critical region, hydrocarbons, molecular theory, thermophysical properties, Patel (V.K.), (et al.), *8676*

Mansot (J.L.), see Belin (M.), *5975*

Mansouri (A.H.), beams, dynamic analysis, ponding, roofs, vibration (free), Chinn (J.), *3290*

Mansouri (S.H.), see Williams (J.H.), *7574*
- see Williams (J.H.) Jr., *7579*

mantle, deformation, earth, geodetic measurements, measurements, Kuchay (V.K.), Pevnev (A.K.), (et al.), *1878*
- convection, earth, modeling, Dexiang (G.), Yinting (L.), (et al.), *3007*
- convection, earth, Trubitsyn (V.P.), Vasilyev (P.P.), (et al.), *5882*
- earthquakes, mechanisms, Vvedenskaya (A.V.), Golubeva (N.V.), *7027*
- earth, earth's crust, magnetic field, Pecherskiy (D.M.), Nazarova (E.A.), (et al.), *8001*
- earth, modeling, stability, thermomechanical model, Gavrilov (S.V.), Zharkov (V.N.), *8006*
- core-mantle boundary, earth, reflection, seismic waves, Dey (S.), Addy (S.K.), *8954*
- creep, earth, thermal waves, Birger (V.I.), Kovtunenko (S.M.), *9915*
- earth, oscillating bodies, spherical waves, Odaka (T.), *11170*

Manton (M.J.), boundary layer (atmospheric), clouds, convection (free), mixing layers, *9932*

Mantz (P.A.), bed load, resistance, roughness, sediment transport, *1496*

Manu (C.), see Ingraffea (A.R.), *6469*

Manwell (A.R.), moving media, supersonic flow, uniqueness, wave equations, *8109*

Manzhelii (V.G.), gases, imperfection sensitivity, solidification, thermal properties, Freiman (Yu.A.), (et al.), *5528*

Mao (C.-P.), see Fernandez-Pello (A.C.), *6846*

maraging steel, copper alloys, creep, steel, stress relaxation, titanium, Pollock (J.T.A.), Barton (S.G.), (et al.), *6473*

Marandet (B.), see De Roo (P.), *4491*

Marchal (C.), hamiltonian equations, perturbation theory, planetary satellites, von zeipel method, *4761*
- see Losco (L.), *7914*

Marchand (G.E.), beams, bonded joints, stress analysis, wood, *2251*

Marchenko (N.V.), emissivity, heat transfer (combined modes), scattering, Venyavkina (E.A.), *7865*

Marchenko (V.S.), see Derzhiev (V.I.), *11840*

Marchesin (D.), see Glimm (J.), *12026*

Marchetti (S.), see Ottaviani (M.), *5258*

Marchman (J.F.) III, airfoil characteristics, delta wings, drag, flaps, leading edge, vortex flaps, *683*

Marchuk (G.I.), atmospheric circulation, climatology, meteorology (physical), ocean air interaction, weather forecasting, *4069*
- oceanography, stratification, Bubnov (M.A.), *8025*

Marconi (F.), one dimensional flow, particle fluid flow, shock waves (normal), two phase flow, unsteady flow, Rudman (S.), (et al.), *9873*

Marcoux (M.O.), fourier series, reflection, seismic waves, *5863*

Marcum (D.C.) Jr., see Dillon (J.L.), *2742*

Marcus (G.D.), see Bar-Shalom (Y.), *4264*

Mardashev (A.M.), detonation (condensed phase), dynamic behavior, explosive solid interactions, impulsive loading, *6889*

Mareev (V.A.), see Zhestkov (G.B.), *11601*

Marek (P.), failure, plastic behavior, structural design, Sejnoha (J.), *6185*

Maresca (C.A.), airfoil characteristics, blades, helicopters, oscillating bodies, two dimensional flow, Favier (D.J.), (et al.), *10502*

Margetson (J.), constitutive equations, metals, nonlinear materials, stress strain relationships, *1199*
- failure, notch tests, plastic behavior, steel, *2444*

Marghitu (D.), see Buculei (M.), *3081*

Margittai (T.B.), ducts (variable area), extended surfaces, heat exchangers, heat exchangers (cartridge), rotating fluids, *4717*

Margolin (G.G.), anisotropic media, composite materials, strength, *9253*

Margules (G.S.), adhesives, biomechanics, sensor devices, skin, Harris (D.L.), *1963*

Mariamy (Y.A.), see Masri (S.F.), *3355*

Mariano (J.J.), buoys, cables, mooring, submerged bodies, *8047*

Marin (G.), polymers, viscoelastic fluids, viscoelastic materials, Montfort (J.P.), (et al.), *3591*

Marin (V.A.), plates, thermal stresses, thermoelasticity (steady), Popovich (V.E.), (et al.), *3991*

marine engineering, design, diesel engines, heat engines, Henshall (S.H.), Orbeck (F.), *1760*
- engines, hull propeller interaction, oscillations, Babitskii (V.I.), Nerubenko (G.P.), *4103*
- machinery, ships, Theremin (H.) eds., Robke (H.), *4104, book*
- augmentation, computer programming, condensers, fouling, heat transfer, Marto (P.J.) eds., Nunn (R.H.), *8761, book*
- engines, magneto fluid dynamics, propulsion, superfluids, Khonichev (V.I.), Yakovlev (V.I.), *9787*

Marinescu (V.), see Vladaianu (D.), *5501*

Marinetti (A.), see Badala (A.), *7353*

Marinin (V.P.), see Antonets (A.V.), *7687*

Mariseen (R.), see Vogelesang (L.B.), *2424*

Marita (Y.), dynamic analysis, plates (rectangular), vibration (free), *3367*

Markachev (Yu.E.), see Dmitriev (L.M.), *11408*

Markatos (N.-C.G.), boundary layer, finite difference methods, plates, submerged bodies, turbulence model, Wills (C.B.), *8537*

Markatos (N.C.), chemical kinetics, chemically reactive flow, combustion, fluid mechanics, rockets, Spalding (D.B.), (et al.), *8796*

Markellos (V.V.), computing techniques, periodic orbits, three body problem, three dimensional formulation, *1790*
- see Robin (I.A.), *7919*
- bifurcation, periodic orbits, stability theory, three body problem, *9809*
- approximations, restricted three body problem, stability theory, Szebehely (V.), *10773*

Markenscoff (X.), edge dislocations, elastodynamics, transforms, Clifton (R.J.), *6155*
- see Clifton (R.J.), *8332*
- dislocations, plastic waves, singular waves, *8336*

Markert (R.), critical speed, rotating bodies, vibration (forced), Pfutzner (H.), *8283*

- bending, critical speed, flexible bodies, rotating bodies, vibration (forced), *8320*
- balancing, dynamic response, flexible bodies, rotating shafts, torque, Pfutzner (H.), (et al.), *10220*

Markevicius (A.A.), see Katinas (V.I.), *6706*
Markeyev (B.M.), see Kitayner (A.G.), *4595*
Markochev (V.M.), analysis, fracture toughness, plane stress, ultimate strength, Morozov (E.M.), *497*
- see Zhitenev (V.V.), *2495*

Markov (Iu.G.), see Barkin (Iu.V.), *3915*
Markov (K.Z.), anisotropy, plates (perforated), yield criteria, *8202*
Markov (P.), constitutive equations, elasticity (linear), shells, *7338*
Markov (Yu.G.), see Barkin (Yu.V.), *3916*
markov processes, algorithms, queue theory, Kukhta (T.K.), *152*
- decision theory, optimization, stochastic processes, Demin (N.S.), *182*
- ergodic properties, mathematical methods, probability theory, Bezhaeva (Z.I.), *2023*
- cybernetics, mathematical methods, Kalashnikov (V.V.), *2024*
- design, stochastic control, Bukhalev (V.A.), *2125*
- mathematical models, stochastic systems, Zakharin (A.M.), *3196*
- optimization, stochastic processes, stochastic systems, Neymark (Yu.I.), Preobrazhenskaya (A.M.), *4277*
- algorithms, bayesian approach, decision theory, stochastic processes, Sato (M.), Abe (K.), (et al.), *4317*
- mathematical models, probability theory, stochastic processes, Yushkevic (A.A.), Fainberg (E.A.), *5053*
- failure, life expectancy, reliability analysis, Teodorescu (D.), *7601*
- earthquakes, prediction, probability, Nishioka (T.), Shah (H.C.), *8962*
- damage (cumulative), failure, Bogdanoff (J.L.), Kozin (F.), *10031*

Markson (R.), see Fairall (C.W.), *5945*
Markus (S.), dynamic response, inertia, plates (circular), plates (sandwich), vibration (free), Nanasi (T.), *7391*
- see Simkova (O.), *10222*

Marloff (R.H.), fractographic tests, high temperature, low cycle fatigue, notch tests, steel, triaxial loading, Johnson (R.L.), *2411*
Marnell (P.), human body, joints, lubrication (boundary), lubrication (elastohydrodynamic), lubrication (hydrostatic), White (R.K.), *5996*
Maron (V.I.), see Krasovitskii (B.A.), *11488*
Marrucci (G.), see Mashelkar (R.A.), *5383*
Marschall (E.), see Moresco (L.L.), *8737*
- see Moresco (L.L.), *9731*

Marsden (J.), see Holmes (P.), *10024*
Marsh (H.), bearings (gas lubricated), dynamics, rotors, vibration, *1030*
- see Glynn (D.R.), *9587*

Marsh (J.E.), airfoils, finite element techniques, transonic flow, Eastep (F.E.), *3727*
Marshall (A.H.), see Barron (M.), *10789*
Marshall (D.B.), brittle materials, erosion, particle size, wear, Evans (A.G.), (et al.), *8052*
Marshall (G.), dam-failure, dams, failure, gravity waves (shallow water), wave interactions, Menendez (A.N.), *11564*
Marshall (I.H.) ed., composite structures, fatigue, fracture, material testing, structural analysis, surveys, *7296, book*
Marshall (R.S.), see Heinrich (J.C.), *7679*
Marsters (G.F.), arrays, measurements, nozzles, *2666*
- jets, slots, turbulent flow, Fotheringham (J.), *7733*

Martelli (F.), see Manfrida (G.), *2567*
- bearings (tilted pad), design, dynamics, high speed, rotors, Manfrida (G.), *9028*

Martens (M.J.M.), absorption, acoustics, anechoic chambers, noise abatement, vegetation, *917*
Martensen (E.), see Brosowski (B.) eds., *2035, book*
Marti (J.), collapse, finite element techniques, numerical methods, plasticity, Cundall (P.), *10183*
Martin (C.S.), surveys, water hammer, *7764*
Martin (D.H.), see Getz (W.M.), *6139*
Martin (G.R.), cyclic loading, ocean bed, pore pressure, soils, Lam (I.), (et al.), *10253*
Martin (H.R.), see Mccloy (D.), *11100, book*
Martin (I.), see Selna (L.), *5895*
Martin (J.-C.E.), linear systems, linear theory, observability, scanning observability, *114*
Martin (J.-M.), additives, friction (rolling), friction (sliding), lubrication (boundary), wear, Georges (J.-M.), *9979*
Martin (J.A.), orbit transfer, propulsion, space shuttle, space vehicles, *10724*
Martin (J.R.), see Miller (B.), *4739*
Martin (K.F.), friction, gears (spur), lubrication (elastohydrodynamic), *3573*
Martin (L.H.), see Bahia (C.S.), *6566*
Martin (M.), see Humbert (M.), *9685*
Martin (P.A.), floating bodies, gravity waves (surface), oscillating bodies, wave generation, *11585*
Martin (R.H.) Jr., liquid gas mixture, mathematical models, parabolic equations, reaction kinetics, *4970*
Martin (W.R.B.), see Ngian (K.-F.), *5843*
Martin (W.W.), anemometers, bubbly flow, laser doppler velocimeters, two phase flow, Adbelmessih (A.H.), (et al.), *12040*
Martincek (G.), dynamic viscoelasticity, impedance methods, viscoelasticity (dynamic), *261*
- half space, layered media, torsional waves, vibration, viscoelastic materials, *10238*

Martinez (G.M.), adhesion, composite materials, compression, fibers, strength, Piggott (M.R.), (et al.), *6190*
Martinez-Val (R.), jets, mixing layers, vorticity, *9597*
Martinov (G.I.), see Getselev (Z.N.), *3894*
Martinson (L.K.), conduction (heat), convection, cylindrical bodies, heat transfer, variable thermal properties, *3778*
- see Granik (I.S.), *3814*

Martinyuk (A.A.), differential equations (ordinary), lyapunov's functions, nonlinear mechanics, stability theory, *1081*
Martirosian (M.M.), see Sarkisian (N.E.), *4359*
Martirosyan (Z.A.), contact problems, cylindrical bodies, elasticity (linear), rolling contact, *5092*
Marto (P.J.) eds., augmentation, computer programming, condensers, fouling, heat transfer, marine engineering, Nunn (R.H.), *8761, book*
Martsinkevich (L.M.), surface waves, velocity measurement, wave height, weather satellites, wind, *12083*
Martyanov (A.I.), see Gavrilenko (V.G.), *9885*
Martynenko (A.A.), coatings, laminates, residual stresses, *9248*
Martynenko (M.D.), couple stresses, elasticity (linear), functional analyis, Shipka (I.G.), (et al.), *5077*
Martynenko (O.G.), see Levdanskii (V.V.), *11451*
Martynets (V.G.), see Bezverkhii (P.P.), *820*
Martynikhina (V.I.), see Goloveiko (A.G.), *7851*
- see Goloveiko (A.G.), *8874*

Martynov (A.I.), see Ivanov (N.M.), *5713*
Martynov (L.A.), biomechanics, cell behavior, materials properties, membranes (permeable), *6015*
Martynov (S.I.), jets, liquid metals, magneto fluid dynamics, stabilization, theory, Taktarov (N.G.), *9793*
Martynov (Yu.V.), annular flow, cyclones, cylindrical bodies, internal flow, inviscid fluid, velocity profiles, vortex flow, *9523*
Martynyuk (D.I.), differential equations (ordinary), impulse, nonlinear systems, time delay systems, Tsyganovskii (N.S.), *4154*
Maruo (H.), boundary value problems, froude number, hulls, nonlinear theory, ship resistance, wavemaking resistance, *5969*
Maruszewski (B.), cylindrical bodies, magnetoelasticity, thermoelasticity (transient), thermomagnetic phenomena, *3238*
Maruta (A.), power plants, rivers, thermal diffusion, Stero (C.), (et al.), *1894*
Maruyama (S.), see Maruyama (T.), *3446*
Maruyama (T.), low cycle fatigue, notch sensitivity, steel, Maruyama (S.), (et al.), *3446*
Marx (C.M.), beams, bonded joints, laminates, stiffness, strength, wood structures, Moody (R.C.), *3528*
Marzetta (T.), see Schoenberg (M.), *7939*
Mascarenhas (A.T.), limit analysis, probabilistic design, random loading, reinforced concrete, *7605*
Maschio (G.), see Lo Schiavo (M.), *6745*
Mashchenko (I.P.), inversion, plasticity, volterra equations, Churikov (F.S.), *1095*
Mashelkar (R.A.), see Mujumdar (A.S.), *1735, book*
- drag, external flow, heat transfer, transport phenomena, viscoelastic fluids, Marrucci (G.), *5383*
- see Shenoy (A.V.), *9707*

Mashkovich (S.A.), see Anzhina (G.I.), *1914*
- see Gubanova (S.I.), *4078*
- atmospheric circulation, internal waves, planetary waves, Anzhina (G.I.), *5942*

Masliyah (J.H.), drag coefficient, porous surfaces, reynolds number (small), spherical bodies, Polikar (M.), *3632*
- computing techniques, heat transfer, laminar flow, noncircular pipes, pipe flow, swirl flow, Nandakumar (K.), *7715*

Maslov (A.A.), see Lysenko (V.I.), *1539*
Maslov (B.Ya.), see Vasilev (A.M.), *10317*
Maslov (E.P.), see Abramyants (T.G.), *2128*
Maslov (G.F.), see Annushkin (Yu.M.), *6835*
Maslov (I.A.), see Kozenko (A.V.), *7023*
Maslov (L.A.), crack propagation, cracks, directivity pattern, fracture, nondestructive tests, Arkhinov (V.I.), *6495*
Maslov (L.I.), crack growth, deformation (plastic), fracture toughness, *6448*
Maso (J.C.), see Granju (J.L.), *4532*
- see Granju (J.L.), *6520*
- see Bascoul (A.), *8399*
- see Bascoul (A.), *8431*

Mason (J.), continuum mechanics, shells, solid mechanics, variational methods, *7129, book*
masonry, dynamic response, structural response, vibration (forced), Benedetti (D.), Castellani (A.), *3379*
- plane stress, plasticity, Tyupin (G.A.), *6184*

Masory (O.), see Koren (Y.), *204*
Masri (S.F.), see Anderson (J.C.), *1260*
- beams, dynamic response, geometric nonlinearities, vibration (forced), Mariamy (Y.A.), (et al.), *3355*
- buildings (tall), dynamic response, experimental mechanics, vibration (nonlinear), Bekey (G.A.), (et al.), *7367*
- modal control, optimal control, oscillations, structural elements, structural response, structural stability, Bekey (G.A.), (et al.), *9171*

mass flow, friction factor, heat transfer, mass transfer, Kast (W.), *5625*
- filtration, porous media, Vasilev (L.L.), Maiorov (V.A.), *8924*
- deformable bodies, porous media, Beavers (G.S.), Hajji (A.), (et al.), *8938*
- deformable bodies, experimental results, porous media, Beavers (G.S.), Wittenberg (K.), (et al.), *8939*
- choked flow, flashing, pipe flow, two phase flow, Chisholm (D.), *9580*

mass transfer, heat transfer, hydrodynamic stability, rayleigh taylor instability, surface tension, viscous effects, Ho (S.-P.), *634*
- diffusion, plumes, turbulence (transport), Chatwin (P.C.), Sullivan (P.J.), *656*
- convection (free), heat exchangers (crossflow), heat transfer, tube bundles, El-Riedy (M.K.), *728*
- rotating disks, sublimation, Koyama (H.), Ohsawa (S.-I.), (et al.), *794*
- decomposition, heat transfer, radiant interchange, Senchenkov (A.S.), *797*
- absorption, film cooling, heat transfer, Nakoryakov (V.Ye.), Grigoryeva (N.I.), *798*
- film boiling, heat transfer (combined modes), radiation, Arai (N.), Takahashi (S.), (et al.), *799*
- cooling, evaporation, heat transfer, water, Arefyev (K.M.), Averkiyev (A.G.), *802*
- boundary layer, diffusion, impact, particle dynamics, Valentin (G.), Le Goff (P.), *803*
- axisymmetric flow, heat transfer, Nesterenko (V.B.), Tverkovkin (B.Ye.), (et al.), *806*
- cylindrical bodies, heat transfer, incompressible flow, Raptis (A.A.), Tzivanidis (G.J.), *814*
- fluid injection, heat transfer, pipe flow, suction, Zaychik (L.I.), *815*
- convection (free), plane surfaces, Arai (N.), Takahashi (S.), (et al.), *818*
- convection (free), particles, spectroscopy, Govindarao (V.M.H.), Lekshminarayanan (H.), *826*
- heat transfer, moisture, soils, thermal instability, transient, Hartley (J.G.), Black (W.Z.), *830*
- dispersion, porous media, stagnation zones, Golubev (V.S.), *831*
- heat transfer, particles, spherical bodies, Hughmark (G.A.), *937*
- boundary layer (atmospheric), drag coefficient, heat transfer (atmospheric), Greenhut (G.K.), Bean (B.R.), *981*
- boundary layer (atmospheric), ocean air interaction, Furnes (G.K.), *985*
- diffusion, turbulence, Krishna (R.), *1585*
- condensation, multicomponent flow, Krishna (R.), *1727*
- granular media, spherical bodies, Badatov (E.V.), Matros (Yu.Sh.), (et al.), *1732*
- heat transfer, transport phenomena, Mujumdar (A.S.), Mashelkar (R.A.), *1735, book*
- chains, diffusion, drops, saturation, Polianin (A.D.), *1738*
- boundary layer, combustion, heat transfer, hydrocarbons, porous media, Batievskii (V.L.), Sergeev (G.T.), *1753*
- heat transfer, liquid gas mixture, liquid vapor mixture, two phase flow, Nigmatulin (R.I.), Khabeyev (N.S.), *1847*
- heat transfer, hydrology, Sokolov (A.A.), Kharchenko (S.I.), *1898*
- heat transfer (atmospheric), hydrology, meteorology (physical), soils, Lykosov (V.N.), Palagin (E.G.), *1907*
- brownian motion, diffusion, Hardt (S.L.), *1953*
- boundary layer, heat transfer, porous surfaces, Pavlov (K.B.), Pokrovskii (L.D.), (et al.), *2638*
- approximations (higher order), entrance region, pipe flow, turbulent flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *2645*
- laminar flow, rotating disks, turbulent flow, Law (C.G.) Jr., Pierini (P.), (et al.), *2848*
- concentration, convection (forced), plates, Atimtay (A.), Gill (W.N.), *2849*
- heat transfer, metallurgy, Spalding (D.B.), Afgan (N.H.), *2854, book*
- finite difference methods, heat transfer, slug flow, Antonini (G.), Guiffant (G.), *2855*
- condensers, porous surfaces, tube bundles, Aly (S.), Cunningham (J.), *2857*
- convection (forced), interface phenomena, two phase flow, Schwarz (E.), Waldheim (W.), (et al.), *2993*
- evaporation, heat transfer (atmospheric), Szaniawski (A.), *3021*
- atmosphere, meteorology (physical), moisture, ocean, Timofeev (N.A.), *3025*
- distributed parameters, heat exchangers, heat transfer, optimal control, process control, sliding optimization, Dubrovin (O.F.), Gaichinskiy (L.Yu.), *3190*
- boundary layer (turbulent), fluid injection, Alp (E.), Strong (A.B.), *3706*
- condensation, evaporation, heat transfer, regenerators, rotary regenerators, Van Leersum (J.G.), Ambrose (C.W.), *3838*
- cylindrical bodies, power law fluids, spherical bodies, Kumar (S.), Tripathi (P.K.), (et al.), *3857*
- ablation, boundary layer (turbulent), heat transfer, space vehicles, transpiration, Suzuki (K.), *3867*
- drops, evaporation, kinetics, numerical analysis, Larina (I.N.), Rykov (V.A.), *4726*
- diffusion, polymers, rotating disks, Lal (P.), Mishra (P.), (et al.), *4729*
- boundary conditions, concentration, diffusion, laminar flow, Vorotyntsev (M.A.), Grafov (V.M.), (et al.), *4730*
- heat transfer, mathematical models, packed beds, Rao (S.P.), Gnielinski (V.), *4733*
- fluidized beds, particles, Pandey (D.K.), Upadhyay (S.N.), (et al.), *4835*
- evaporation, liquid metals, porous media, Prosvetov (V.V.), *5608*
- heat transfer, mines, rocks, Kremnev (O.A.), Zhuravlenko (V.Ya.), (et al.), *5609*
- drops, heat transfer, liquid vapor mixture, mathematical models, Monaco (R.), *5610*
- crystals, freezing, heat transfer, Wheeler (A.A.), *5613*
- convection, heat transfer, prandtl number, Riahi (N.), *5616*
- heat transfer, liquid liquid interface, thermal diffusion, Takao (S.), Narusawa (U.), *5619*
- heat transfer, moisture, porous media, Eckert (E.R.G.), Faghri (M.), *5623*
- composite materials, liquid metals, powder metallurgy, sintered materials, Lisovskii (A.F.), *5624*
- friction factor, heat transfer, mass flow, Kast (W.), *5625*
- capillary flow, inhomogeneities, magneto fluid dynamics, porous media, Panasyuk (A.L.), Panchenko (M.S.), (et al.), *5677*
- immiscible fluids, inhomogeneities, Pergushev (L.P.), Rozentsvaig (A.K.), *5816*
- bubble dynamics, heat transfer, unsteady flow, Shagapov (V.Sh.), *5818*
- continuum mechanics, granular media, Kanatani (K.-I.), *5823*
- continuum mechanics, granular media, Kanatani (K.-I.), *5825*
- heat transfer, moving media, porous media, saturation, Verigin (N.N.), Khabibullin (I.L.), (et al.), *5853*
- boundary layer (atmospheric), heat transfer (atmospheric), turbulence (geophysical), Reinking (R.F.), *5949*
- boundary layer (atmospheric), heat transfer (atmospheric), ocean air interaction, turbulence (geophysical), Pedersen (K.), Boyum (G.), *5951*
- convection, evaporation, oceanography, Kutalo (A.A.), Chernyavskii (E.B.), *5952*
- blood flow, diffusion, Schwartz (A.J.), *6016*
- boundary value problems, composite structures, diffusion, models, moisture, Miller (R.K.), *6827*
- diffusion, diffusion-reaction, mathematical methods, mathematical models, Sperb (R.P.), *6829*
- absorption, sound, Wei (R.-J.), Wu (J.-R.), *6996*
- entrainment, heat transfer, mixing layers, oceanography, thermocline, turbulence (geophysical), Shapiro (G.I.), *7059*
- composite materials, finite element techniques, heat transfer, porous media, Strada (M.), Lewis (R.W.), *7224*
- boundary layer (atmospheric), boundary layer (turbulent), surface flow, surface flow, turbulence (transport), Dawkins (R.A.), Davies (D.R.), *7699*
- condensation, multicomponent flow, tubes, Webb (D.R.), Sardesai (R.G.), *7870*
- conduction (heat), diffusion, heat transfer, mathematical models, Hatton (T.A.), Chiang (A.S.), (et al.), *7875*
- interface phenomena, multicomponent flow, two phase flow, Rohm (H.-J.), Vogelpohl (A.), *7876*
- flow measurement, fluid mechanics, packed beds, Hoek (P.J.), De Rooij (J.G.), (et al.), *7877*
- axisymmetric flow, electrical properties, magneto fluid dynamics, solids with liquids, Polyanin (A.D.), Pryadkin (P.A.), *7897*
- measurements, pitot tube, two phase flow, Hau (K.-F.F.-L.), Banerjee (S.), *7970*
- rotating fluids, stratification, vortex lines, vorticity, Gill (A.E.), Smith (J.M.), (et al.), *8020*
- boundary layer (atmospheric), diffusion, evaporation, Reijnhart (R.), Piepers (J.), (et al.), *8030*
- convection (free), cylindrical bodies, external flow, Terron (L.R.), Brunello (G.), *8728*
- boundary layer, heat transfer, moving surfaces, thermal diffusion, Chen (T.S.), Strobel (F.A.), *8776*
- diffusion, fluidized beds, mathematical models, Yasnikov (G.P.), Galperin (L.G.), (et al.), *8777*
- conduction (unsteady), darcy flow, diffusion, half space, Nilson (R.H.), *8778*
- buoyancy, density, diffusion, interface phenomena, Griffiths (R.W.), Ruddick (B.R.), *8781*
- darcy flow, heat transfer, porous media, Vafai (K.), Tien (C.L.), *8782*
- heat transfer, nonlinear analysis, porous media, Thomas (H.R.), Morgan (K.), (et al.), *8783*
- cylindrical bodies, permeability, porous media, Swarup (S.), *8785*
- combustors, heat transfer (combined modes), magneto fluid dynamics, three dimensional flow, Im (K.H.), Ahluwalia (R.K.), *8811*
- finite difference methods, oxygen, stratified flow, thermocline, Naito (K.), Nakamura (Y.), (et al.), *9509*
- freezing, heat transfer, porous media, Jame (Y.-W.), Norum (D.I.), *9900*
- differential equations (partial), group theory, hyperbolic equations, Berman (V.S.), *10020*
- atmosphere, turbulent flow, Saab (A.E.), *10460*
- heat transfer, jets, turbulence, turbulent flow, Mills (A.F.), Kim (S.), (et al.), *10473*
- heat transfer, integral methods, laminar flow, rotating disks, rotating fluids, Felsch (K.O.), Plesche (M.), *10580*

- counterflow, duct flow, film flow, heat transfer, roughness, Fujita (H.), Takahama (H.), (et al.), *10581*
- acceleration, body force convection, crystals, cylindrical bodies, heat transfer, Feonychev (A.I.), *10595*
- heat transfer, laplace transform, Koprinski (S.Ts.), *10601*
- ablation, boundary layer, heat transfer, injection, radiant interchange, radiating flow, stagnation point, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10608*
- centrifugal fans, heat transfer, Kremnev (V.O.), *10647*
- bubble dynamics, heat transfer, liquid vapor mixture, two phase flow, Nigmatulin (B.I.), Kroshilin (A.Ye.), (et al.), *10650*
- heat transfer, laminar flow, mist flow, plates, Trela (M.), Kowalski (J.), *10652*
- bubble dynamics, fluidized beds, Buevich (Yu.A.), Deryabin (A.N.), *10653*
- bubbly flow, convection, drops, Polyanin (A.D.), Sergeev (Yu.A.), *10657*
- burning rate, convection (forced), heat transfer, solids, Joulain (P.), *10663*
- gases, heat transfer, suspensions, Sheiman (V.A.), Nikolaichik (L.V.), *10664*
- evaporation, heat transfer, impingement, jets, navier stokes equation, Mujumdar (A.S.), Li (Y.-K.), (et al.), *10665*
- binary flow, distillation, heat transfer, Ito (A.), Asano (K.), *10666*
- dispersed flow, Vain (A.), *10668*
- diffusion coefficient, liquids, Rao (D.P.), Rao (G.H.), *10670*
- absorption, film flow, Pedersen (H.), Prenosil (J.E.), *10678*
- spherical bodies, Sandoval-Robles (J.G.), Riba (J.P.), (et al.), *10681*
- gas liquid interaction, jets, wakes, Karlsson (H.T.), Aberg (S.), (et al.), *10686*
- convection (free), packed beds, porous media, Gabitto (J.F.), Bohm (E.), *10689*
- evaporation, heat transfer, porous media, Iodko (E.A.), *10692*
- fluidized beds, power law fluids, Kumar (S.), *10695*
- fluidized beds, heat transfer, Glicksman (L.R.), Joos (F.M.), *10842*
- adhesion, capillary flow, rarefied gases, Levdanskii (V.V.), Martynenko (O.G.), *11451*
- channel flow, diffusion, roughness, Polyakova (L.A.), Shakhov (V.G.), *11486*
- channel flow, dispersion, non newtonian flow, solutions (material), Soundalgekar (V.M.), Mohiuddin (M.), *11505*
- molecular diffusion, pipe flow, turbulence, Von Alfthan (C.), Rantapuska (S.), *11558*
- combustion, convection, relaxation, Sieniutycz (S.), *11775*
- film cooling, fluid injection, porous media, turbulence (freestream), Mironov (B.P.), Lugovskiy (P.P.), (et al.), *11778*
- carbon, char particles, combustion, fluidized beds, particles, Gavalas (G.R.), *11792*
- carbon, char particles, combustion, particles, porous media, Simons (G.A.), *11793*
- diodes, fluidics, internal combustion engines, valves, Sher (E.), *11796*
- magneto fluid dynamics, spherical bodies, surface effect, two phase flow, Oreper (G.M.), *11820*
- heat transfer, liquid vapor interface, sound propagation, Azamatov (A.Sh.), Shagapov (V.Sh.), *11923*
- particle fluid flow, pulsatile flow, Akselrud (G.A.), Fiklistov (N.I.), (et al.), *12019*
- drag, non newtonian flow, two phase flow, Kawase (Y.), Ulbrecht (J.J.), *12022*
- filtration, granular media, heat transfer, Ganzha (V.L.), Zhuravskii (G.I.), *12050*

mass transportation, cavities, cylindrical bodies, diffusion, porous media, Gipson (G.S.), Thoms (R.L.), *1729*

- cellular flow, convection (free), Sigrist (L.), Dossenbach (O.), (et al.), *1736*
- automatic control, control, guideways, vehicles, Shladover (S.E.), *5062*
- dispersion, groundwater, models, stochastics, Smith (L.), Schwartz (F.W.), *10671*

Massalas (C.), cyclic loading, dynamic loads, dynamic stability, shells (conical), Dalamangas (A.), (et al.), *8273*

Massoud (M.), see My Dao Thien, *6518*

Mastro (R.A.), boundary layer, collocation, falkner-skan equation, splines, Voss (D.A.), *4615*

Mastryukov (B.S.), flames, furnaces, heat transfer, models, radiant interchange, *5639*

masts, damping capacity, design, oscillations, viscous effects, wind loads, Etkin (B.), Hansen (J.S.), *11842*

Masubuchi (K.), see Papazoglou (V.J.), *2173*

Masubuchi (M.), floating bodies, ocean waves, oscillating bodies, wave energy, wave engines, Shinomiya (Y.), *11638*

Masuda (H.), see Yoshida (H.), *8893*

Masuoka (T.), convection (free), heat transfer, layered media, porous media, Yokota (Y.), (et al.), *8940*

Masuzawa (J.), entrance region, laminar flow, pipe flow, porous walls, Tanahashi (T.), (et al.), *3672*

Masyakin (N.E.), see Vlagov (V.V.), *631*

Matako (T.), bending, combined loading, fatigue, notch tests, torsion, Imai (Y.), *6418*

Matakiev (V.), see Zapryanov (Z.), *4618*

Matalon (M.), flames (diffusion), kinetics, thermal effects, Ludford (G.S.S.), *7879*

- burning rate, carbon, combustion, oxidation, particles, *9771*

Matanzo (F.) Jr., cables, ropes, strength, wires, Metcalf (J.T.) Jr., *536*

Mateer (G.G.), boundary layer, interaction, mach number, navier stokes equation, reynolds number, shock waves, Viegas (J.R.), *5432*

material nonlinearities, finite element techniques, geometric nonlinearities, stiffness matrix, structural analysis, Cook (R.D.), *1127, book*

- elasticity (nonlinear), shock waves (normal), Kulikovskii (A.G.), Shaposhnikova (E.I.), *2363*
- geometric nonlinearities, plane stress, reinforced concrete, shells (thin), Arnesen (A.), Sorensen (S.I.), (et al.), *7603*

material testing, compressible flow, ice mechanics, rate sensitivity, strength, Sinha (N.K.), *493*

- creep, semiconductors, stress relaxation, testing equipment, Kalaidzhan (S.E.), Krivoruchko (S.P.), (et al.), *496*
- aluminum alloys, flaw detection, ingots, titanium, ultrasonics, Zavyalova (N.S.), Grishina (V.M.), (et al.), *501*
- airplane structures, crack growth, fatigue, prediction, survey, Schijve (J.), *1350*
- bending, viscoelastic materials, wood, Becker (H.F.), *1401*
- low cycle fatigue, metals, plastic flow, Hatanaka (K.), Yamada (T.), (et al.), *1406*
- crack resistance, impact, strain rate, Bondarovich (L.A.), Zlochevskii (A.B.), (et al.), *1409*
- creep rupture, high temperature, nickel alloys, Dwivedi (V.S.), *1410*
- creep, polymers, relaxation, Hayashi (K.), Gozu (K.), (et al.), *1412*
- brittle fracture, crack resistance, x ray techniques, Georgiev (M.N.), Mezhova (N.Ya.), (et al.), *1415*
- biomaterials, bones, frequencies, impact, Khalil (T.B.), Viano (D.C.), (et al.), *1961*
- accelerated testing, creep, life expectancy, Fraifeld (V.E.), Sorokin (O.V.), *2229*
- deformation (plastic), polymers, yield criteria, G'Sell (C.), Jonas (J.J.), *2235*
- dies, drawing, rolling, Al-Makky (M.M.), Woo (D.M.), *2397*
- crack closure, crack growth, fatigue, three dimensional formulation, Mcgowan (J.J.), Liu (H.W.), *2412*
- crack growth, high temperature, steel, Saxena (A.), *2427*
- combined loading, fatigue, notch sensitivity, stress concentration, Kurajian (G.M.), Na (T.Y.), *2433*
- polymers, recoil, thermoplasticity, viscoelastic fluids, Apicella (A.), Nicodemo (L.), (et al.), *2576*
- alloys, life expectancy, thermal fatigue, Vashunin (A.I.), Kotov (P.I.), *2976*
- extrusion, simulation, steel, Soos (E.), Teodosiu (C.), (et al.), *3423*
- crack propagation, fatigue, fracture mechanics, Shimada (H.), Furuya (Y.), *3433*
- ceramics, endurance limit, refractories, thermal fatigue, Lamon (J.), *3435*
- crack growth, fatigue, foam, polymers, Noble (F.W.), Lilley (J.), *3437*
- damage (cumulative), fatigue, life expectancy, random loading, Berezovszkij (A.M.), Balter (I.I.), (et al.), *3447*
- crack growth, environmental tests, fatigue, steel, stress intensity factor, Stewart (A.T.), *3448*
- ductile fracture, elastoplasticity, fracture, j-integral, surveys, Landes (J.D.), Begley (J.A.), (et al.), *3460, book*
- beryllium, crystals, failure, Papirov (I.I.), Stoev (P.I.), (et al.), *3472*
- crack opening displacement, fracture toughness, stress intensity factor, surface flaws, weight function, Bar-Tikva (D.), Grandt (A.F.) Jr., (et al.), *3478*
- dissipation, plastic behavior, plastic flow, Saix (C.), Jouanna (P.), *3995*
- rupture, simulation, thermal fatigue, Cailletaud (G.), Culie (J.-P.), (et al.), *3998*
- acoustic emission, composite materials, laminates, nondestructive tests, Prakash (R.), *4360*
- grain size, machining (electrochemical), metallurgy, Krishnaiah Chetty (O.V.), Radhakrishnan (V.), *4472*
- crack initiation, fracture toughness, steel, Chizhik (A.A.), *4495*
- fatigue, fracture, stochastic processes, Bolotin (V.V.), *4504*
- biomechanics, spine, stress strain relationships, Hung (T.-K.), Chang (G.-L.), *4906*
- anelasticity, damping, finite element methods, viscoelasticity (dynamic), Vasilenko (N.V.), *5105*
- aluminum alloys, high strength, high temperature, reinforced bodies, Yajima (S.), Okamura (K.), (et al.), *5125*
- strength, textiles, Barker (R.L.), Poole (H.W.), (et al.), *5139*
- dynamic fracture, fracture mechanics, micromechanics, spallation, Golubev (V.K.), Novikov (S.A.), (et al.), *5291*
- materials properties, mechanical properties, strength, testing equipment, Voloshchenko (A.P.), Kuzema (Yu.A.), (et al.), *5326*
- laminates, shear rigidity, shear strength, Polyakov (V.A.), Tanevskii (V.V.), *6193*
- composite materials, fatigue, loads, Oldyrev (P.P.), *6204*
- damage, fatigue, fracture mechanics, time dependence, Biegler (K.K.), Sandor (B.I.), *6412*
- bending, damping, fatigue, metals, Weissmann (G.F.), *6421*
- copper, creep, necking, Baranov (N.A.), Likhachev (V.A.), (et al.), *6430*
- composite materials, crack growth, crack initiation, delamination, fracture mechanics, Crossman (F.W.), Warren (W.J.), (et al.), *6437*
- acoustic emission, crack growth, x ray techniques, Kuksenko (V.S.), Orlov (L.G.), (et al.), *6438*
- beams, cements, composite materials, fracture mechanics, Visalvanich (K.), Naaman (A.E.), *6439*
- composite structures, fatigue, fracture, structural analysis, surveys, Marshall (I.H.) ed., *7296, book*
- crimping, shrinkage, textiles, thermal effects, Quynn (R.G.), Poisson (W.H.), *7310*
- creep, materials processing, pressure, Gorev (B.V.), Klopotov (I.D.), (et al.), *7457*

- crack propagation, edge cracks, fatigue, microcracks, nickel alloys, Lankford (J.), Cook (T.S.), (et al.), *7476*
- aluminum alloys, crack growth, low cycle fatigue, stress intensity factor, vacuum, Kirby (B.R.), Beevers (C.J.), *7484*
- aluminum alloys, damage, electric resistance, steel, Cailletaud (G.), Policella (H.), (et al.), *7504*
- aluminum alloys, boron, fracture toughness, Reedy (E.D.) Jr., *7507*
- fatigue, high cycle fatigue, Kuzmenko (V.A.), *7510*
- crack opening displacement, elastoplasticity, fracture criteria, j-integral, Havas (I.), Czoboly (E.), *7526*
- brittle fracture, crack propagation, fracture, Nikolaevskiĭ (V.N.), *7530*
- composite structures, fibers, resins, Strife (J.R.), Prewo (K.M.), *8218*
- aluminum alloys, crack opening displacement, fatigue, high strength, Davidson (D.L.), Lankford (J.), *8373*
- crack arrest, fracture criteria, fracture toughness, pipelines, pressure vessels, Hahn (G.T.) eds., Kanninen (M.F.), *8415, book*
- brittle materials, failure, stochastic processes, Aoki (S.), Sakata (M.), *8422*
- fibers, laminates, plastics, stretching, Polyakov (V.A.), Tanevskiĭ (V.V.), *10133*
- aluminum alloys, fracture toughness, Latiere (H.J.), *10278*
- deformation (plastic), fracture, metallurgy, work hardening, Aurich (D.), Wobst (K.), *10280*
- crack resistance, steel, Takahashi (H.), Khan (M.A.), (et al.), *10281*
- bending, cracks, jintegral, pipes, stability theory, Wilkowski (G.M.), Zahoor (A.), (et al.), *10301*
- nondestructive tests, stress intensity factor, vibrators, Pye (C.J.), Adams (R.D.), *10310*
- compression, elastomers, fibers, tubes, Farris (R.), Filippov (A.), *10324*

materials possessing memory, entropy, thermodynamic processes, thermodynamics (irreversible), thermodynamics (nonequilibrium), Bataille (J.), Kestin (J.), *720*

- constitutive equations, non newtonian flow, shear flow, viscoelastic fluids, Menezes (E.V.), *2575*
- anisotropic media, green function, Osokin (A.E.), Suvorova (Iu.V.), *3077*
- deformation (finite), thermoviscoelasticity, Senchenkov (I.K.), *3997*
- rheology, thermodynamics (nonequilibrium), Huet (C.), *4566*
- interface waves, scattering, viscoelastic waves, Lokshin (A.A.), *6341*
- conduction (heat), helical flow, uniqueness, Fetecau (C.), *6577*
- conduction (heat), cylindrical bodies, linear theory, tubes, Fetecau (C.), *6797*
- constitutive equations, plasticity, superplastics, Lenskiĭ (V.S.), *8207*
- work hardening, yield criteria, Mroz (Z.), *8211*
- friction factor, non newtonian flow, pipe flow, thixotropic media, Kemblowski (Z.), Petera (J.), *11504*

materials processing, drawing, measurements, residual stresses, Shimahashi (Y.), Saito (K.), *1399*

- aluminum alloys, crack propagation, fatigue, Schulte (K.), Nowack (H.), *1407*
- charcoal cloth, mechanical properties, textiles, Capon (A.), Maggs (F.A.P.), (et al.), *2254*
- continuum mechanics, damage, life expectancy, materials properties, mathematical models, surveys, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- deformation (plastic), geometric nonlinearities, metals, plastic behavior, Lysov (M.I.), Sosov (N.V.), *3421*
- differential equations (ordinary), dynamics, glass, melting, Kobayashi (M.), Hujisawa (T.), (et al.), *3424*
- explosive forming, sheet metal, tubes, Berman (I.), Schroeder (J.W.), *4473*
- surface flaws, thermoplasticity, upset forging, Jenner (A.), Bai (Y.), (et al.), *4496*
- overlap formation, rolling, slabs, Stahlberg (U.), Soderberg (J-O.), (et al.), *5277*
- dynamic loads, glass fibers, textiles, Ko (F.), Bruner, (et al.), *6200*
- dies, films, melting, polymers, Cheng (C.Y.), *6407*
- abrasion, finishing, grinding, tribology, Kunz (P.), *6411*
- creep, material testing, pressure, Gorev (B.V.), Klopotov (I.D.), (et al.), *7457*
- compression, explosive forming, plasma, projectiles, Kirko (V.I.), *7903*
- deformation, forging, Leutgob (A.), *10267*
- composite materials, gas turbines, steel, titanium, Meetham (G.W.) ed ., *11337, book*

materials properties, polymers, viscoelastic materials, Zezin (Yu.P.), Malinin (N.I.), *262*

- exercise, experimental results, strength, tendons, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *1032*
- aortic valve, heart, viscoelastic materials, Dorogin (A.D.), Maltsev (L.E.), (et al.), *1040*
- polymers, strain rate, viscoelasticity (dynamic), Kokoshvili (S.M.), Kalnin (P.P.), *1193*
- composite materials, fibers, plastics, Worndle (R.), Daschner (W.), *1203*
- shock waves (normal), solid mechanics, Shea (R.), Mescall (J.F.), *1311*
- dynamic effects, forging, forming, high speed, inertia, plane strain, Arora (K.L.), Sachdev (A.S.), (et al.), *1338*
- laser plasma interaction, nuclear fusion, power generation, thermal loading, Jaeger (T.A.) eds., Boley (B.A.), *1781, book*
- elasticity, finite element methods (hybrid), interpolation, Spilker (R.L.), *2061*
- deformation (plastic), elastoplasticity, finite element techniques, forging, Hartley (P.), Sturgess (C.E.N.), (et al.), *2394*
- chip formation, cutting, Hastings (W.F.), Mathew (P.), (et al.), *2401*
- continuum mechanics, damage, life expectancy, materials processing, mathematical models, surveys, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- fatigue, offshore structures, steel, toughness, Wilson (A.D.), *2413*
- crack growth, fatigue, reinforced concrete, Lovegrove (J.M.), Salah El Din (A.S.), (et al.), *2420*
- hopkinson bar, radioactivity, reactor structures, strain rate, temperature, tension, welding, Albertini (C.), Montagnani (M.), (et al.), *2488*
- metallurgy, thermodynamic processes, thermodynamics, Gaskell (D.R.), *2773, book*
- acoustic measurements, impedance, Nicholls (B.H.), *2953*
- alloys, high temperature, phase changes, Guttmann (V.) ed., *2962, book*
- composite materials, elastomers, Yevstratov (V.F.), Lykin (A.S.), (et al.), *3278*
- metallic composites, stochastics, strength, Hughes (J.D.H.), Morley (H.), (et al.), *3282*
- cutting, extrusion, forming, plastic flow, Shaw (M.C.), *3420*
- acoustic emission, hydrogen embrittlement, inorganic materials, Cuthrell (R.E.), Randich (E.), *3451*
- ductile fracture, void fraction, Melander (A.), Stahlberg (U.), *3465*
- forming, nuclear reactors, pressure vessels, structural materials, welding, Nichols (R.W.) ed., *3564, book*
- acoustic measurements, liquids, molecular properties, Ernst (S.), Glinski (J.), *3968*
- dissipation, experimental mechanics, vibration, Khilchevskiĭ (V.V.), Vasilevich (D.I.), *4418*
- creep, high temperature, steel, Brovman (M.Ya.), *4488*
- pistons, thermal effects, thermoelasticity (transient), Calderale (P.M.), Garro (A.), (et al.), *4743*
- cermets, composite materials, composite structures, fatigue, fracture, metallic composites, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
- aluminum alloys, damping capacity, machinability, metallic composites, Deonath, Narayan (R.), (et al.), *5123*
- adhesion, effective elastic moduli, metallic composites, resins, Spathis (G.D.), Sideridis (E.P.), (et al.), *5124*
- compression, filamentary structures, textiles, yarn, Leaf (G.A.V.), Oxenham (W.), *5131*
- rocks, shock waves (normal), Vaal (A.A.), Zhukov (A.V.), (et al.), *5242*
- rolling, sheet metal, Scrutton (R.F.), Lenard (J.G.), *5276*
- material testing, mechanical properties, strength, testing equipment, Voloshchenko (A.P.), Kuzema (Yu.A.), (et al.), *5326*
- heat transfer, thermal properties, Najjar (M.S.), Bell (K.J.), *5806*
- biomechanics, cell behavior, membranes (permeable), Martynov (L.A.), *6015*
- beams, deformation (plastic), dynamic loads, reinforced concrete, Popov (N.N.), Rastorguev (B.S.), (et al.), *6521*
- cast steel, composite materials, fibers, high temperature, Skrovanek (S.D.), Herron (R.H.), *6954*
- impact, polymers, viscoelasticity (dynamic), Matsumoto (H.), Nakahara (I.), (et al.), *7279*
- elastoplasticity, excavation, mining, underground, Chugh (A.K.), *7288*
- deformation (plastic), foil, rolling, Kouzuma (M.), *7458*
- compaction, dies, friction (rolling), powder metallurgy, Lammens (R.F.), Struyk (C.), (et al.), *7463*
- compaction, crackling, powder metallurgy, powders, Gerritsen (A.H.), Stemerding (S.), *7464*
- combustion, environmental tests, thermal fatigue, Tretyachenko (G.N.), Kravchuk (L.V.), (et al.), *7474*
- brittle materials, damage (cumulative), Huy Duong Bui, Ky Dang Van, (et al.), *7517*
- composite materials, fibers, fracture, strength, Chou (T.-W.), Kelly (A.), *8227*
- composite materials, fatigue, fracture criteria, Reifsnider (K.), *8378*
- computing techniques, corrosion, Jankowski (J.), Juchniewicz (R.), *8381*
- acoustic properties, acousto-optical phenomena, optical techniques, Kleszczewski (Z.), *8869*
- microstructures, refractories, Krivenyuk (V.V.), Zelenyuk (E.E.), *8885*
- high temperature, steel, strain rate, Krabiel (A.), Dahl (W.), *8886*
- bones, electroelasticity, piezoelectrics, Johnson (M.W.), Chakkalakal (D.A.), (et al.), *9051*
- dynamic properties, impact, strain rate, Zukas (J.A.), Nicholas (T.), (et al.), *9350*
- elastic constants, insulating materials (acoustical), transfer functions, Pritz (T.), *9676*
- composite materials, elastic constants, glass fibers, laminates, Wagner (H.D.), Fischer (S.), (et al.), *10128*
- composite materials, Phillips (M.G.), *10129*
- brittle materials, finite element techniques, Erdei (C.K.), *10134*
- design, failure, fatigue, fracture, piping systems, pressure vessels, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- closed cycle, design, gas turbines, thermodynamic properties, working fluids, Lee (J.C.), Campbell (J.) Jr., (et al.), *11740*

Mathai (C.V.), aerosols, atmosphere, drops, particle size, refraction, Harrison (A.W.), *5960*

Matharu (D.S.), see Adkins (R.C.), *4628*

mathematical methods, dynamic analysis, kinematics, lagrange equations, Schrapel (H.D.), *7*

- dynamic analysis, kinematics, Brunk (G.), *9*
- dynamic analysis, rotating bodies, Koshlyakov (V.N.), *10*
- dynamic analysis, elastic bodies, rotating bodies, Vilke (V.G.), *11*
- differential equations (partial), lyapunov's functions, Bhat (M.S.), Shrivastava (S.K.), *12*
- analytical methods, matrix methods, nyquist theory, Nwokah (O.D.I.), *19*
- bifurcation, codes, differential equations (ordinary), differential equations (partial), Hassard (B.D.), Kazarinoff (N.D.), (et al.), *21, book*
- averaging, differential equations (ordinary), Bainov (D.), Milusheva (S.), *22*
- hamiltonian equations, integration, Kozlov (V.V.), Kolesnikov (N.N.), *29*
- coordinate systems, elliptical bodies, helmholtz equation, Arscott (F.M.), Darai (A.), *37*
- backward heat problem, conduction (heat), existence theorems, norms, Biollay (Y.), *39*
- generalized functions, gradient techniques, Norkin (V.I.), *52*
- convergence, design (optimum), newton method, Watson (L.), Yang (W.H.), *56*
- computing techniques, existence theorems, shells, Visarion (V.), Migdalovici (M.), *69*
- beams, error, finite element techniques, variational methods, Thomas (G.), *81*
- dynamic analysis, pendulums, vibration (parametric), Kozlov (V.V.), *358*
- dynamic analysis, vibration (parametric), Krupenin (V.L.), *359*
- cracks, nonlinear analysis, random excitation, stochastic systems, Wedig (W.), *360*
- beams, random excitation, vibration (random), Wedig (W.), *361*
- perturbation theory, series, transforms, Spirig (F.), *877*
- oblateness, perturbation methods, transformation, Deprit (A.), *878*
- fluid mechanics, porous media, Rudnicki (J.W.), *950*
- curvature, dynamic analysis, kinematics, Veldkamp (G.R.), *1060*
- eigenvalue problems, eigenvalues, sensitivity, structural analysis, Haug (E.J.), Rousselet (B.), *1070*
- boundary value problems, coordinate systems, nonlinear methods, numerical analysis, Murray (J.C.), *1071*
- bibliography, bifurcation, dynamics, nonlinear mechanics, Holmes (P.J.) ed., *1072, book*
- differential equations (ordinary), linear theory, nonlinear systems, Rama Mohana Rao (M.), *1073, book*
- boundary value problems, mechanics, Gelman (B.D.), Gliklikh (Iu.E.), *1075*
- dynamic analysis, hamiltonian equations, Churchill (R.C.), Rod (D.L.), *1078*
- averaging, inverse method, korteweg de vries equation, Flaschka (H.), Forest (M.G.), (et al.), *1086*
- inverse problems, scattering, time domain techniques, wave equations, Burridge (R.), *1088*
- discontinuities, integro differential equations, nonlinear characteristics, volterra equations, Aizicovici (S.), *1096*
- bgk model, kinetic theory, matrix methods, riemann-hilbert problem, Siewert (C.E.), Kelley (C.T.), *1103*
- perturbation methods, plk method, supersonic flow, Mcintosh (S.C.) Jr., Nixon (D.), *1104*
- computer programming, computing techniques, differential equations (ordinary), differential equations (partial), numerical analysis, Lederman (W.) eds., Churchhouse (R.F.), *1109, book*
- computing techniques, differential equations (ordinary), differential equations (partial), numerical analysis, Ferziger (J.H.), *1110, book*
- iterative methods, nonlinear methods, Krawczyk (R.), *1120*
- convergence, euler equations, reynolds number (high), vorticity, Hald (O.H.), *1121*
- dynamic analysis, strings, vibration, Synge (J.L.), *1270*
- dynamic properties, strings, vibration (nonlinear), Faulkner (M.G.), Mioduchowski (A.), (et al.), *1271*
- acoustic waves, sublayers, ultrasonics, Basatskaya (L.V.), Ermolov (I.N.), *1294*
- cracks, integro differential equations, orthotropic materials, stefan problem, survey, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *1362*
- dynamic analysis, lagrange equations, Baumgarte (J.), *1977*
- dynamic analysis, lagrange equations, Muschik (W.), Poliatzky (N.), (et al.), *1979*
- dynamic analysis, lagrange equations, Baumgarte (J.), *1980*
- dynamic analysis, kinematics, moving media, Mcgill (D.J.), Kim (T.D.), *1981*
- dynamic analysis, energy conservation, lagrange equations, Vujicic (V.A.), *1985*
- eigenvalue problems, hamiltonian equations, korteweg de vries equation, Alber (S.I.), *2005*
- cavities, diffusion, infinite medium, spherical bodies, Akkas (N.), Bauld (N.R.) Jr., *2010*
- ergodic properties, markov processes, probability theory, Bezhaeva (Z.I.), *2023*
- cybernetics, markov processes, Kalashnikov (V.V.), *2024*
- differential equations (partial), fluid mechanics, mathematical models, perturbation theory, surveys, Brosowski (B.) eds., Martensen (E.), *2035, book*
- algorithms, matrices, matrix inversion, Pan (V.Ya.), *2042*
- dynamic analysis, kinematics, Bottema (O.), Veldkamp (G.R.), *3080*
- dynamic analysis, pendulums, vibration (nonlinear), Samson (A.), *3092*
- differential geometry, dynamics, hamiltonian equations, *3095, book*
- differential equations (ordinary), nonlinear theory, Nagle (R.K.), Singkofer (K.), *3096*
- boundary value problems, differential equations (ordinary), Struwe (M.), *3097*
- inequalities, oscillations, Grammatikopoulos (M.K.), *3101*
- backlund transformations, evolution equations, transformation, Fokas (A.S.), Fuchssteiner (B.), *3103*
- acoustics, boundary value problems, reynolds number (high), viscous flow, Geymonat (G.), Sanchez-Palencia (E.), *3104*
- classification, data analysis, Plotkin (A.A.), *3128*
- machine design, machining (electrochemical), optimization, Erden (A.), Kaftanoglu (B.), *3430*
- boundary value problems, chemical reactions, diffusion, dirichlet problem, polymerization, Bobisud (L.E.), *3853*
- canonical elements, hamiltonian equations, orbit mechanics, Bond (V.R.), Janin (G.), *3919*
- dynamic analysis, libration theory, Bolotin (S.V.), Kozlov (V.V.), *4146*
- dynamic stability, nonlinear mechanics, splines, Jain (M.K.), *4149*
- experimental methods, rethermalization, singular integral equations, Haidar (N.H.S.), *4164*
- differential equations (ordinary), finite difference methods, inequalities, integro differential equations, Pachpatte (B.G.), *4170*
- approximation theory, duality, Precupanu (T.), *4176*
- acceleration waves, dynamic analysis, membranes, Pop (J.J.), Wang (C.-C.), *4421*
- conservation laws, continuum mechanics, fracture, integral methods, similarity methods, Cherepanov (G.P.), *4489*
- computing techniques, coordinate systems, navier stokes equation, shear flow, Hirschel (E.H.), Kordulla (W.), *4596, book*
- boundary layer, three dimensional flow, unsteady state, Vereshchagina (L.I.), *4807*
- dynamic analysis, kinematics, Nayak (J.H.), Roth (B.), *4932*
- dynamic analysis, kinematics, Hsia (L.M.), Yang (A.T.), *4933*
- dynamic stability, kinematics, Karapetian (A.V.), *4938*
- continuum mechanics, elastic dislocations, elasticity, tensor methods, Kunin (I.A.), *4943*
- fokker-planck equation, kinetic theory, thermodynamics, Meyer (J.), Schroter (J.), *4958*
- coordinate systems, elasticity, navier equation, Berger (B.S.), Curtis (D.M.), *4959*
- elastica, finite element techniques, nonlinear characteristics, stability theory, stiffness matrix, Fried (I.), *5034*
- vibration (free), vibration (nonlinear), Schrapel (H.D.), *5191*
- dynamic response, fracture toughness, nondestructive tests, ultrasonics, Fu (L.S.), *5315*
- seismic waves, De (S.), *5880*
- kinematics, rigid bodies, Freudenstein (F.), Primose (E.J.F.), *6049*
- dynamic analysis, mechanical systems, Rubanovich (E.M.), *6059*
- elasticity (linear), isotropic materials, tensor methods, vector methods, Smith (G.F.), *6060*
- equations of motion, hamiltonian equations, kepler orbits, transformation, Leach (P.G.L.), *6064*
- asymptotic behavior, conservation laws, Wang (C.-H.), *6071*
- convergence, noise (random), stochastics, Korostelev (A.P.), *6091*
- computer programming, finite element techniques, graphical methods, mesh generation, Haber (R.), Shephard (M.S.), (et al.), *6106*
- approximations (polynomial), finite element techniques, interpolation, Hoppe (V.), *6110*
- beams, integration, Becker (O.), *6214*
- alloys, mixtures, moving surfaces, solidification, Tao (L.N.), *6802*
- conduction (heat), mathematical models, monte carlo analysis, transient effects, Vorobeva (L.S.), Zhevlakov (G.N.), *6803*
- diffusion, mathematical models, transport phenomena, Mikhailov (M.D.), Ozisik (M.N.), *6828*
- diffusion, diffusion-reaction, mass transfer, mathematical models, Sperb (R.P.), *6829*
- boundary layer (atmospheric), diffusion, mathematical models, Nieuwstadt (F.T.M.), *6830*
- tensor methods, three dimensional formulation, Guo (Z.-H.), *7152*
- differential equations (ordinary), linear equations, monodromy deformation, Jimbo (M.), Miwa (T.), (et al.), *7160*
- differential operators, discrete spectra, hilbert space, spectra, Read (T.T.), *7161*
- elastoplasticity, torsion, unloading, Caffarelli (L.A.), Friedman (A.), *7165*
- approximations, convolution processes, stochastic processes, Splettstosser (W.), *7174*
- differential equations (ordinary), initial value problems, Verwer (J.G.), *7182*
- differential equations (ordinary), matrix methods, structural analysis, Hees (G.), *7200*
- convergence, parabolic equations, stability (numerical), Crouzeix (M.), *7201*
- finite element methods, finite element techniques, integration, Okabe (M.), *7203*
- approximation methods, elastic bodies, singularities, vibration (forced), George (O.D.), *7398*
- gasification, immersion, phase changes, thermal expansion, thermal loading, Hunter (L.W.), *7852*
- error, melting, stefan problem, Epperson (J.F.), *8108*
- helmholtz equation, inverse problems, scattering, sturm-liouville equation, Bojarski (N.N.), *8112*

- group theory, helmholtz equation, klein-gordon equation, similarity methods, Steinberg (S.), Wolf (K.B.), *8113*
- existence theorems, hyperbolic equations, Hoff (D.), *8117*
- group theory, hilbert space, integro differential equations, transport phenomena, wiener-hopf technique, Van Der Mee (C.V.M.), *8118*
- boundary value problems, differential equations (ordinary), resonance, turning point problems, Lewis (G.N.), *8125*
- algorithms, Platonov (A.D.), Trivailo (P.M.), *8134*
- nonlinear analysis, vibration (nonlinear), Gottlieb (H.P.W.), *8280*
- control, dynamic response, elastic bodies, plates, Leipholz (H.H.E.), *8302*
- elastic waves, holes, Tait (R.J.), Moodie (T.B.), *8327*
- particles, random media, waves, Furutsu (K.), *8339*
- cracks, fracture mechanics, mathematical models, three dimensional formulation, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *8396*
- cylindrical bodies, heat transfer, solidification, Beckett (P.M.), *8775*
- n body problems, orbit mechanics, Saari (D.G.), Hulkower (N.D.), *8836*
- dynamic response, electromechanical components, motors, startup, Myklebust (A.), *9087*
- kinematics, mechanisms, motion, De Sa (S.), Roth (B.), *9091*
- kinematics, matrix methods, mechanisms, motion, De Sa (S.), Roth (B.), *9092*
- matrix methods, tensor methods, Smith (M.M.), Smith (G.F.), *9093*
- limit cycles, van der pol equations, Palm (E.), Tveitereid (M.), *9098*
- convergence, finite difference methods, parabolic equations, Heron (B.), *9114*
- dynamic analysis, equations of motion, vibration (nonlinear), Benson (D.C.), *9296*
- dynamic analysis, vibration (nonlinear), Roseau (M.), *9297*
- damping, dynamic analysis, vibration (free), Inman (D.J.), *9301*
- bessel functions, dynamic analysis, vibration (free), Liu (X.-Z.), *9307*
- chatter, cutting, dynamic analysis, vibration (forced), De Canniere (J.), Van Brussel (H.), (et al.), *9325*
- porous media, seepage, Orasanu (M.T.), *9891*
- computing techniques, kinematics, optimization, state space techniques, Sohoni (V.), Haug (E.J.), *10006*
- dynamic analysis, hamiltonian equations, Baruch (M.), Riff (R.), *10007*
- dynamic properties, sensitivity, transient loading, Ehle (P.E.), Haug (E.J.), *10008*
- dynamic analysis, lagrange equations, Pascal (M.), *10009*
- elasticity (three dimensional), functional analyis, hilbert space, variational methods, Nowinski (J.L.), *10013*
- lyapunov's functions, vector methods, Lakshmikantham (V.), Leela (S.), (et al.), *10014*
- vector methods, Li (C.-B.), *10026*
- diffusion, quasisolutions, reaction kinetics, stability theory, Lakshmikantham (V.), Vatsala (A.S.), *10028*
- eigenvalue problems, operators, transforms, Sirovich (L.), Knight (B.W.), *10030*
- eigenvalue problems, group theory, operators, transforms, Knight (B.W.), Sirovich (L.), *10035*
- computing techniques, newton method, Von Gudenberg (J.W.), *10050*
- approximations, optimization, Fletcher (R.), Sinclair (J.W.), *10053*
- computing techniques, dynamic analysis, Wehage (R.A.), Haug (E.J.), *10197*
- bifurcation, circumnavigation, libration theory, n body problems, periodic orbits, solar system, Szebehely (V.) ed., *10769, book*
- collision models, n body problems, stability theory, Simo (C.), Llibre (J.), *10770*
- dynamic analysis, Kozlov (V.V.), *10930*
- computing techniques, dynamic analysis, eigenvalues, Iyer (M.S.), *11152*

mathematical models, robotics, tools, trajectories, Clement (A.), *8*

- digital simulation, numerical methods, regenerators, Khandwawala (A.I.), Chawla (O.P.), *72*
- boilers, digital simulation, dynamic analysis, nonlinear theory, Roder (H.W.), Rosel (G.S.), *74*
- beams, finite element techniques, Barrett (D.), Soler (A.), *89*
- modeling, pattern recognition, relativity, Jumarie (G.), *104*
- hydraulic machinery, servomechanisms, stability theory, Bazhenov (A.I.), *127*
- discrete systems, filters, Blyumin (S.L.), *136*
- estimation, frequency response, plasma, Gvozdkov (Yu.V.), *138*
- correlation, stochastic processes, Akimov (P.P.), *141*
- estimation, filters, Baram (Y.), *145*
- biomathematics, time invariant systems, Matis (J.H.), Tolley (H.D.), *150*
- distribution function, matrix methods, queue theory, Basharin (G.P.), Gromov (A.I.), *151*
- approximation methods, dynamic response, large scale systems, Lamba (S.S.), Rao (S.V.), *183*
- energy conservation, environmental control, Hirst (E.), *208*
- estimation, population estimation, simulation, Nakamura (A.), Nakamura (M.), *215*
- boilers, control, design, power generation, Lin (Y.-H.), Nielsen (R.S.), (et al.), *218*
- approximation methods, vibration, Kuttler (J.R.), Sigillito (V.G.), *353*
- dynamic analysis, rolling, vibration, Dobrucki (W.), Swiatoniowski (A.), *389*
- boundary layer (three dimensional), boundary layer (turbulent), shock layer, Kussoy (M.I.), Viegas (J.R.), (et al.), *601*
- boundary roughness, dynamic analysis, film thickness, Vorontsov (Ye.G.), Yakhno (O.M.), *605*
- hydrodynamic stability, jets, two dimensional flow, Morris (P.J.), *637*
- buoyancy, hydrodynamic stability, microgravity, surface tension, Castillo (J.L.), Velarde (M.G.), *638*
- navier stokes equation, statistical theory, turbulence, Foias (C.), Temam (R.), *641*
- asymptotic methods, conduction (heat), perturbation methods, variable thermal properties, Aziz (A.), Jaleel (A.), (et al.), *772*
- computer aided design, computer programming, heat transfer, Amkreutz (J.H.A.E.), Vanier (D.J.), *778*
- radiant interchange, radiation properties, transient loading, Surkov (G.A.), *780*
- combustion products, flames, methanol, quenching, spark ignition engines, Browning (L.H.), Pefley (R.K.), *840*
- crossflow, fire, two dimensional flow, Luti (F.M.), *843*
- combustion instability, probability theory, Polinszky (K.), Bator (B.), (et al.), *844*
- diffusion, electro fluid dynamics, theory, two phase flow, Gogosov (V.V.), Naletova (V.A.), (et al.), *850*
- computer aided design, dynamic stresses, wind turbines, Kaza (K.R.V.), Janetzke (D.C.), *866*
- geothermal reservoirs, rock mechanics, Sowell (E.F.), Curry (R.L.), *956*
- dynamic analysis, lagrange multiplier, Hemami (H.), Weimer (F.C.), *1063*
- interaction, series, stochastic processes, Chan (W.-Y.T.), Wallis (K.F.), *1100*
- finite element techniques, scale effects, Dow (J.O.), Byrd (D.E.), *1131*
- bonding, computing techniques, networks, paper, Smith (J.C.), *1137*
- dynamic analysis, state space techniques, Mcclamroch (N.H.), *1140, book*
- airplanes, dynamic stability, trajectories, Young (J.W.), Schy (A.A.), (et al.), *1161*
- biocontrol, biomathematics, nervous system, Gorozhanin (V.S.), *1172*
- biocontrol, biphasic stimulation, design, Donaldson (N.De N.), *1173*
- hydrodynamic stability, interface phenomena, magnetic stabilization, Egorushkin (S.A.), Tsypkin (A.G.), *1578*
- deformation, diffusion, porous media, Podstrigach (Ya.S.), Povstenko (Yu.Z.), *1730*
- dynamic analysis, error, gyrocompasses, gyroscopes, identification, Potemkin (A.E.), *1989*
- differential equations (partial), fluid mechanics, mathematical methods, perturbation theory, surveys, Brosowski (B.) eds., Martensen (E.), *2035, book*
- linear systems, process control, range model, Zenkov (V.V.), *2110*
- operations research, risk, Kottas (J.F.), Lau (H.-S.), *2118*
- algorithms, identification, Kharchev (V.N.), *2147*
- calibration, electrostatic gyro, estimation, gyroscopes, kalman filters, navigation, strapdown systems, Blanchard (R.L.), *2162*
- algorithms, model reduction, process control, Minsker (I.N.), *2175*
- environmental control, pesticide, pollution, Hirata (H.), Kogo (H.), *2192*
- identification, urban planning, Cirina (M.), *2197*
- air traffic control, airplanes, simulation, Atack (M.J.), *2203*
- bilinear systems, biomathematics, population growth, Brewer (J.W.), *2205*
- biomathematics, catastrophe theory, nervous system, zeeman's equations, Stewart (I.), Woodcock (A.E.R.), *2206*
- biomathematics, gastrointestinal system, myoelectrical activity, oscillations, Smallwood (R.H.), Linkens (D.A.), (et al.), *2207*
- continuum mechanics, damage, life expectancy, materials processing, materials properties, surveys, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- aerodynamic performance, flaps, wings, Ovchinnikov (V.A.), Osorgin (V.D.), (et al.), *2736*
- afterbodies, supersonic flow, wing body combinations, Vukelich (S.R.), Williams (J.E.) Jr., *2739*
- boundary layer, micropolar media, stagnation point, Unsworth (K.), Chiam (T.C.), *2806*
- conduction (heat), variable thermal properties, Galaktionov (V.A.), *2809*
- asymptotic methods, conduction (heat), transient effects, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *2810*
- energy storage, heat pumps, heating, Schlosser (K.), Teislev (B.), *2837*
- analytical methods, bilinear systems, biomathematics, immunology, inverse problems, Hsu (C.S.), Mohler (R.R.), *3153*
- state space techniques, time varying systems, Milov (L.T.), Solodovnikov (V.V.), *3157*
- airplanes, guns, identification, least squares, Kou (R.S.), Glass (B.C.), (et al.), *3176*
- analytical methods, reliability analysis, statically indeterminate structures, Karaval (M.F.), Sogomonyan (E.S.), *3177*
- algorithms, digital simulation, multivariable systems, stochastic systems, Razevig (V.D.), *3179*
- identification, man machine systems, Krug (E.K.), Legovich (Yu.S.), (et al.), *3182*
- bridge replacement, bridges, highways, integer programming, operations research, Garcia-Diaz (A.), Liebman (J.S.), *3192*
- markov processes, stochastic systems, Zakharin (A.M.), *3196*
- algorithms, erlang distribution, queue theory, two phase systems, Vilenkin (S.Ya.), Fedotov (A.G.), *3197*
- computer aided manufacturing, process control, queue theory, stochastic systems, Hitomi (K.), Nakajima (M.), (et al.), *3214*
- cost uncertainty, operations research, optimization, Naert (P.A.), Weverbergh (M.), *3215*

- cutting (three dimensional), numerical control, optimization, Davis (R.P.), Wysk (R.A.), (et al.), *3220*
- amplification, fluidic amplifiers, fluidics, Hayashi (S.), Matsui (T.), (et al.), *3222*
- biomathematics, nervous system, respiratory system, Chestnova (A.A.), Chetayev (A.N.), *3224*
- damping, dissipation, dynamic response, Pisarenko (G.S.), Boginich (O.E.), *3362*
- compressors, control, cooling, screw compressors, Airila (M.), *3746*
- axial compressors, axisymmetric flow, rotors, stalling, Al-Daini (A.J.), Railly (J.W.), *3747*
- discharges, flow measurement, potential flow, swirl flow, Murakami (M.), Kito (O.), *3756*
- atmosphere, radiant interchange, scattered light, Ganapol (B.D.), *3828*
- porous media, sublimation, Lin (S.), *3846*
- flames (laminar), nonlinear theory, Matkowsky (B.J.), Putnick (L.J.), (et al.), *3859*
- combustors, gas turbines, pyrolysis, soot formation, Kesten (A.S.), Sangiovanni (J.J.), (et al.), *3871*
- meteorology, Sirotenko (O.D.), *4087*
- dynamic analysis, mechanical systems, Do Sanh, *4144*
- frequency domain techniques, model reduction, transfer functions, Shieh (L.S.), Datta-Barua (M.), (et al.), *4222*
- adaptive systems, algorithms, statistical modelling, stochastic control, stochastic systems, Minyaeva (L.N.), Sabinin (O.Y.), *4267*
- compressible flow, jets, nozzles, plumes, Kraiko (A.N.), Shelomovskii (V.V.), *4591*
- turbulence, turbulence model, Lagendre (R.), *4649*
- airfoils, hydrofoils, lifting surfaces, Stepanov (G.Yu.), *4669*
- heat transfer, mass transfer, packed beds, Rao (S.P.), Gnielinski (V.), *4733*
- chemical kinetics, flame propagation, reaction kinetics, Matkowsky (B.J.), Olagunju (D.O.), *4738*
- drainage, porous media, soils, Polyakov (V.L.), *4838*
- liquid gas mixture, parabolic equations, reaction kinetics, Martin (R.H.) Jr., *4970*
- almost periodic solutions, integro differential equations, time delay systems, volterra equations, Alexiades (V.), *4980*
- process control, stochastic systems, wastewater treatment, water pollution, Tanthapanichakoon (W.), Himmelblau (D.M.), *5046*
- markov processes, probability theory, stochastic processes, Yushkevic (A.A.), Fainberg (E.A.), *5053*
- cross-over, textiles, twisting, Familant (H.M.), *5134*
- axisymmetric flow, compressible flow, jets, supersonic flow, Grabitz (G.), *5414*
- bodies of revolution, combustion, compressible flow, supersonic flow, Artyukh (L.Yu.), Kashkarov (V.P.), (et al.), *5415*
- nonequilibrium flow, shock waves, shock waves (attached), Sharma (V.D.), *5419*
- fuel elements, melting, nuclear reactors, Chen (W.L.), Ishii (M.), (et al.), *5589*
- optical thickness, radiant interchange, temperature, Blokh (A.G.), Adzerikho (K.S.), (et al.), *5590*
- condensers, heat exchangers, refrigeration, Tassou (S.A.), Green (R.K.), *5592*
- drops, heat transfer, liquid vapor mixture, mass transfer, Monaco (R.), *5610*
- boltzmann equation, combustion, kinetic theory, Makashev (N.K.), *5634*
- combustion, stability (numerical), thermal diffusion, Baushev (V.S.), Vilunov (V.N.), (et al.), *5643*
- combustion, combustors, particulate flow, Chung (P.M.), Carlson (L.), *5644*
- chemical reactions, combustion, hydrocarbons, Arbib (H.A.), Goldman (Y.), (et al.), *5645*
- blowdown, boilers, Takeuchi (K.), Squarer (D.), *5663*
- control, controllable pitch propeller, propellers (marine), Geway (R.P.), De Mulder (E.P.H.M.), (et al.), *5966*
- computer programming, prediction, Muller (J.-A.), Ivachnenko (A.G.), *6101*
- biocontrol, dynamic analysis, electroencephalography, nervous system, nonlinear systems, nonlinear theory, Freeman (W.J.), *6149*
- biomathematics, dynamic analysis, epidemics, Gripenberg (G.), *6151*
- clay, elastoplasticity, Banerjee (P.K.), Stipho (A.S.), *6375*
- discharges, drainage, finite difference methods, hydrographs, storage, Khan (S.I.), Takagi (F.), (et al.), *6599*
- compressible flow, thermodynamics (nonequilibrium), two dimensional flow, Popov (S.P.), Romashkevich (Yu.I.), *6631*
- compressible flow, one dimensional flow, Borzov (V.B.), Gutsunaev (T.I.), *6632*
- turbulence, turbulence model, turbulent flow, variational methods, Stern (M.E.), *6687*
- aerodynamic interference, inlets, vortex sheets, wings, Shurygin (V.M.), *6723*
- axial turbines, cascades, rotors, separated flow, Ablamskii (V.A.), *6733*
- blades, design, lifting surfaces, propellers, turbomachinery, Brockett (T.E.), *6738*
- equations of state, nonlinear analysis, Ahrendts (J.), Baehr (H.D.), *6744*
- boltzmann equation, constitutive equations, thermodynamic functions, thermodynamics (nonequilibrium), Nonnenmacher (T.F.), *6746*
- conduction (heat), transient effects, transport properties, variable thermal properties, Maewal (A.), *6799*
- conduction (heat), mathematical methods, monte carlo analysis, transient effects, Vorobeva (L.S.), Zhevlakov (G.N.), *6803*
- energy storage, heating, solar energy, Rabinovich (M.D.), Fert (A.R.), *6820*
- control, temperature, thermostats, Dulnev (G.N.), Egorov (V.I.), (et al.), *6824*
- diffusion, mathematical methods, transport phenomena, Mikhailov (M.D.), Ozisik (M.N.), *6828*
- diffusion, diffusion-reaction, mass transfer, mathematical methods, Sperb (R.P.), *6829*
- boundary layer (atmospheric), diffusion, mathematical methods, Nieuwstadt (F.T.M.), *6830*
- boundary value problems, diffusion, nonlinear analysis, porous media, Alikakos (N.D.), Rostamian (R.), *6831*
- chemically reactive flow, combustion, flames (laminar), numerical methods, Oran (E.S.), Boris (J.P.), *6833*
- fire spread, flame propagation, forest fires, stefan problem, Fujii (N.), Hasegawa (J.), (et al.), *6847*
- fluidized beds, mixed flow, Buevich (Yu.A., Tsyrulnikov (I.M.), *7010*
- earth, gravity, Kozenko (A.V.), Maslov (I.A.), *7023*
- meteorology, Kudoh (T.), *7028*
- berthing, docks, harbors, jetties, ship maneuvers, ships, Fontijn (H.L.), *7074*
- kinematics, mechanisms (planes), Wunderlich (W.), *7145*
- design, digital control, modeling, synthesis, Neugebauer (G.), *7254*
- finite element methods, plasticity, soils, Desai (C.S.), Phan (H.V.), (et al.), *7438*
- compressible flow, navier stokes equation, one dimensional flow, viscous effects, Sakurai (A.), Kukuyu (A.), *7685*
- jets, turbulent flow, Kazachkov (I.V.), *7739*
- free shear layer, hydrodynamic stability, reynolds number (high), Huerre (P.), Scott (J.F.), *7742*
- gravity waves (surface), hydrodynamic stability, Laedke (E.W.), Spatschek (K.H.), *7744*
- cavitation, flow reversal, pumps, unsteady flow, Ershov (N.S.), Kuchkin (V.N.), *7791*
- frequency response, spectra, wavemakers, Hudspeth (R.T.), Leonard (J.W.), *7809*
- closed conduit flow, convection (free), heat transfer, spectral expansion method, Iyican (L.), Bayazitoglu (Y.), (et al.), *7839*
- conduction (heat), conductivity, inverse problems, numerical methods, Chen (Y.M.), Liu (J.Q.), *7855*
- conduction (heat), diffusion, heat transfer, mass transfer, Hatton (T.A.), Chiang (A.S.), (et al.), *7875*
- combustion instability, flames (laminar), thermal effects, Aldushin (A.P.), Kasparyan (S.G.), *7881*
- boilers, combustion chambers, heat transfer, Gulic (M.G.), Gvozdenac (D.D.), *7886*
- porous media, saturation, two component flow, Kowalski (S.J.), *7978*
- reservoirs, three dimensional flow, Coats (K.H.), *7984*
- convergence, ill posed problems, least squares, minimization, Seidman (T.I.), *8133*
- computing techniques, discrete systems, electrical analogies, graph theory, Savage (G.J.), Kesavan (H.K.), *8137*
- eigenvalues, model reduction, spectral analysis, Allemong (J.J.), Kokotovic (P.V.), *8157*
- man machine systems, process control, simulation, stochastic systems, Hainal (M.), Revesz (G.), *8172*
- computer aided manufacturing, modeling, process control, robotics, Dessas (W.R.) ed., *8173, book*
- biomathematics, cell behavior, dynamic analysis, fluid mechanics, Aldis (G.), Tognetti (K.), (et al.), *8178*
- cutting, rock mechanics, Abdel Moneim (M.E.), Castillo (E.A.), (et al.), *8365*
- cracks, fracture mechanics, mathematical methods, three dimensional formulation, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *8396*
- canals, frequency response, gates, unsteady flow, Corriga (G.), Sanna (S.), (et al.), *8509*
- compressible flow, inviscid fluid, transonic flow, Oswatitsch (K.), *8546*
- hydrodynamic stability, vortices, Dhanak (M.R.), *8604*
- hydrodynamic stability, navier stokes equation, spectral analysis, Taylor (T.D.), Murdock (J.W.), *8608*
- navier stokes equation, reynolds number (high), turbulence, Deissler (R.G.), *8617*
- thermocouples, thermophysical properties, Shashkov (A.G.), *8680*
- convection (free), enclosure flow, finite element techniques, stream function, vorticity, Reddy (J.N.), Satake (A.), *8726*
- conduction (heat), inverse problems, Novikov (I.A.), *8730*
- conduction (heat), cylindrical bodies, hardening, heat addition, inverse problems, Glasko (V.B.), Kulik (N.N.), (et al.), *8734*
- numerical methods, stefan problem, Lozano (C.J.), Reemtsen (R.), *8740*
- boundary layer (thermal), convection, diffusion, Barrett (J.W.), Morton (K.W.), *8749*
- energy storage, heat exchangers, solar collectors, solar energy, thermosyphons, Mertol (A.), Place (W.), (et al.), *8756*
- generators, nuclear power, steam, steam power plants, transient effects, Van Tuyle (G.J.), Lee (J.C.), *8759*
- diffusion, fluidized beds, mass transfer, Yasnikov (G.P.), Galperin (L.G.), (et al.), *8777*
- combustion, initial value problems, Tam (K.K.), *8794*

- combustors, ramjet engines, Lilley (D.G.), *8796*
- kinematics, mechanical systems, rigid bodies, Lotstedt (P.), *9083*
- hydraulic machinery, nonlinear mechanics, Nepraz (F.), *9099*
- computer programming, computing techniques, energy, heat transfer, numerical analysis, Lewis (R.W.), Morgan (K.), (et al.), *9149*
- bifurcation, biomathematics, neural nets, Ermentrout (G.B.), Cowan (J.D.), *9197*
- dynamic analysis, random loading, Bily (M.), Cacko (J.), *9300*
- finite difference methods, river beds, unsteady flow, Henriques (A.G.), *9508*
- dispersion coefficient, mixing, rivers, Lau (Y.L.), Krishnappan (B.G.), *9520*
- aerodynamic performance, airplanes, unsteady flow, Skoda (Z.), *9665*
- boundary layer (thermal), convection (forced), cylindrical bodies, galerkin method, laminar flow, Graebel (W.P.), Hsu (C.C.), *9711*
- conduction (heat), solids, variable thermal properties, Imber (M.), *9713*
- energy conservation, energy storage, reservoirs, Ucer (A.S.), *9717*
- heat transfer, temperature, Duc (E.), *9718*
- approximation methods, conductivity, experimental methods, radiant interchange, Saito (A.), *9722*
- monte carlo analysis, radiant interchange, scattering, Antyufeev (V.S.), *9723*
- axial flow, conduction (heat), graetz problem, Bayazitoglu (Y.), Ozisik (M.N.), *9725*
- ignition, reactive systems, thermal ignition, Bazley (N.W.), Wake (G.C.), *9743*
- flames (diffusion), kinetics, Allison (R.A.), Clarke (J.F.), *9751*
- flame propagation, pressure distribution, Deshaies (B.), Leyer (J.C.), *9752*
- catalyzed ignition, combustion, combustion (catalytic), granular media, packed beds, reactive systems, Kiselev (O.V.), Matros (Yu.Sh.), *9753*
- blowoff, flames, methane, viscous flow, Mikolaitis (D.), Buckmaster (J.), *9755*
- combustion, steam, steam zone, Voll (L.), Smohai (F.), (et al.), *9766*
- fire spread, forest fires, Anderson (D.H.), Catchpole (E.A.), (et al.), *9777*
- fire control, fire spread, methane, Quintiere (J.G.), Rinkinen (W.J.), (et al.), *9778*
- finite difference methods, magneto plasma dynamics, nonlinear analysis, two dimensional flow, Schnack (D.), Killeen (J.), *9791*
- filtration, porous media, Golden (J.M.), *9888*
- aquifers, storage, underground storage, Dussaud (M.), Carriere (J.-F.), *9902*
- bearings (journal), friction (solid fluid), lubricants (liquid), lubrication (hydrodynamic), Usov (P.P.), Toder (I.A.), (et al.), *9970*
- control, manipulators, robotics, Totani (T.), Miyakawa (S.), *10011*
- finite difference methods, reservoirs, three dimensional formulation, wells, Trimble (R.H.), Mcdonald (A.E.), *10059*
- algorithms, probability theory, simulation, Malyshev (I.A.), Palagin (Yu.I.), *10060*
- karhunen-loeve expansion, matrix methods, pattern recognition, Fernando (K.V.M.), Nicholson (H.), *10077*
- dynamic analysis, graph theory, Tenenbaum (L.A.), *10078*
- nonlinear programming, optimization, shells (cylindrical), stress analysis, stresses, Michael (W.), Siddall (J.N.), *10090*
- air pollution, control, linear programming, optimization, Kohn (R.E.), *10094, book*
- heat engines, stirling cycles, thermodynamic processes, Beans (E.W.), *10546*
- conduction (heat), nonlinear materials, transient effects, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *10591*
- fourier problem, radiant interchange, Alexiades (V.), Chan (C.Y.), *10593*
- conduction (heat), contact fronts, Litvin (O.N.), *10599*
- contact problems, evaporation, heat exchangers, liquid vapor interface, Bukharkin (E.N.), *10617*
- dynamic response, heat exchangers (crossflow), numerical methods, weighted residual methods, Terasaka (H.), Kanoh (H.), (et al.), *10618*
- automatic control, drying, Rock (H.), *10639*
- coagulation, drops, evaporation, transport mechanisms, Novikov (V.S.), *10646*
- gas turbines, optimization, starting regime, Agrawal (R.K.), Yunis (M.), *10722*
- dynamic stresses, heat shields, space shuttle, vibration (random), Doyle (G.R.) Jr., *11155*
- compressible flow, inviscid fluid, Ebin (D.G.), *11416*
- airplanes, control surfaces, design, equations of motion, flight control, Paljaruci (G.), *11733*
- channel flow, magneto fluid dynamics, pumps, stability theory, Poklonskii (E.V.), Elkin (A.I.), *11807*
- separated flow, two phase flow, Rousseau (J.C.), Ferch (R.L.), *12033*

mathematical programming, algorithms, computing techniques, convex block programming, Karpinskaya (N.N.), *158*
- algorithms, automation, design (optimum), Zhabin (V.I.), Korneichuk (V.I.), (et al.), *159*
- algorithms, optimization, pareto optimization, Corley (H.W.), *167*
- operations research, optimization, plant location, Uzdemir (A.P.), *1155*
- arches, design (optimum), Lipson (S.L.), Haque (M.I.), *1424*
- finite element techniques, finite element techniques, parabolic equations, stiffness matrix, Franke (R.), Salinas (D.), *2045*
- linear programming, nonlinear programming, optimization, plant location, Uzdemir (A.P.), *2109*
- algorithms, estimation, optimization, stochastic processes, Katkovnik (V.Ya.), Kheisin (V.E.), *2138*
- algorithms, multiprocessor systems, queue theory, Kaweguchi (T.), Nakano (H.), (et al.), *2152*
- algorithms, optimal control, regulator problem, Dzhafarov (E.M.), Iskenderov (I.A.), *2155*
- elastoplasticity, matrix methods, shakedown structures, Hung (N.D.), Palgen (L.), *3544*
- algorithms, hybrid techniques, minimization, Adamenko (G.M.), Gaishun (I.V.), *5047*
- optimization, vector methods, Moldavskiy (M.A.), *6081*
- algorithms, geometric programming, stochastic processes, stochastic systems, Scott (C.H.), Jefferson (T.R.), *6136*
- algorithms, numerical methods, optimal control, Sheela (B.V.), Ramamoorthy (P.), *6140*
- anisotropic media, composite materials, optimization, polymers, shells (of revolution), Tomashevskii (V.T.), Nikolaev (B.A.), (et al.), *7594*
- computer aided design, nonlinear programming, optimization, reinforced concrete, Bond (D.), *9442*
- lipschitz condition, minimization, Gupal (A.M.), *10054*
- connections, design (optimum), joints, steel, Douty (R.), *10354*
- asymptotic behavior, optimal control, trajectory optimization, Feinstein (C.D.), Luenberger (D.G.), *11069*
- algorithms, numerical methods, optimization, Russak (I.B.), *11074*
- algorithms, numerical methods, optimization, quadratic programming, Coope (I.D.), Fletcher (R.), *11081*

Matheron (G.), fickian model, layered media, porous media, transport phenomena, De Marsily (G.), *11776*

Matheson (M.J.), cables, dynamic response, electric power, towers, vibration (forced), wind loads, Holmes (J.D.), *6872*

Mathew (J.), absorption, acoustic waves, fibers, reflection, Alfredson (R.J.), *4738*

Mathew (P.), see Hastings (W.F.), *2401*

Mathews (D.C.), see Sofrin (T.G.), *4773*

Mathieu (H.J.), auger analysis, electron spectroscopy, spectroscopy, surfaces, wear, Landolt (D.), (et al.), *4116*

Mathur (M.N.), see Subhadra Ramachandran (P.), *1685*
- see Jena (S.K.), *1976*

Matijevic (E.), see Kallay (N.), *552*

Matis (J.H.), biomathematics, mathematical models, time invariant systems, Tolley (H.D.), *150*

Matizen (E.V.), see Zhdanov (K.R.), *2784*

Matkowsky (B.J.), see Sivashinsky (G.I.), *838*
- see Kapila (A.K.), *2852*
- flames (laminar), mathematical models, nonlinear theory, Putnick (L.J.), (et al.), *3859*
- chemical kinetics, flame propagation, mathematical models, reaction kinetics, Olagunju (D.O.), *4738*
- see Putnick (L.J.), *6293*
- see Kapila (A.K.), *7878*
- burners, flames, stabilization, Olagunju (D.O.), *10701*

matrices, algorithms, mathematical methods, matrix inversion, Pan (V.Ya.), *2042*
- algorithms, computer programming, Thompson (E.), Shimazaki (Y.), *2056*
- adhesion, fibers, high speed, hopkinson bar, strain rate, testing equipment, Rybin (A.A.), *2496*
- computer programming, finite element techniques, gaussian integration, mesh generation, Jackson (C.P.), *4191*
- dynamic response, dynamics, mechanisms (planes), Dranga (M.), Manolescu (N.I.), *4551*
- algorithms, cholesky algorithm, computer programming, eigenvalues, optimization, Meirovitch (L.), Baruh (H.), *5001*
- iterative methods, linear equations, relaxation methods, Hadjidimos (A.), *5009*
- eigenvalues, nonsymmetric matrices, optimization, stability theory, variational methods, Kalaba (R.), Spingarn (K.), (et al.), *6078*
- dynamic analysis, finite element methods, flexibility, linkages, mechanisms (spatial), Sunada (W.), Dubowsky (S.), *7629*
- discretization, finite element methods, fredholm equations, free boundary, gravity waves, variational methods, Berhault (C.), *9546*
- characteristic methods, hyperbolic equations, unsteady flow, Edenhofer (J.), Schmitz (G.), *11392*

matrices (sparse), gradient techniques, iterative methods, newton method, Gambolati (G.), *1116*
- elliptic equations, iterative methods, three dimensional formulation, Lipitakis (E.A.), Evans (D.J.), *1122*
- algorithms, finite element techniques, mesh generation, George (A.), *2063*
- gradient techniques, iterative methods, Hageman (L.A.), Young (D.M.), *4177, book*
- algorithms, computing techniques, Kafarov (V.V.), Meshalkin (V.P.), (et al.), *5005*
- finite element techniques, solid mechanics, stiffness matrix, Sloan (S.W.), *9131*

matrix inversion, algorithms, mathematical methods, matrices, Pan (V.Ya.), *2042*
- computing techniques, matrix methods, optimiza tion, Den Broeder (G.), *3113*
- biharmonic equation, boundary conditions, mesh generation, stiffness matrix, Stavitsky (D.), Macagno (E.), (et al.), *3131*
- differentiation, interpolation, singularities, Okabe (M.), Kikuchi (N.), *5022*
- lyapunov's functions, stability theory, systems, Ikeda (M.), Siljak (D.D.), *8102*

matrix methods, inverse problems, linear equations, optimization, Torkamani (M.A.M.), *17*
- continuum mechanics, tensor methods, Prediger (H.), *18*
- analytical methods, mathematical methods, nyquist theory, Nwokah (O.D.I.), *19*
- analytical methods, computing techniques, eigenvalues, Kalaba (R.), Spingarn (K.), (et al.), *20*
- algorithms, least squares, splines, Best (M.R.), *65*
- dynamic behavior, finite element techniques, Okrouhlik (M.), *84*
- laplace transform, pole zero structure, state space techniques, Verghese (G.), *101*
- distributed parameters, dynamic analysis, state space techniques, Prepelita (V.), *110*
- distribution function, mathematical models, queue theory, Basharin (G.P.), Gromov (A.I.), *151*
- bgk model, kinetic theory, mathematical methods, riemann-hilbert problem, Siewert (C.E.), Kelley (C.T.), *1103*
- lyapunov's functions, optimization, Geromel (J.C.), Bernussou (J.), *1147*
- chain links, chains, damping, dynamic analysis, Eiber (A.), Schiehlen (W.), *1983*
- eigenvalues, linear systems, time varying systems, Wu (M.-Y.), *1991*
- algorithms, large scale systems, Sincovec (R.F.), Erisman (A.M.), (et al.), *2039*
- bending, finite element techniques, interpolation, locking, mindlin plates, plates, shells, Tsach (U.), *2070*
- algorithms, array ordering, arrays, Vilenkin (S.Ya.), Charnaya (I.S.), *2113*
- beams (variable cross section), deflections, Romhanyi (G.), *2264*
- mechanics, structural analysis, Darkov (A.) ed., *2529, book*
- draft, hydrostatics, ships, trim, Chalmers (D.W.), *3033*
- eigenvalues, stiffness matrix, transcendental equations, Hopper (C.T.), Simpson (A.), (et al.), *3093*
- computing techniques, matrix inversion, optimization, Den Broeder (G.), *3113*
- finite element techniques, isoparametric elements, three dimensional formulation, Gnuchii (Yu.B.), Kvitka (A.L.), (et al.), *3136*
- elastoplasticity, mathematical programming, shakedown structures, Hung (N.D.), Palgen (L.), *3544*
- eccentric loading, second order analysis, space frames, structural analysis, Subramanian (N.), Chettiar (C.G.), *3548*
- eigenvalue problems, rayleigh method, Macavei (F.), *4150*
- eigenvalues, linear systems, stability theory, Vorotnikov (V.I.), Prokopev (V.P.), *4159*
- algorithms, digital simulation, linear systems, numerical methods, simulation, state space techniques, transition matrices, Litz (L.), *4206*
- algorithms, automatic control, design, frequency domain techniques, multivariable systems, Frisch (H.P.), *4224*
- stability theory, state space techniques, structural analysis, Babak (S.F.), Ilyasov (B.G.), (et al.), *4244*
- control, control stability, feedback, linear systems, stability theory, Meilakhs (A.M.), *4246*
- estimation, identification, linear systems, Schwarz (R.G.), *4254*
- edge effects, plates (rectangular), plates (simply supported), Hegedus (I.), *4386*
- beam columns, buckling (plastic), Oliveto (G.), *4400*
- algorithms, computer programming, finite element techniques, linear equations, Stabrowski (M.M.), *5017*
- control, feedback, state space techniques, Potter (J.M.), Anderson (B.D.O.), (et al.), *6128*
- cables, vibration (free), Sergev (S.S.), Iwan (W.D.), *6286*
- runge kutta method, stability (numerical), Strehmel (K.), *7189*
- eigenvalue problems, iterative methods, mesh generation, newton method, Mccormick (S.F.), *7190*
- differential equations (ordinary), mathematical methods, structural analysis, Hees (G.), *7200*
- forced systems, periodic structure, structures, substructuring, vibration, Fricker (A.J.), Potter (S.), *7209*
- finite element techniques, hydrodynamics, simulation, Walters (R.A.), *7221*
- computer programming, computing techniques, conduction (unsteady), finite element methods (hybrid), Chiatti (G.), Sestieri (A.), *7222*
- laplace transform, pole placement, Seraji (H.), *7229*
- geometric nonlinearities, space frames, structural analysis, textiles, Stubbs (N.), Fluss (H.), *7311*
- bridges, foundations, piles, reinforced concrete, structural response, Onu (G.), *7607*
- bracing, buildings (tall), multistory frames, structural analysis, Bozzo (E.), Gambarotta (L.), *7611*
- computing techniques, elliptic equations, fredholm equations, singularities, Christiansen (S.), *8119*
- computing techniques, finite element techniques, fourier series, structural analysis, Wang (L.), *8145*
- finite element techniques, substructuring, Mucino (V.H.), Pavelic (V.), *8146*
- structural analysis, variational methods, Fuchs (M.B.), *8189*
- failure, probability theory, reliability analysis, trusses, Murotsu (Y.), Okada (H.), (et al.), *8448*
- kinematics, mathematical methods, mechanisms, motion, De Sa (S.), Roth (B.), *9092*
- mathematical methods, tensor methods, Smith (M.M.), Smith (G.F.), *9093*
- computing techniques, series, Saha (R.K.), Boriotti (J.R.), *10047*
- computing techniques, finite element methods, fluid mechanics, heat transfer, Rao (S.S.), *10061*
- linear systems, lyapunov's functions, state space techniques, Bialas (S.), *10075*
- karhunen-loeve expansion, mathematical models, pattern recognition, Fernando (K.V.M.), Nicholson (H.), *10077*
- linear systems, linear theory, multivariable systems, state space techniques, Field (A.D.), Owens (D.H.), *10079*
- bending (viscoplastic), blades, dynamic response, dynamic testing, steam turbines, Nahlik (A.), Pastia (A.), *10209*
- algorithms, design, multivariable systems, Wolovich (W.A.), *11039*
- algorithms, lyapunov's functions, numerical methods, riccati equation, Balzer (L.A.), *11042*
- poles, transfer functions, Pugh (A.C.), Ratcliffe (P.A.), *11044*
- fluid-structure interaction, piping systems, vibration (flow induced), Keskinen (R.P.), *11600*

Matros (Yu.Sh.), see Badatov (E.V.), *1732*
- see Kiselev (O.V.), *9753*

Matsch (L.A.), see Gross (W.A.), *4110, book*

Matsevityi (Yu.M.), computing techniques, conduction (heat), hybrid techniques, inverse problems, *4712*

Matsko (A.M.), see Zolotko (A.N.), *9745*

Matsuda (M.), see Shioya (S.), *2965*
- see Shioya (S.), *5794*

Matsufuji (H.), boussinesq equation, mixtures, oscillating bodies, two phase flow, Hasegawa (E.), *936*
- collision models, particle dynamics, particle fluid flow, stagnation point, walls, Hasegawa (E.), *6047*
- buoyancy, mixtures, oscillating bodies, particles, two phase flow, Hasegawa (E.), *6960*

Matsui (S.), grinding, stochastics, tools, *8366*

Matsui (T.), clay, cyclic testing, shear strength, stress strain relationships, Ohara (H.), (et al.), *2378*
- see Hayashi (S.), *3222*
- see Nagata (H.), *3633*
- see Hayashi (S.), *11606*

Matsumoto (E.), analog simulation, heat addition, thermoelasticity (steady), Sekiya (T.), *3996*
- continuum mechanics, discontinuities, internal state variables, *7139*

Matsumoto (H.), impact, materials properties, polymers, viscoelasticity (dynamic), Nakahara (I.), (et al.), *7279*

Matsumoto (J.), aeration, bubble dynamics, two phase flow, Nakamura (M.), *6974*

Matsumoto (Y.), see Fuyuki (M.), *401*
- characteristic methods, compressional waves, pipelines, pneumatic components, transient effects, Ishibashi (K.), *1597*
- dynamic analysis, frequency response, pipelines, pneumatic components, Okazaki (M.), *1598*
- arches, design, structural support, tunnels, Sakamoto (S.), (et al.), *4538*
- see Tachibana (M.), *10447*

Matsumura (S.), see Sato (H.), *6351*

Matsumura (T.), meteorology (physical), numerical methods, weather forecasting, Ookochi (Y.), *5956*

Matsunaga (N.), laminar flow, numerical methods, oscillatory flow, wavy walls, Kaneko (A.), (et al.), *602*
- see Honji (H.), *2589*

Matsuno (H.), see Mukai (Y.), *4482*

Matsuno (Y.), see Nakamura (A.), *668*

Matsuo (A.), see Mukudai (Y.), *5892*

Matsuo (K.), design, ludwig tubes, orifices, reservoirs, Kawagoe (S.), (et al.), *2763*

Matsuo (M.), see Asaoka (A.), *6394*
- excavation, soils, statistical design, Kawamura (K.), *6394*

Matsuo (T.), condensation, melting, snow, sublimation, Sasyo (Y.), *5614*
- melting, snow, sublimation, Sasyo (Y.), *5615*

Matsuo (Y.), biaxial loading, brittle fracture, fracture, stochastic processes, weibull statistics, *5295*
- see Sakamoto (Y.), *10643*

Matsuoka (H.), see Nakai (T.), *9354*

Matsushita (O.), eigenvalues, modal analysis, rotating shafts, vibration, Kikuchi (K.), (et al.), *2342*

Matsuura (K.), critical speed, resonance, rotating bodies, vibration (forced), *6305*

Matsuura (Y.), compression, crack initiation, forming, fracture, friction, metals, Morimoto (H.), *8432*

Matsuzaki (Y.), shock waves (normal), spectra, structural response, *1309*
- dynamic stability, fluid-structure interaction, incompressible flow, panels, *11651*

Matthew (G.K.), see Griffin (J.N.), *9477*

Matthews (F.L.), see Godwin (E.W.), *10381*

Matthewson (M.J.), axisymmetric loading, coatings, contact problems, indentation, *248*

Matthies (H.), deformation (finite), elastoplasticity, plates (stiffened), postbuckling behavior, ship structures, Payer (H.G.), *8276*

Mattick (A.A.), aerodynamic performance, delta wings, drag, flaps, lift, Stollery (J.L.), *10498*

Mattick (A.T.), convection, gases, heat transfer, radiant interchange, radiation, spectroscopy, *5585*

Mattioli (F.), breakwater, coasts, diffraction, integral methods, *1591*

- boundary value problems, green function, green theorem, helmholtz equation, stability (numerical), *4982*
- finite element techniques, gravity waves (surface), integral methods, *11692*

Matuk (C.), dynamic analysis, stress analysis, towing cables, *7315*

Matushevskii (G.V.), oceanography, probability theory, surface waves, wind-wave interaction, *4855*

Matveeskii (R.M.), additives, adsorption, friction, lubrication (boundary), thermal effects, *1942*

- additives, friction, lubricants (liquid), lubrication (boundary), scoring, Buyanovskii (I.A.), (et al.), *9036, book*

Matveev (A.P.), see Golovin (O.A.), *4384*

Matveev (V.V.), damping, turbines, vibration (forced), *4407*

- damping, dynamic response, rotating bodies, vibration (forced), Zinkovskii (A.P.), *5214*

Matvienko (G.G.), aerosols, laser velocimeter, turbulence (geophysical), velocimeters, velocity measurement, wind, Samokhvalov (I.V.), *4093*

Mauck (G.W.), arteries, blood flow, pressure measurement, pulsatile flow, Smith (C.R.), (et al.), *4120*

Mauer (L.), see Knothe (K.), *2351*

Maugin (G.A.), continuum theory, magnetoelastic waves, magnetoelasticity, Pouget (J.), *1054*

- continuum theory, ferrous metals, magnetoelasticity, waves, *4140*

Maus (J.R.), see Gray (J.D.), *1551*

maximum principle, discrete systems, optimal control, sampled data systems, stochastic processes, De Koning (W.L.), *175*

- discrete systems, optimal control, sampled data systems, Kuntsevich (V.M.), Lychak (M.M.), *176*
- linear systems, pursuit, rendezvous, time delay systems, Bien (Z.), Chyung (D.H.), *1141*
- adaptive systems, estimation, filters, Skelton (R.E.), *2080*
- distributed parameters, nonlinear systems, Petrovacki (D.), *3194*
- boundary value problems, diffusion, parabolic equations, Aifantis (E.C.), Hill (J.M.), *4973*
- algorithms, stochastic systems, Bodner (V.A.), Rodnishchev (N.E.), (et al.), *5052*
- discontinuities, jump conditions, optimal control, Getz (W.M.), Martin (D.H.), *8139*
- constraints, optimal control, Gollan (B.), *10086*
- heat exchangers, optimization, Nishimura (H.), *10620*
- constraints, optimal control, Blatt (J.M.), *11068*

Maxwell (T.T.), see Nilmani (M.), *12041*

May (I.M.), collapse, panels, plasticity, *3514*

Mayeda (H.), see Shibata (H.), *3171*

Mayer (W.G.), see Ngoc (T.D.K.), *3944*

Mayes (I.C.), crack closure, fatigue, inclusions, Baker (T.J.), *10273*

Mayne (P.W.), clay, modeling, strength, *413*

Mayne (R.W.), see Afimiwala (K.A.), *227*

Mayo (R.A.), kinematics, maneuverability, quaternions, space vehicles, *5715*

Mays (L.W.), see Tung (Y.-K.), *4530*

Mazilu (P.), beams, holes, stress concentration, Ieremia (M.), (et al.), *4201*

Mazumdar (J.), see Coleby (J.R.), *3365*

Mazurak (L.P.), see Berezhnitskii (L.T.), *3299*

Mazzarella (C.), constraints, design (optimum), nonlinear programming, work hardening, Polizzotto (C.), *6513*

- design (optimum), plasticity, statically indeterminate structures, Panzeca (T.), *6514*
- beams (flexural), deformation, elastoplasticity, shakedown structures, variational methods, *8232*
- see Lo Bianco (M.), *10341*

Mcadoo (D.C.), earth, geoid anomalies, gravity, ocean, *8013*

Mcallister (G.T.), design (optimum), piston rings, Rohde (S.M.), *8445*

Mcanally (W.H.) Jr., see Letter (J.V.) Jr., *1500*

Mcassey (E.V.) Jr., see Bonakdar (H.), *6773*

Mcbean (E.A.), energy transport, greenhouses, solar radiation, Haycock (D.), (et al.), *5606*

Mcbride (D.D.), see Randall (D.E.), *10874*

Mccabe (W.M.), see Koerner (R.M.), *10265*

Mccaffery (F.G.), see Batycky (J.P.), *7990*

Mccarthy (J.M.), curvature, differential geometry, kinematics, mechanical analysis, mechanisms, motion, three dimensional formulation, Roth (B.), *6061*

Mccarthy (W.A.) Jr., aluminum alloys, fracture toughness, porosity, porous media, welded joints, Lamba (H.), (et al.), *1476*

Mccartney (H.A.), see Harrison (R.M.), *11523*

Mccartney (L.N.), constitutive equations, creep, internal state variables, thermal fatigue, *1187*

- crack growth, fracture mechanics, linear theory, viscoelasticity, *8413*
- crack opening displacement, microcracks, stress intensity factor, *9399*

Mccartney (M.L.), acoustic measurements, velocimeters, Mudd (C.P.), (et al.), *4789*

Mccarty (K.P.), see Beckstead (M.W.), *11786*

Mccauley (E.W.), see Lu (S.C.H.), *11674*

Mcclamroch (N.H.), dynamic analysis, mathematical models, state space techniques, *1140, book*

Mcclimans (T.A.), froude number, plumes, rivers, stratified flow, surface tension, Saegrov (S.), *10399*

Mcclintock (F.A.), see Bassani (J.L.), *1387*

Mccloud (J.L.) III, aerodynamic loads, control, helicopters, rotors, *7797*

Mccloy (D.), control, design, fluidics, hydraulic machinery, pneumatic components, servomechanisms, Martin (H.R.), *11100, book*

Mcclurken (M.E.), see Kececioglu (I.), *11608*

Mccoll (I.R.), see Morley (J.G.), *2409*

Mccomb (W.D.), bubble dynamics, noise, nonhomogeneous media, sound generation, viscosity, Ayyash (S.), *889*

- bubble dynamics, damping, dilute solutions, polymers, Ayyash (S.), *9884*

Mcconachie (P.J.), convection, pipe flow, spectra, turbulence, turbulence (correlations), *1584*

Mccool (A.A.), see Verble (A.J.) Jr., *1770*

Mccormick (B.W.), interaction, propellers, thrust, unsteady flow, wing body combinations, Aljabri (A.S.), (et al.), *2759*

- airplanes, gyrodynamics, spin recovery, *3734*

Mccormick (S.F.), eigenvalue problems, iterative methods, matrix methods, mesh generation, newton method, *7190*

Mccormick (S.P.), see Wright (P.K.), *8363*

Mccoy (J.J.), see Fishman (L.), *3276*

- acoustics, sound propagation, wave equations, *4812*

Mccroskey (W.J.), airfoils, flutter, one dimensional flow, oscillating bodies, transonic flow, unsteady flow, wakes, *6716*

Mccutcheon (W.J.), beams, deflections, floors, stiffness, wood structures, Vanderbilt (M.D.), (et al.), *3554*

Mcdaniel (S.T.), couplings, modes, scattering, shallow water, underwater acoustics, *6902*

Mcdiarmid (D.L.), bending, fatigue, multiaxial fatigue, torsion, *6414*

Mcdonald (A.E.), see Trimble (R.H.), *10059*

Mcdonald (C.F.), see Shah (R.K.) eds., *1711, book*

- design, helium, nuclear reactors, power plants, turbomachinery, Smith (M.J.), *2750*

Mcdonald (H.), combustion, combustors, modeling, numerical methods, *4736*

Mcdonough (J.M.), nonlinear systems, oscillations, suppression, *9153*

Mcdougall (T.J.), laser doppler velocimeters, liquids, refraction, stratified flow, turbulence, *2767*

- buoyant flow, flow reversal, jets, *3689*

Mcdowell (J.L.), accelerometers, aerodynamic coefficients, digital simulation, reentry, spinning bodies, Williamson (W.E.) Jr., *3924*

Mcevily (A.J.), see Radhakrishnan (V.M.), *8384*

Mcfadden (G.), see Garabedian (P.), *9645*

Mcgee (W.M.), crack growth, fasteners, fatigue, fractographic tests, Hsu (T.M.), *9414*

Mcgill (D.J.), dynamic analysis, kinematics, mathematical methods, moving media, Kim (T.D.), *1981*

Mcgowan (J.J.), crack closure, crack growth, fatigue, material testing, three dimensional formulation, Liu (H.W.), *2412*

- crack growth, design, fatigue, high temperature, life expectancy, Liu (H.W.), *3436*

Mcgown (A.), see Andrawes (K.Z.), *3397*

Mcgregor (B.A.), continental slope, physical properties, soils, structure, Bennett (R.H.), (et al.), *410*

Mcilrath (T.J.), see Koopman (D.W.), *2898*

Mcintosh (A.C.), see Clarke (J.F.), *6840*

Mcintosh (S.C.) Jr., mathematical methods, perturbation methods, plk method, supersonic flow, Nixon (D.), *1104*

Mckee (S.), computing techniques, repetition factor, stability (numerical), volterra equations, Brunner (H.), *4184*

- see Cameron (R.F.), *6176*

Mckendree (F.S.), see Fenlon (F.H.), *4786*

Mckenzie (C.K.), field tests, nondestructive tests, rocks, ultrasonics, Stacey (G.P.), (et al.), *11181*

Mckenzie (E.), algorithms, estimation, forecasting, *2201*

Mckenzie (R.), see Szebehely (V.), *3917*

- libration theory, nonlinear theory, stability theory, Szebehely (V.), *6879*
- see Szebehely (V.), *8837*

Mckern (R.), algorithms, attitude control, gyrodynamics, Musoff (H.), *8846*

Mckinnon (R.A.), see Fitzsimmons (R.D.), *11993*

Mclarty (T.T.), see Yen (J.G.), *4439*

Mclaughlin (J.), drag reduction, oscillatory flow, particulate flow, viscoelastic fluids, *1490*

Mclaughlin (J.R.), boundary value problems, eigenvalue problems, inverse problems, sturm-liouville problems, Handelman (G.H.), *1999*

Mclaughlin (T.M.), biological joints, experimental methods, impact, injuries, sports medicine, Miller (N.R.), *7122*

Mclean (M.), creep, dislocations, friction (internal), models, stress relaxation, *12093*

Mcleod (J.B.), see Fife (P.C.), *7167*

Mcmaster (W.H.), finite element techniques, fluid-structure interaction, nuclear reactors, numerical methods, Gong (E.Y.), (et al.), *1605*
Mcmeeking (R.M.), see Leckie (F.A.), *8402*
Mcmichael (J.M.), see Retelle (J.P.) Jr., *10541*
Mcnabb (A.), adiabatic processes, calorimeters, conduction (heat), thermal diffusion, *770*
Mcnulty (P.J.), cavitation inception, noise, pumps, scale effects, Pearsall (I.S.), *10530*
Mcphee (M.G.), ice, icebergs, ocean air interaction, oceanography, oscillations, surface flow, *3017*
- boundary layer (atmospheric), currents, ice, icebergs, oscillations, surface flow, *7055*

Mcqueen (D.), see Plunt (J.), *9011*
Mcqueen (R.G.), see Siegfried (R.W.), *2388*
Mcrobie (D.E.), see Conor (P.C.), *997*
Mcvee (J.D.), hulls, ship structures, structural analysis, *6541*
Mcwilliams (J.C.), baroclinic instability, coriolis forces, currents, eddies, geostrophic flow, ocean air interaction, Holland (W.R.), (et al.), *1890*
- oceanography, vortices, Flierl (G.R.), *4856*
- currents, jets, oceanography, *4873*
- atmospheric circulation, meteorology (physical), vortices, *9934*

Mcwithey (R.R.), aluminum alloys, high temperature, laminates, mechanical properties, Royster (D.M.), *3281*
Mead (D.J.), see Hooker (R.J.), *7587*
Meade (K.P.), earthquake resistant structures, foundations, shear stress, soil structure interaction, underground, Keer (L.M.), *9346*
measurements (dynamic), dynamic testing, rails, wheels, Ahlbeck (D.R.), Harrison (H.D.), *16*
- displacement-phase-code converter, error, Kosinskii (A.V.), *224*
- shafts, torque gages, Artamonov (A.T.), Volkov (N.P.), (et al.), *225*
- creep, vibration, Cawley (P.), Adams (R.D.), (et al.), *451*
- gyrodynamics, pumps, turbomachinery, Godde (E.), *709*
- dynamic properties, human body, mass determination, zero g phenomena, Sarychev (V.A.), Sazonov (V.V.), (et al.), *1064*
- axial compressors, rotating stall, rotors, Sharma (P.B.), Railly (J.W.), *1635*
- pressure measurement, velocity measurement, Adler (D.), Taylor (P.M.), *1639*
- random excitation, vibration (random), Walker (A.W.), *2325*
- vehicles, vibration (forced), Crolla (D.A.), Dale (A.K.), *2350*
- shear layer, shear stress, walls, Tennant (M.H.), Pierce (F.J.), (et al.), *2761*
- blades, steam turbines, vibration, Donato (V.), Bannister (R.L.), (et al.), *3370*
- density, vibration, viscous effects, Wenger (A.P.), *3754*
- interface phenomena, liquid liquid interface, optical instruments, Piquemal (J.), Barrau (J.J.), *3759*
- dynamic properties, trucks, Krisper (G.), Reichweger (J.), (et al.), *4145*
- dynamic testing, internal combustion engines, noise, Tschoke (H.), *4741*
- electromagnetic waves, mechanical instruments, Franceschetti (G.), Papas (C.H.), *5250*
- density, interferometry, laser plasma interaction, transport phenomena, Benattar (R.), Popovics (C.), *5683*
- containment, diagnostics, inertia, nuclear fusion, Campbell (E.M.), Lane (S.M.), (et al.), *5684*
- diagnostics, energy spectrum, ionic flow, laser plasma interaction, Chowdhury (S.S.), Clement (R.M.), (et al.), *5687*
- charged particles, energy spectrum, ionic flow, laser plasma interaction, Clement (R.M.), Davies (R.A.), (et al.), *5689*
- energy spectrum, high temperature, plasma (toroidal), tokamak, Nakamura (K.), Hiraki (N.), (et al.), *5692*
- density, interferometry, plasma (toroidal), tokamak, Mitarai (O.), Nakashima (H.), (et al.), *5693*
- interferometry, laser plasma interaction, schlieren methods, unsteady flow, Klimkin (V.F.), Pikalov (V.V.), *5694*
- experimental mechanics, fiber optics, shock, Cook (R.O.), Hamm (C.W.), (et al.), *6320*
- noise (random), structural response, transfer functions, Aubourg (M.), Guesdon (M.), *6321*
- linearization, magneto fluid dynamics, models, navier stokes equation, Bondarenko (N.F.), Gak (M.Z.), (et al.), *6856*
- bubble dynamics, liquid gas mixture, two phase flow, Heijnen (J.J.), Vant Riet (K.), (et al.), *6972*
- dynamic analysis, gyrodynamics, gyroinertial systems, Zakharin (F.M.), Kharitonov (M.A.), *8101*
- liquid metals, magneto fluid dynamics, unsteady effects, velocity profiles, Chambarel (A.), Ricou (R.), (et al.), *8827*
- displacement gages, surface waves, Breckenridge (F.R.), Greenspan (M.), *9340*
- calibration, data acquisition, force, tension, transducers (load), Dalke (D.D.), *9426*
- attenuation, dispersion, elastic waves, Bondarenko (A.N.), Kondratev (A.I.), *10240*
- beams (cantilever), strain gages, tension, transducers (load), Haggstrom (R.P.), *10314*
- aerosols, sampling, El-Shobokshy (M.S.), *12061*

Meauze (G.), aerodynamic performance, cascades, numerical analysis, pressure distribution, *3677*
mechanical analysis, rolling, shaping, straighteners, Das Talukder (N.K.), Johnson (W.), *3425*
- curvature, differential geometry, kinematics, mechanisms, motion, three dimensional formulation, Mccarthy (J.M.), Roth (B.), *6061*
- composite materials, compression, fibers, strength, Piggott (M.R.), *6191*
- mesh generation, singularities, Syczewski (M.), Tribillo (R.), *9125*

mechanical components, probabilistic design, reliability, safety, Moss (T.R.) ed., *1434, book*
mechanical design, knees, prosthetic devices, Judge (G.W.), Fisher (L.), *1957*
- biological joints, ski binding, sports medicine, Hull (M.L.), Allen (K.W.), *6001*
- beams, bellows, design, plates, Chand (S.), Garg (S.B.L.), *7623*

mechanical instruments, electromagnetic waves, measurements (dynamic), Franceschetti (G.), Papas (C.H.), *5250*
mechanical joints, algorithms, contact problems, finite element methods, machine design, Sachdeva (T.D.), Ramakrishnan (C.V.), *541*
- bolted joints, design, wood, Wilkinson (T.L.), Rowlands (R.E.), *5378*
- thermoelasticity (nonlinear), tools, Attia (M.H.), Kops (L.), *5800*
- design, manipulators, mechanisms, robotics, Derby (S.), *6563*
- gas turbines, residual stresses, thermoplasticity, Kravchenko (B.A.), Gutman (G.N.), (et al.), *7953*
- algorithms, contact problems, friction (solid solid), tools, Sachdeva (T.D.), Ramakrishnan (C.V.), *9945*
- bolted joints, composite materials, fibers, plastics, Godwin (E.W.), Matthews (F.L.), *10381*

mechanical properties, glass fibers, polymers, West (J.M.), Majumdar (A.J.), (et al.), *291*
- biomaterials, composite materials, fibers, teeth, Fox (P.G.), *1034*
- paper, structure, Herdman (P.T.), *2252*
- charcoal cloth, materials processing, textiles, Capon (A.), Maggs (F.A.P.), (et al.), *2254*
- dynamic properties, elastic constants, polymers, vibration, Mertz (K.), *2490*
- aluminum alloys, high temperature, laminates, Mcwithey (R.R.), Royster (D.M.), *3281*
- brittle materials, ice, tests, Timco (G.W.), *3490*
- creep, dispersion hardening, nickel alloys, tensile strength, Whittenberger (J.D.), *3500*
- ferrous metals, fracture toughness, micromechanisms, stainless steels, toughness, Lula (R.A.) ed., *3501, book*
- ceramics, creep, glass, high temperature, Northover (J.P.), Groves (G.W.), *4520*
- forging, gear teeth, gears (spur), grinding, metallurgy, Abdel-Rahman (A.R.O.), Dean (T.A.), *5274*
- finite element techniques, friction, upset forging, Hartley (P.), Sturgess (C.E.N.), (et al.), *5275*
- metals, rolling, Kato (K.), Saito (Y.), (et al.), *5278*
- axial loading, bending, friction, ice, tests, Schwarz (J.), Frederking (R.), (et al.), *5324*
- material testing, materials properties, strength, testing equipment, Voloshchenko (A.P.), Kuzema (Yu.A.), (et al.), *5326*
- abrasion, hardness, heat treatment, steel, wear, Sorokin (G.M.), Milancheva (N.V.), *5334*
- dynamic testing, plasticity, steel, strain, tension, Novikov (N.V.), Ulyanenko (A.P.), (et al.), *6475*
- mixtures, two phase flow, viscosity, Oshima (N.), *6980*
- prediction, soils, statistical theory, Tabba (M.M.), Yong (R.N.), *7441*
- electro-osmosis, field tests, soils, Banerjee (S.), Mitchell (J.K.), *7445*
- electroosmosis, field tests, soils, Mitchell (J.K.), Banerjee (S.), *7446*
- anisotropy, deep drawing, deformation (plastic), drawing, Schmidt (W.), *7459*
- failure, fatigue, ice, Mellor (M.), Cole (D.), *7479*
- algorithms, computer programming, stress strain relationships, testing equipment, Kharchenko (V.K.), Gnuchil (Yu.B.), (et al.), *7562*
- compression, strength, Azarov (A.D.), *7567*
- biomechanics, deformation, lungs, tissues, Tai (R.C.), Lee (G.C.), *8071*
- bones, experimental methods, Jaeger (J.H.), Merckx (D.), (et al.), *9047*
- electrical properties, laminates, Kadotani (K.), Aki (F.), (et al.), *10132*
- inspection, magnetic field, rolling, sheet metal, Timoshenko (N.N.), Pyatunin (G.A.), (et al.), *10322*
- drag, slurries, spherical bodies, Tsai (S.T.), *12018*

mechanical stabilization, laminates, plates, rayleigh ritz method, shape factors, temperature, Hyer (M.W.), *9247*
mechanical systems, lorentz model, lyapunov's functions, stability theory, Roshchin (N.V.), *30*
- lyapunov's functions, resonance, stability theory, Tkhai (V.N.), *1077*
- probability theory, stochastic processes, Friedrich (H.), Hennig (K.), *3526*
- dynamic analysis, mathematical models, Do Sanh, *4144*
- dynamic analysis, mathematical methods, Rubanovich (E.M.), *6069*
- existence theorems, periodic orbits, Pasynkova (I.A.), *6067*
- impedance methods, vibration isolation, Granhall (A.), Kihlman (T.), *6282*
- canard, missiles, remote control, rolling motion, Blair (A.B.) Jr., *6728*
- dynamic behavior, unloading, Oosterloo (P.J.), *7418*
- vibration (nonlinear), Kononenko (V.O.), *8279*
- damping, vibration, Ortt (D.), *8287*
- kinematics, mathematical models, rigid bodies, Lotstedt (P.), *9083*
- dynamic analysis, vibration (nonlinear), Manevich (L.I.), Pilipchuk (V.N.), *10191*

mechanics, control, manipulators, mechanisms, robotics, Morecki (A.), Bianchi, (et al.), *209, book*
- drying, evaporation, thermodynamics, Lampinen (M.), *800*
- evaporation, heat pipes, Tolubinskii (V.I.), Antonenko (V.A.), (et al.), *804*
- boundary value problems, mathematical methods, Gelman (B.D.), Gliklikh (Iu.E.), *1075*
- boundary integral methods, finite element techniques, numerical analysis, *1113, book*
- solid mechanics, structures, Pister (K.S.) ed., *1421, book*
- matrix methods, structural analysis, Darkov (A.) ed., *2529, book*
- continuum mechanics, solid mechanics, waves, Strelkov (S.P.), *3074, book*
- fluid-structure interaction, nuclear reactors, pressure vessels, vibration (forced), Jaeger (T.A.) eds., Boley (B.A.), *3565, book*
- constraints, dynamic analysis, lagrange equations, Hering (J.), *6053*
- conservation laws, lagrange equations, particle dynamics, Lutzky (M.), *7131*
- dynamic analysis, Desloge (E.A.), *7144*
- modeling, reactor structures, structural analysis, Jaeger (T.A.) eds., Boley (B.A.), *7618, book*

mechanisms, control, manipulators, mechanics, robotics, Morecki (A.), Bianchi, (et al.), *209, book*
- adhesion, force, grinding, Yossifon (S.), Rubenstein (C.), *438*
- dynamic behavior, rotating shafts, Stuhler (W.), *1280*
- kinematics, statically indeterminate structures, synthesis, Kozhevnikov (S.N.), *1466, book*
- design (optimum), synthesis, Kothari (M.), Rao (A.C.), *1468*
- chebyshev approximations, linkages, Dijksman (E.A.), *1472*
- cams, gear trains, linkages, machine design, transmissions, Kozhevnikov (S.N.) ed., *2549, book*
- bond graphs, torque, transmissions, Stecki (J.S.), *2550*
- design (optimum), geometric programming, synthesis, Rao (A.C.), *2551*
- constraints, dynamic analysis, Levitsky (D.N.), *2552*
- cams, computer aided design, Borun (F.L.), *2554*
- dynamic properties, kinematics, Meyer Zur Capellen (W.), Meyer Zur Capellen (F.), *3084*
- kinematics, rigid bodies, Pekarek (F.), *3087*
- algorithms, design, force, kinematics, transmission, Sutherland (G.H.), *3569*
- algorithms, linkages, synthesis, Jaini (C.K.C.), Rao (A.C.), *4550*
- analysis, computer aided design, linkages, sensitivity, Coit (W.G.), Riley (D.R.), *4557*
- design, four bar linkage, kinematics, linkages, Hain (K.), *4560*
- design (optimum), flexible bodies, high speed, Cleghorn (W.L.), Fenton (R.G.), (et al.), *5377*
- curvature, differential geometry, kinematics, mechanical analysis, motion, three dimensional formulation, Mccarthy (J.M.), Roth (B.), *6061*
- burmester configuration, four bar linkage, kinematics, Watanabe (K.), *6554*
- connecting rods, design, error, linkages, sensitivity, Lebedev (P.A.), *6559*
- cams, linkages, synthesis, Singh (Y.P.), Kohli (D.), *6561*
- design, manipulators, mechanical joints, robotics, Derby (S.), *6563*
- design, manipulators, robotics, synthesis, Orlandea (N.), Berenyi (T.), *6564*
- design (optimum), fourier transform, laplace transform, nonlinear mechanics, Sandler (B.Z.), *6565*
- earthquakes, mantle, Vvedenskaya (A.V.), Golubeva (N.V.), *7027*
- cams, design, dynamics, linkages, Kwong (C.W.), Wiederrich (J.L.), (et al.), *7627*
- elastic behavior, equations of motion, kinematics, lagrange multiplier, Blejwas (T.E.), *8100*
- cams, design, Turnbull (S.R.), *8470*
- kinematics, mathematical methods, motion, De Sa (S.), Roth (B.), *9091*
- kinematics, mathematical methods, matrix methods, motion, De Sa (S.), Roth (B.), *9092*
- cams, orifices, pneumatic components, Lequoc (S.), Cheng (R.M.H.), *9483*
- balancing, four bar linkage, linkages, vibration, Bagci (C.), *10378*
- kinematics, linkages, synthesis, Yu Hon-Cheung, Baker (J.E.), *10380*
- four bar linkage, kinematics, linkages, Baker (J.E.), *11341*
- algorithms, kinematics, linkages, Garcia De Jalon (J.), Serna (M.A.), (et al.), *11342*

mechanisms (planes), algorithms, linkages, synthesis, Soni (A.H.), Azeez (S.A.), *540*
- dyades, elastodynamics, linkages, Pelecudi (C.), Mitsis (S.), *2553*
- kinematics, linkages, Kothari (M.), Rao (A.C.), *3083*
- kinematics, manipulators, mechanisms (spatial), robotics, Duffy (J.), *3568, book*
- kinematics, linkages, synthesis, Erdman (A.G.), *3578*
- dynamic response, dynamics, matrices, Dranga (M.), Manolescu (N.I.), *4551*
- four bar linkage, kinematics, linkages, machine design, Kimbrell (J.E.), Hunt (K.H.), *4558*
- computer aided design, design (optimum), linkages, optimization, Gauchel (H.-J.), *4563*
- dynamic analysis, kinematics, Williams (R.J.), Rupprecht (S.), *4942*
- four bar linkage, kinematics, linkages, synthesis, Sun (J.W.H.), Waldron (K.J.), *5375*
- design, four bar linkage, kinematics, Hain (K.), *6376*
- couplings, four bar linkage, kinematics, linkages, Hunt (K.H.), Fichter (E.F.), *6562*
- kinematics, mathematical models, Wunderlich (W.), *7145*
- design, machine design, structure, Miller (S.), Gronowicz (A.), (et al.), *7625*
- design, four bar linkage, Heinzl (J.), *7632*
- balancing, four bar linkage, kinematics, kinetics, Tricamo (S.J.), Lowen (G.G.), *8475*
- four bar linkage, kinematics, Kimbrell (J.E.), Hunt (K.H.), *8478*
- algorithms, design, manipulators, robotics, Murata (H.), Hayashi (I.), *8480*
- design, high speed, linkages, springs, synthesis, Griffin (J.N.), Matthew (G.K.), *9477*
- balancing, four bar linkage, linkages, Tricamo (S.J.), Lowen (G.G.), *9478*
- design, linkages, mechanisms (spatial), rotational capability, Geise (G.), Modler (K.-H.), *9481*
- algorithms, control, design, manipulators, robotics, Hewit (J.R.), Burdess (J.S.), *9482*

mechanisms (spatial), kinematics, manipulators, mechanisms (planes), robotics, Duffy (J.), *3568, book*
- kinematics, linkages, Nitescu (P.N.), *3579*
- graphical methods, kinematics, linkages, Nitescu (P.N.), *3580*
- closure, kinematics, linkages, robotics, Sticher (F.), *4559*
- design, kinematics, optimization, Keler (M.), *4562*
- dynamic analysis, four bar linkage, kinematics, linkages, Oranescu (A.), Bocioasa (R.), *6560*
- dynamics, linkages, screws, vector methods, Keler (M.L.), Beran (M.A.), *7626*
- dynamic analysis, finite element methods, flexibility, linkages, matrices, Sunada (W.), Dubowsky (S.), *7629*
- kinematics, linkages, screws, Ohwovoriole (M.S.), Roth (B.), *8094*
- kinematics, manipulators, optimization, robotics, Benati (M.), Morasso (P.), (et al.), *9084*
- kinematics, robotics, Osman (M.O.M.), Bahgat (B.M.), (et al.), *9085*
- design, dynamic analysis, four bar linkage, velocity profiles, Osman (M.O.M.), Dukkipati (R.V.), *9479*
- constraints, linkages, Yu Hon-Cheung, *9480*
- design, linkages, mechanisms (planes), rotational capability, Geise (G.), Modler (K.-H.), *9481*

Mechetnyy (V.S.), algorithms, identification, linear systems, modeling, multivariable systems, pseudoinverse, static model, *7235*

Mecholsky (J.J.), see Rice (R.W.), *7489*

Mecking (H.), experimental results, plastic flow, polycrystalline materials, work hardening, Kocks (U.F.), *7289*

Medeksha (G.G.), see Zhitkyavichene (V.P.), *3269*

Medina (F.), axisymmetric loading, boussinesq equation, finite element techniques, infinite medium, *4189*

Medland (I.C.), finite element methods, interbraced beam systems, structural stability, *2294*

Medvedev (S.A.), see Oleinik (N.V.), *5280*
- see Kurkin (V.I.), *7382*

Medvedev (S.V.), see Kunitsyn (A.L.), *2000*

Medvedev (V.S.), see Vereshchagin (A.F.), *9184*

Medwin (H.), barriers, noise, noise abatement, *4799*
- ocean, scattering, underwater acoustics, Novarini (J.C.), *5744*

Meecham (W.C.), aerothermoacoustics, incompressible flow, sound generation, wave equations, *9844*

Meek (J.L.), see Beer (G.), *7206*

Meerkov (S.M.), accelerators, control, lasers (gasdynamic), vibration, vibrational control, *5064*

Meerov (M.V.), algorithms, multivariable systems, optimization, Bershchanskiy (Ya.M.), (et al.), *1152*
- see Bershchanskii (Ya.M.), *3185*

Meeten (G.H.), anisotropy, birefringence, colloids, optical techniques, suspensions, *8502*

Meetham (G.W.) ed., composite materials, gas turbines, materials processing, steel, titanium, *11337, book*

Megahed (I.E.A.), axisymmetric flow, elliptic equations, jets, Elghobashi (S.E.), *2675*

Megahed (M.M.), cyclic loading, elastoplasticity, shakedown structures, work hardening, *2238*

Megahid (A.), beams, reinforced concrete, shear strength, ultimate strength, Masmoun (A.), (et al.), *10358*

Meguid (S.A.), cylindrical bodies, plastic behavior, rate sensitivity, torsion, work hardening, *277*
- aluminum alloys, plasticity, servomechanisms, steel, strain measurement, stress relaxation, *10334*

Mehta (A.J.), blunt bodies, drag coefficient, fall velocity, sedimentation, stability, Lee (J.), (et al.), *5391*

Mehta (P.R.), channels (closed), diffusers, ducts (variable area), stratified flow, turbulence, *9602*

Mei (C.C.), acoustic waves, diffraction, electromagnetic waves, scale models, scattering, Tuck (E.O.), *4967*
- see Haren (P.), *9013*
- see Serman (D.D.), *9631*
- see Foda (M.A.), *11577*

Meier (G.D.), biomechanics, heart, kinematics, strain analysis, Ziskin (M.C.), (et al.), *1037*

Meier (G.E.A.), pulsatile flow, self excitation, tanks, valves, Szumowski (A.P.), *9503*
- see Anderson (J.S.), *11493*

Meier (H.U.), bodies of revolution, boundary layer, flow measurement, separation, transition, Kreplin (H.-P.), *3651*
Meilakhs (A.M.), control, control stability, feedback, linear systems, matrix methods, stability theory, *4246*
Mein (R.G.), modeling, watersheds, Brown (B.M.), *5913*
Meinkohn (D.), cyclic loading, heating, polymers, thermal effects, thermal explosions, vibration, *929*
Meire (R.), libration theory, restricted three body problem, stability theory, *2916*
Meirovitch (L.), discrete systems, distributed parameters, modal control, space vehicles, spinning bodies, Van Landingham (H.F.), (et al.), *198*
- see Oz (H.), *881*
- shape functions, structural analysis, substructuring, Hale (A.L.), *2528*
- algorithms, cholesky algorithm, computer programming, eigenvalues, matrices, optimization, Baruh (H.), *5001*
- see Oz (H.), *5045*
- control, distributed parameters, hyperbolic equations, modal control, optimal control, self-adjoint systems, Baruh (H.), *9170*
- damping, distributed parameters, modal control, numerical methods, Baruh (H.), *11061*

Meissner (U.), finite element techniques, rivers, tides, *5901*
Meister (F.J.), acoustic loading, biodynamics, human body, vibration, *8081*
Melamed (L.E.), conduction (heat), conductivity, heat addition, heat sources, semi infinite media, *8736*
Melander (A.), ductile fracture, materials properties, void fraction, Stahlberg (U.), *3465*
Melbard (A.M.), see Kalinin (V.M.), *3691*
Melbin (J.), see Li (J.F-J.), *7118*
- biomechanics, blood flow, flexible walls, fluid-structure interaction, muscles, navier stokes equation, Noordergraaf (A.), *8073*

Melbourne (W.H.), see Kwok (K.C.S.), *3907*
Melchers (R.E.), axial loading, beams, design (optimum), reinforced concrete, *7596*
Melekhova (N.A.), hydrology, roughness, turbulent flow, wavy walls, Mikhailova (N.A.), *5915*
Meleshko (V.V.), energy density, stonely waves, surface waves, *1296*
- see Grinchenko (V.T.), *10228*

Melikhov (O.I.), buoyant flow, cellular motions, closed conduit flow, convection, Shcherbak (S.B.), *5539*
Melkanovich (A.A.), shape factors, thickness, ultrasonics, velocimeters, Firsukov (A.A.), (et al.), *7582*
Mellen (R.H.), absorption, chemical reactions, ocean, underwater acoustics, Browning (D.G.), (et al.), *5719*
Melling (A.), see Flueckiger (G.), *10528*
Mellingen (K.), see Hatlestad (B.), *8461*
Mellor (A.M.), see Plee (S.L.), *1767*
Mellor (G.), stratified flow, turbulence, turbulence (geophysical), turbulent flow, Strub (P.T.), *652*
Mellor (M.), failure, fatigue, ice, mechanical properties, Cole (D.), *7479*
Melman (M.M.), see Popov (Yu.A.), *10707*
Melnikov (A.N.), see Dyubua (P.P.), *1920*
Melnikov (B.G.), design, filters, kalman filters, optimization, wienerhopf technique, *9180*
Melnikov (D.A.), nozzles, pressure distribution, supersonic flow, unsteady flow, Tutushkin (A.S.), *7727*
Melnikov (G.P.), see Shesterikov (S.A.), *8198*
Melnikov (I.V.), bearings (ball), eddy currents, hardness, heat treatment, inspection, transducers, Savikovskii (L.A.), (et al.), *6491*
Melnikov (V.P.), boundary value problems, elasticity, orthogonal functions, viscoelasticity, *4962*
melting, conduction (heat), energy storage, liquid solid interface, phase changes, Henze (R.H.), Humphrey (J.A.C.), *768*
- heat transfer, phase changes, solidification, velocity profiles, Ramachandran (N.), Jaluria (Y.), (et al.), *769*
- analytical methods, biot method, radiation, Prasad (A.), *812*
- crystals, floating zone, De-Riva (I.), Meseguer (J.), *813*
- convection (free), cylindrical bodies, Bareiss (M.), Beer (H.), *1728*
- capillary flow, convection, crystals, radiant interchange, Schwabe (D.), Scharmann (A.), *2807*
- latent heat, solidification, stefan problem, Solomon (A.), *2814*
- conduction (heat), dispersed flow, dispersed media, freezing, thermophysical properties, Pavlov (A.R.), Permyakov (P.P.), (et al.), *2815*
- boundary conditions, convection, pcm body, Solomon (A.D.), *2816*
- convection (forced), heat transfer, surface effect, Solomon (A.D.), *2820*
- differential equations (ordinary), dynamics, glass, materials processing, Kobayashi (M.), Hujisawa (T.), (et al.), *3424*
- boussinesq equation, convection, liquid solid interface, solidification, Povkh (I.L.), Zavgorodnii (P.F.), (et al.), *3819*
- finite element methods, phase changes, stefan problem, vaporization, Bonnerot (R.), Jamet (P.), *3820*
- containment, liquid metals, magneto fluid dynamics, vessels, Getselev (Z.N.), Martinov (G.I.), *3894*
- freezing, models, transient, Cheung (F.B.), *4727*
- convection (free), ice, models, Wilson (N.W.), Lee (J.J.), *4728*
- fuel elements, mathematical models, nuclear reactors, Chen (W.L.), Ishii (M.), (et al.), *5589*
- condensation, snow, sublimation, Matsuo (T.), Sasyo (Y.), *5614*
- snow, sublimation, Matsuo (T.), Sasyo (Y.), *5615*
- dies, films, materials processing, polymers, Cheng (C.Y.), *6407*
- free jets, phase changes, shielded arc welding, Kolesnichenko (A.F.), *6570*
- cylindrical bodies, freezing, phase changes, Lunardini (V.J.), *6800*
- extended surfaces, fins, heat transfer, solidification, Bathelt (A.G.), Viskanta (R.), *7853*
- error, mathematical methods, stefan problem, Epperson (J.F.), *8108*
- crossflow, cylindrical bodies, ice mechanics, solidification, Cheng (K.C.), Inaba (H.), (et al.), *8739*
- convection (free), cylindrical bodies, heat transfer (combined modes), Yao (L.S.), Chen (F.F.), *8748*
- ablation, fluid mechanics, heat transfer, Omelchenko (K.G.), Trenev (M.G.), *8774*
- ice, stratification, Huppert (H.E.), Josberger (E.G.), *9926*
- film boiling, shock waves, thermal explosions, thermal shock, Inoue (A.), Bankoff (S.G.), *11760*
- film boiling, shock waves, thermal explosions, thermal shock, Inoue (A.), Ganguli (A.), (et al.), *11761*

Meltzer (G.), attenuation, noise, noise measurements, springs, Melzig-Thiel (R.), *6895*
Melzig-Thiel (R.), see Meltzer (G.), *6895*
membrane theory, finite element techniques, mesh generation, stiffness matrix, Robinson (J.), *1133*
- shells (membrane), shells (of revolution), Kisban (S.), *1232*
- panels (curved), shells (hyperbolic paraboloid), shells (thin), Layrangues (P.), *3306*
- anisotropic media, cosserat solids, moving surfaces, shells (thin), Murdoch (A.I.), Cohen (H.), *4926*
- finite difference methods, shells, theory, Csonka (P.), *5156, book*
- developable surfaces, shells, Pina (E.), Campoy (G.), *5158*
- rayleigh ritz method, strings, vibration (free), Irie (T.), Yoda (K.), *7387*
- shells, theory, Pfluger (A.), *9266*
- shells (axisymmetric), shells (of revolution), shells (thin), Hsu (T.C.), Shang (H.M.), *10147*
- cooling towers, shells (of revolution), thin walled structures, Szalai (J.), *10151*
- bending, finite element techniques, shear loading, tanks, Royles (R.), Sofoluwe (A.B.), *11114*

membranes, shells, stress functions, stresses, Simmonds (J.G.), *308*
- holes, hovercraft, Firt (V.), *310*
- diaphragms, large displacement, Na (T.Y.), Kurajian (G.M.), *323*
- blood, cell behavior, experimental methods, plastic behavior, Waugh (R.E.), La Celle (P.L.), *1949*
- ear, gravity, otolith membrane, Twizell (E.H.), *1950*
- deformation (finite), deformation (plastic), shells (plastic), Selyutin (A.E.), Lebedev (A.A.), *2280*
- acoustic loading, acoustics, conical bodies, loudspeakers, Van Der Pauw (L.J.), *2949*
- finite strain, Fenner (W.J.), Wu (C.H.), *3304*
- hydrodynamic stability, shear flow, vortex flow, Couder (Y.), *3702*
- porous surfaces, rotating bodies, Mikhlin (J.A.), Tanny (G.B.), *3852*
- finite strain, plane stress, wrinkling, Wu (C.H.), Canfield (T.R.), *4369*
- axisymmetric loading, nonlinear theory, Weinitschke (H.J.), *4371*
- acceleration waves, dynamic analysis, mathematical methods, Pop (J.J.), Wang (C.-C.), *4421*
- plates, vibration (free), Irie (T.), Yamada (G.), (et al.), *4422*
- cylindrical bodies, drag, linear theory, navier stokes equation, Hughes (B.D.), Pailthorpe (B.A.), (et al.), *4584*
- containers (partially filled), dynamic loads, excitation, fluid-structure interaction, sloshing, Bauer (H.F.), *4661*
- eigenvalue problems, finite difference methods, Kuttler (J.R.), *5006*
- finite element techniques, helmholtz equation, variational methods, vibration, Laura (P.A.A.), Sarmiento (G.S.), (et al.), *5025*
- mesh generation, nonlinear characteristics, plates, shells, Jones (R.E.), Vos (R.G.), *5027*
- finite strain, theory, Yin (W.-L.), *5157*
- half space, reinforced bodies, thermoelasticity (steady), Tamate (O.), Sekine (H.), (et al.), *5795*
- finite element techniques, helmholtz equation, variational methods, vibration, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *6097*
- beams, finite difference methods, mesh generation, plates (folded), Mohr (G.A.), *6105*
- annuli, axial loading, large displacement, Allman (D.J.), Mansfield (E.H.), *6217*
- cyclic loading, stress strain relationships, tissues, Vito (R.P.), Macmanus (R.K.), (et al.), *7112*
- elasticity (linear), prestressed structures, Turvey (G.J.), *7335*
- curved surfaces, strain analysis, Benati (M.), *8244*
- gravity, wrinkling, Mansfield (E.H.), *8245*
- shells (of revolution), variational methods, Kreichman (M.M.), Cherevatskii (V.B.), *8248*

- hydrodynamic stability, liquid solid interface, viscoelasticity, Steinchen (A.), Gallez (D.), (et al.), *8275*
- plates (circular), plates (holed), vibration (free), wave engines, Lin (W.H.), *8301*
- dams, design, Goel (M.C.), Singhal (M.M.), *9457*
- boundary value problems, elastic bodies, laplace equation, variational methods, Lefevere (A.-M.), *10149*
- flexible bodies, fluid-structure interaction, strouhal number, two dimensional flow, Newman (B.G.), Low (H.T.), *11632*
- piezoelectrics, transducers, Lerch (R.), *11898*

membranes (inflatable), inflatable structures, inflation, restraint systems, Cole (B.N.), *1242*
- airfoil theory, cavitation, cavitation number, contact problems, surface tension, weber number, Vanden-Broeck (J.-M.), *10402*

membranes (permeable), bubbly flow, gases, Ramchandran (N.), Didwania (A.K.), (et al.), *1876*
- brownian motion, molecular diffusion, Ramshaw (J.D.), *3643*
- biomechanics, cell behavior, materials properties, Martynov (L.A.), *6015*
- diffusion, permeability, thermal effects, Ibanez (J.A.), Tejerina (A.F.), *7874*
- anisotropic media, biological membranes, inclusions, Pasechnik (V.I.), *8072*
- diffusion, dilute solutions, mixing, osmosis, Pedley (T.J.), *8078*
- absorption, bacterial cells, cell behavior, Brunn (P.O.), *9065*

Mendelsohn (D.A.), edge cracks, elastic waves, scattering, Achenbach (J.D.), (et al.), *6348*

Mendenhall (M.R.), compressible flow, supersonic flow, vortex shedding, *6630*

Menendez (A.N.), see Marshall (G.), *11564*

Menezes (E.V.), constitutive equations, materials possessing memory, non newtonian flow, shear flow, viscoelastic fluids, *2575*

Meng (S.Y.), see Cheng (H.K.), *2612*

Mengi (Y.), see Ertepinar (A.), *11134*

Menguturk (M.), boundary layer, compressible flow, deposition, gas turbines, particles, two dimensional flow, Sverdrup (E.F.), *8564*
- see Wenglarz (R.A.), *8807*

meniscus, capillary waves, surface tension, Chiroiu (V.), *3710*
- capillary flow, laplace equation, Finn (R.), *8520*

Menneron (J.-C.), aerodynamics, drag coefficient, spoilers, trucks, vehicles, wind tunnels, *3732*

Mennig (J.), boltzmann equation, conductivity, neutrons, nuclear radiation, radiant interchange, transport, Ozisik (M.N.), (et al.), *776*

Menon (S.), see Pai (S.I.), *9637*

Menon (V.V.), adiabatic processes, discontinuities, plasma, theory, waves, Sharma (V.D.), *10759*

Mensing (P.), lasers, mixing layers, smoke tunnels, turbulent flow, visualization, Fiedler (H.), *9679*

Menzala (G.P.), cauchy problem, nonlinear systems, parabolic equations, wave equations, *1090*
- cauchy problem, nonlinear waves, wave equations, Strauss (W.A.), *7171*

Mercier (O.), control, decoupling, design, linear systems, multivariable systems, nonlinear systems, synthesis, *9165*

Merckx (D.), see Jaeger (J.H.), *9047*

Meredith (B.D.), computer programming, data analysis, imaging systems, real time solution, spectra, Kelly (W.L.) IV, *3129*

Meredith (D.), beams, dynamic response, impact, nonlinear structures, transient loading, Morman (K.N.) Jr., (et al.), *514*
- beams (thin section), nonlinear theory, Witmer (E.A.), *3293*

Meredith (R.W.), see Zuckerwar (A.J.), *11975*

Merilees (P.E.), meteorology, spectra, *3027*

Merkin (J.H.), boundary layer (thermal), convection, heat transfer, plates (parallel), porous media, *3782*

Merkurev (V.V.), algorithms, estimation, optimization, pareto set, Moldavskii (M.A.), *4281*

Merminod (A.), see Janach (W.), *10264*

Merrill (L.S.), see Kazemi (H.), *2994*

Merte (H.) Jr., see Oker (E.), *1692*

Mertol (A.), conduction (steady), thermal instability, thermosyphons, transient effects, Greif (R.), (et al.), *5598*
- energy storage, heat exchangers, mathematical models, solar collectors, solar energy, thermosyphons, Place (W.), (et al.), *8756*

Mertz (K.), dynamic properties, elastic constants, mechanical properties, polymers, vibration, *2490*

Merzhanov (A.G.), see Ivieva (T.P.), *9764*

Merzhievskii (L.A.), dislocations, relaxing media, rods, stress relaxation, yield criteria, Shamonin (S.A.), *8200*
- particle dynamics, penetration, velocity profiles, *8348*

Merzkirch (W.) ed., flow, survey, surveys, visualization, *9677, book*

Mescall (J.F.), see Shea (R.), *1311*

Meseguer (J.), see DaRiva (I.), *813*

mesh generation, finite difference methods, finite element techniques, plane strain, Kunar (R.R.), *55*
- differential equations (ordinary), differential equations (partial), numerical methods, time dependence, Lee (N.N.), Meyers (R.E.), *59*
- finite element techniques, infinite medium, Bettess (P.), *77*
- finite element techniques, plates, Stefanou (G.D.), Syrmakezis (K.), *78*
- computing techniques, finite element methods, programming, Imafuku (I.), Kodera (Y.), (et al.), *79*
- elastoplasticity, finite element techniques, substructuring, Anand (S.C.), Shaw (R.H.), *80*
- finite difference methods, survey, Liszka (T.), Orkisz (J.), *1124*
- finite element techniques, membrane theory, stiffness matrix, Robinson (J.), *1133*
- finite element methods (hybrid), seepage, surface flow, Bathe (K.-J.), Khoshgoftaar (M.R.), *1870*
- differential equations (partial), finite element techniques, Bernadou (M.), Hassan (K.), *2060*
- computing techniques, three dimensional formulation, Pissanetzky (S.), *2062*
- algorithms, finite element techniques, matrices (sparse), George (A.), *2063*
- finite element techniques, singularities, Hughes (T.J.R.), Akin (J.E.), *2065*
- finite element techniques, interpolation, Robinson (J.), Ward (P.), *2067*
- computing techniques, finite difference methods, finite element techniques, modeling, Thacker (W.C.), *3122*
- biharmonic equation, boundary conditions, matrix inversion, stiffness matrix, Stavitsky (D.), Macagno (E.), (et al.), *3131*
- conduction (unsteady), convergence, crank-nicolson scheme, stability theory, Jamet (P.), *4181*
- computer programming, finite element techniques, gaussian integration, matrices, Jackson (C.P.), *4191*
- computer programming, computing techniques, triangular elements, Sadek (E.A.), *4195*
- contact problems, dynamics, finite element techniques, Asano (N.), *4202*
- computer programming, finite element techniques, stiffness matrix, vibration, Hoa (S.V.), Sankar (S.), *5019*
- membranes, nonlinear characteristics, plates, shells, Jones (R.E.), Vos (R.G.), *5027*
- error, estimation, finite element techniques, structural analysis, Kleiber (M.), *5028*
- bending, finite element methods (hybrid), plates (thick), Cheung (Y.K.), Wong (P.M.), (et al.), *5029*
- computer graphics, computing techniques, finite element techniques, optimization, Shephard (M.S.), Gallagher (R.H.), (et al.), *5031*
- computing techniques, differential equations (ordinary), singular perturbations, Kreiss (B.), Kreiss (H.-O.), *6087*
- computing techniques, continuation methods, finite element techniques, nonlinear mechanics, structural analysis, Rheinboldt (W.C.), *6089*
- optimization, random search, stochastics, Sheela (B.V.), *6099*
- finite element techniques, plane stress, semi infinite media, singularities, Shephard (M.S.), Gallagher (R.H.), (et al.), *6104*
- beams, finite difference methods, membranes, plates (folded), Mohr (G.A.), *6105*
- computer programming, finite element techniques, graphical methods, mathematical methods, Haber (R.), Shephard (M.S.), (et al.), *6106*
- convergence, stochastics, Hoffman (R.E.), Guerra (F.M.), (et al.), *6111*
- fatigue, surface profiles, thin films, wear, El-Sherbiny (M.G.), Salem (F.B.), *7088*
- eigenvalue problems, iterative methods, matrix methods, newton method, Mccormick (S.F.), *7190*
- finite difference methods, marching procedures, navier stokes equation, parabolic equations, stability theory, Rubin (S.G.), *7191*
- finite element methods, finite element methods (hybrid), finite element techniques, structural analysis, Cheung (Y.K.), Yeo (M.F.), *7202*
- boundary elements, finite element techniques, holes, infinite medium, mining, Beer (G.), Meek (J.L.), *7206*
- computer programming, finite element techniques, fluid mechanics, triangular elements, Kleinstreuer (C.), Holdeman (J.T.), *7220*
- conduction (unsteady), moving media, Padovan (J.), *7223*
- boundary layer, finite element techniques, galerkin method, steps, viscous flow, Leone (J.M.) Jr., Gresho (P.M.), *7713*
- finite element techniques, moving loads, Padovan (J.), Zeid (I.), *8149*
- finite element techniques, shells (thick), structural design, thermal diffusion, Baldur (R.), *8156*
- mechanical analysis, singularities, Syczewski (M.), Tribillo (R.), *9125*
- asymptotic behavior, elliptic equations, error, Rai (M.M.), Anderson (D.A.), *9127*
- convergence, finite element techniques, interpolation, Babuska (I.), Szabo (B.), *9128*
- elliptic equations, finite element methods, infinite medium, Goldstein (C.I.), *9134*
- approximations (polynomial), finite element techniques, interpolation, Okabe (M.), *10065*

Meshalkin (V.P.), see Kafarov (V.V.), *5005*

Messick (R.E.), see Napolitano (M.), *3656*

Messina (A.D.), critical heat flux, nucleate boiling, nucleation, surface effect, surface flaws, Park (E.L.) Jr., *740*

Messiter (A.F.), airfoils, cascades, transonic flow, two dimensional flow, Adamson (T.C.) Jr., *10448*

Mestre (A.), combustion, emissions, gas turbines, swirl flow, *7887*

metallic composites, fatigue, laminates, shakedown structures, Dvorak (G.J.), Johnson (W.S.), *283*

- crack growth, fatigue, fracture mechanics, Morley (J.G.), Mccoll (I.R.), *2409*
- materials properties, stochastics, strength, Hughes (J.D.H.), Morley (H.), (et al.), *3282*
- cermets, composite materials, composite structures, fatigue, fracture, materials properties, surveys, Kawata (K.) eds., Akasaka (T.), *5122, book*
- aluminum alloys, damping capacity, machinability, materials properties, Deonath, Narayan (R.), (et al.), *5123*
- adhesion, effective elastic moduli, materials properties, resins, Spathis (G.D.), Sideridis (E.P.), (et al.), *5124*
- aluminum alloys, composite materials, elastic constants, ultrasonics, Blessing (G.V.), Elban (W.L.), *5328*
- composite materials, discontinuities, fibers, shear lag, Fukuda (H.), Chou (T.-W.), *6194*
- bending, bimodulus materials, elastoplasticity, Akhmerov (A.F.), *7306*
- buckling, composite materials, explosive welding, fibers, Kornev (V.M.), Yakoviev (I.V.), *7363*

metallography, pattern recognition, thermography, Fainzilberg (L.S.), *156*
- chip formation, machine design, temperature, tools, Wright (P.K.), Mccormick (S.P.), (et al.), *8363*
- aluminum alloys, cyclic loading, deformation, macroscopic characterization, microstructures, Wang (Z.G.), Ke (T.S.), *8429*
- friction (sliding), metals, wear, Blau (P.J.), *9019*

metallurgy, machinability, particles, steel, surface effect, Kallay (N.), Matijevic (E.), *552*
- brittle fracture, fracture, grain boundaries, molybdenum, Kumar (A.), Eyre (B.L.), *1355*
- materials properties, thermodynamic processes, thermodynamics, Gaskell (D.R.), *2773, book*
- heat transfer, mass transfer, Spalding (D.B.), Afgan (N.H.), *2854, book*
- grain size, machining (electrochemical), material testing, Krishnaiah Chetty (O.V.), Radhakrishnan (V.), *4472*
- deformation (plastic), laminates, work hardening, Yellup (J.M.), Woodward (R.L.), *4498*
- forging, gear teeth, gears (spur), grinding, mechanical properties, Abdel-Rahman (A.R.O.), Dean (T.A.), *5274*
- aluminum alloys, crack retardation, fatigue, hold time, Slagle (W.P.), Mahulikar (D.), (et al.), *5310*
- discharges, magneto fluid dynamics, models, vortex flow, Boyarevich (V.V.), *5678*
- brittle fracture, crystals, ductile fracture, grain boundaries, molybdenum alloys, Denisyuk (V.A.), Drachinskii (A.S.), (et al.), *6432*
- alloys, crack propagation, nucleation, stress corrosion, Chu (W.-Y.), Hsiao (C.-M.), (et al.), *9394*
- deformation (plastic), fracture, material testing, work hardening, Aurich (D.), Wobst (K.), *10280*

metals, compression, dynamic properties, elastoplasticity, experimental results, shock waves (normal), Astanin (V.V.), *399*
- abrasion, cutting, microstructures, wear, Ramalingam (S.), Wright (P.K.), *435*
- corrosion fatigue, fatigue, fretting, survey, Kovalevskii (V.V.), *453*
- forming, friction (solid solid), plasticity, Oxley (P.L.B.), *1001*
- adhesion, contact resistance, roughness, wear, Chowdhury (S.K.R.), Pollock (H.M.), *1007*
- friction (sliding), lubrication (boundary), wear, Rabinowicz (E.), *1008*
- friction (sliding), wear, work hardening, x ray techniques, Sasada (T.), Norose (S.), (et al.), *1009*
- additives, chemical reactions, friction, lubrication (boundary), Sanin (P.I.), *1022*
- nonhomogeneous media, viscoelastic fluids, void growth, Taya (M.), Seidel (E.D.), *1195*
- constitutive equations, nonlinear materials, stress strain relationships, Margetson (J.), *1199*
- compression, crystals, kinematics, Havner (K.S.), *1204*
- dynamic properties, shock waves (normal), strain rate, Meyers (M.A.) eds., Murr (L.E.), *1299, book*
- cold working, extrusion, rods, Ghosh (T.P.), *1340*
- low cycle fatigue, material testing, plastic flow, Hatanaka (K.), Yamada (T.), (et al.), *1406*
- cooling, difference equations, parabolic equations, Drenska (N.T.), *2037*
- plasticity, porous media, yield criteria, Gadala (M.S.), Mullins (M.L.), (et al.), *2243*
- aluminum alloys, ductility, erosion, Bellman (R.) Jr., Levy (A.), *3039*
- damage, plastic flow, viscoplasticity, Nicholson (D.W.), *3078*
- cavities, creep, fracture mechanics, grain boundaries, Greenwood (G.W.), *3253*
- creep, crystals, grain boundaries, micromechanisms, Ghahremani (F.), *3255*
- endochronic theory, internal state variables, work hardening, Wu (H.C.), Yip (M.C.), *3265*
- crystals, deformation, plasticity, Berveiller (M.), *3268*
- deformation (plastic), geometric nonlinearities, materials processing, plastic behavior, Lysov (M.I.), Sosov (N.V.), *3421*
- crack growth, damage (cumulative), environmental tests, fracture mechanics, Davidson (D.L.), *3449*
- correlation, friction, shear strength, Miyoshi (K.), Buckley (D.H.), *3492*
- experimental methods, plasma, rotating fluids, spectroscopy, Brand (G.F.), James (B.W.), (et al.), *3903*
- thermal properties, thin films, Pichard (C.R.), Tellier (C.R.), (et al.), *4003*
- diffusion, inclusions, nonhomogeneous media, Trzesowski (A.), *4138*
- explosive forming, powders, Roman (O.V.), Nesterenko (V.F.), (et al.), *4474*
- creep, deformation (plastic), thermal stresses, thermoelasticity (transient), Morjaria (M.), Mukherjee (S.), *4818*
- adhesives, friction (sliding), lubricants (dry film), lubrication (boundary), thin films, Iliuc (I.), *4889, book*
- abrasion, deformation (plastic), friction (sliding), wear, Miyoshi (K.), Buckley (D.H.), *4891*
- creep, internal stresses, micromechanisms, power law geometrics, Argon (A.S.), Takeuchi (S.), *5101*
- anelasticity, continuum mechanics, creep, viscoplasticity, Rusinko (K.N.), Ivasyuk (V.V.), *5114*
- mechanical properties, rolling, Kato (K.), Saito (Y.), (et al.), *5278*
- failure, prediction, Kovpak (V.I.), *5289*
- combustion, powders, self ignition, Chernenko (E.V.), Rozenband (V.I.), *5627*
- absorption, diffusion, heating, lasers, Boiko (V.I.), Bunkin (F.V.), (et al.), *5808*
- cutting, lubricants (liquid), Bhattacharyya (S.K.), Jetley (S.K.), *5992*
- diffusion, mixture theories, solid mechanics, Aifantis (E.C.), *6045*
- micromechanisms, work hardening, yield criteria, Bastun (V.N.), *6183*
- penetration, slender bodies, Vantoyan (A.A.), *6359*
- bending, damping, fatigue, material testing, Weissmann (G.F.), *6421*
- alloys, cracking, stress corrosion, Koval (V.P.), Karvatskii (L.M.), (et al.), *6423*
- cracks, diffraction, nondestructive tests, surfaces, ultrasonics, Parvatov (G.N.), Popov (A.A.), *6486*
- experimental methods, thermal fatigue, thermal stresses, Gopkalo (A.P.), Zasiotskaya (L.A.), (et al.), *6947*
- friction (sliding), lubricants (liquid), scoring, viscosity, wear, Drozdov (Yu.N.), Archegov (V.G.), *7081*
- abrasion, wear, Bhansali (K.), Miller (A.E.), *7087*
- fracture criteria, fracture toughness, structural materials, Volkov (G.S.), Naumenko (V.P.), *7521*
- damping, experimental methods, friction (internal), strain, Hooker (R.J.), Mead (D.J.), *7587*
- creep, cyclic loading, low cycle fatigue, Pisarenko (G.S.), Troshchenko (V.T.), (et al.), *8213*
- dislocations, indentation, polycrystalline materials, Tanaka (Y.), Ido (M.), (et al.), *8214*
- compression, crack initiation, forming, fracture, friction, Matsuura (Y.), Morimoto (H.), *8432*
- phase changes, shock waves, vaporization, waves, Goloveiko (A.G.), Martynikhina (V.I.), *8874*
- elastodynamics, lasers, thermal effects, thermoelasticity (transient), Scruby (C.B.), Dewhurst (R.J.), (et al.), *8877*
- dynamic properties, high temperature, hopkinson bar, shock waves, Tsoi (P.A.), Novikov (S.A.), (et al.), *8890*
- friction (sliding), metallography, wear, Blau (P.J.), *9019*
- cavities, cracks, creep, fatigue, micromechanics, surveys, Gittus (J.) ed., *9380, book*
- particle fluid flow, suspensions, Zolotko (A.N.), Matsko (A.M.), (et al.), *9745*
- films, ignition, kinetics, particles, Arutyunyan (A.B.), Kharatyan (S.L.), (et al.), *9747*
- films, ignition, kinetics, particles, Grigorev (Yu.M.), Safaneev (D.Z.), *9748*
- combustion, diffusion, evaporation, oxidation, Fursov (V.P.), Shevtsov (V.I.), (et al.), *9767*
- combustion, diffusion, models, Kudryavtsev (V.M.), Sukhov (A.V.), (et al.), *9774*
- abrasion, friction (sliding), wear, Spurr (R.T.), *9951*
- attenuation, modeling, shock waves (normal), Duan (Z.-P.), *10231*
- axial loading, creep, Simonian (A.M.), *10335*
- conductivity, thermal diffusion, thermophysical properties, thin films, Pugachev (A.T.), Volkov (Yu.A.), (et al.), *10557*
- low gravity, schlieren methods, solidification, Owen (R.B.), Johnston (M.H.), *10659*

Metcalf (J.T.) Jr., see Matanzo (F.) Jr., *536*

Metcalfe (R.), deformation, friction (sliding), rotating bodies, seals, *1017*

meteorology, atmosphere, laser doppler velocimeters, lasers, lidar, Gaumet (J.-L.), Renaut (D.), (et al.), *1917*
- atmosphere, density, measurements, temperature, Dyubua (P.P.), Melnikov (A.N.), (et al.), *1920*
- climatology, solar collectors, Page (J.K.), Rodgers (G.G.), (et al.), *2835*
- spectra, Merilees (P.E.), *3027*
- estimation, optimization, Brimkulov (U.N.), Krug (G.K.), (et al.), *4081*
- variational methods, Penenko (V.V.), Obraztsov (N.N.), *4084*
- data analysis, Gruza (G.V.), Kachurina (L.R.), (et al.), *4085*
- mathematical models, Sirotenko (O.D.), *4087*
- geopential fields, geophysics, Babaliev (A.M.), Kostyukov (V.V.), (et al.), *4088*
- atmosphere, forecasting, temperature, Bochkova (T.N.), *4089*
- balloons, data acquisition, weather forecasting, Dushkin (P.K.), Belov (A.I.), (et al.), *4090*
- data acquisition, oceanography, Bogatyr (B.N.), *4094*
- geopotential height, ocean, Bagrov (A.N.), *4096*
- helmholtz equation, solar radiation, thermal sciences, three dimensional formulation, transfer theory, Ou (S.C.S.), Liou (K.-N.), *4180*

- weather satellites, Hinkley (E.D.), *4888*
- clouds, drops, thermal explosions, Svirkunov (P.N.), Sedunov (Yu.S.), (et al.), *5584*
- aerosols, planetary atmospheres, radiant interchange, Konyukh (L.A.), Yurevich (F.B.), (et al.), *5586*
- mathematical models, K udoh (T.), *7028*
- calibration, flow measurement, liquid metals, magneto fluid dynamics, Kirshtein (G.Kh.), Kvasnevskii (I.P.), *11833*
- forecasting, precipitation, weather forecasting, Kenzhibaev (A.T.), Petrichenko (I.A.), *12082*

meteorology (physical), finite difference methods, Sadokov (V.P.), Kucherenko (I.K.), *990*
- atmospheric circulation, eddies, Kabanov (A.S.), Shmerlin (B.Ya.), *1901*
- atmospheric circulation, geostrophic flow, Kivganov (A.F.), Mokhanti (U.Ch.), *1904*
- heat transfer (atmospheric), hydrology, mass transfer, soils, Lykosov (V.N.), Palagin (E.G.), *1907*
- estimation, oceanography, optimization, Penenko (V.V.), *1910*
- boundary conditions, oceanography, Bennett (A.F.), Kloeden (P.E.), *1913*
- atmospheric circulation, boundary layer (atmospheric), Penenko (V.V.), Aloyan (A.E.), (et al.), *1916*
- atmosphere, mass transfer, moisture, ocean, Timofeev (N.A.), *3025*
- atmospheric circulation, vortices, Bekoryukov (V.I.), Makarov-Mironov (A.M.), *4060*
- atmospheric circulation, Radinovic (D.), *4066*
- forecasting, weather forecasting, Ivakhnenko (A.G.), Rao (M.G.), *4067*
- balloons, Demchenko (P.F.), Golitsyn (G.S.), *4068*
- atmospheric circulation, climatology, ocean air interaction, weather forecasting, Marchuk (G.I.), *4069*
- atmospheric circulation, heat transfer (atmospheric), weather forecasting, Dymnikov (V.P.), Ishimova (A.V.), *4070*
- forecasting, ocean air interaction, weather forecasting, Ryasin (V.A.), *4071*
- atmospheric circulation, Kurbatkin (G.P.), Karimov (A.U.), (et al.), *4072*
- forecasting, isobaric processes, Kurbanov (B.T.), *4073*
- atmospheric circulation, forecasting, Fuks-Rabinovich (M.S.), *4074*
- clouds, forecasting, moisture, Sholokhova (N.I.), *4077*
- forecasting, weather forecasting, weather satellites, Gubanova (S.I.), Mashkovich (S.A.), (et al.), *4078*
- atmospheric circulation, heat transfer (atmospheric), Dobryshman (E.M.), *4082*
- forecasting, weather forecasting, Belousov (S.L.), *4083*
- forecasting, Kurbatkin (G.P.), Eikher (M.Sh.), (et al.), *4086*
- climatology, heat transfer (atmospheric), potential energy, Vakalyuk (Yu.V.), *5948*
- numerical methods, weather forecasting, Matsumura (T.), Ookochi (Y.), *5956*
- boundary conditions, forecasting, weather forecasting, Gordin (V.A.), Dolmatov (B.K.), *5957*
- weather forecasting, Romov (A.I.), *5958*
- atmosphere, lasers, lidar, moisture, raman scattering, scattering, Zakharov (V.M.), Kalachinskii (S.F.), (et al.), *5959*
- cloud physics, flow obstructions, latent heat, two dimensional flow, Barcilon (A.), Jusem (J.C.), (et al.), *7677*
- cloud physics, clouds, convection (free), Pushistov (P.Yu.), Malbakhov (V.M.), (et al.), *8029*
- boundary layer (atmospheric), Krishna (K.), *8985*
- atmospheric circulation, boundary conditions, Gordon (P.), *8986*
- atmospheric circulation, rotating fluids, stratification, Held (I.M.), Hou (A.Y.), *8988*
- clouds, turbulence (geophysical), Coulman (C.E.), *8994*
- atmospheric circulation, vortices, Mcwilliams (J.C.), *9934*
- atmospheric circulation, turbulence (geophysical), Dutton (J.A.), *12075*
- atmospheric circulation, cyclones, Pinus (N.Z.), Kapitanova (T.P.), *12076*
- boundary layer (atmospheric), clouds, heat transfer (atmospheric), Buikov (M.V.), Khvorostyanov (V.I.), *12077*

meteorology (synoptic), heat transfer (atmospheric), Oerlemans (J.), *7071*
- vorticity, Lewis (J.M.), *8991*

meters, flow measurement, pressure measurement, water tunnels, yawing, Takamatsu (Y.), Takahara (H.), (et al.), *1641*
- calibration, design, discharges, flow measurement, venturi tubes, Inoue (M.), Yano (H.), (et al.), *8665*
- calibration, electromagnetic loading, flow measurement, velocity profiles, Tsangaris (S.), Leiter (E.), *10535*

methane, flame propagation, flow obstructions, turbulence, Moen (I.O.), Donato (M.), (et al.), *1745*
- exhaust gases, flames (turbulent), Moreau (P.), Borghi (R.), *2868*
- chemical kinetics, exhaust gases, flames (diffusion), nitric oxide, Mitchell (R.E.), Sarofim (A.F.), (et al.), *5635*
- combustion, flames (diffusion), hydrogen, turbulent flow, Annushkin (Yu.M.), Maslov (G.F.), *6835*
- burning velocity, chemical kinetics, flames (laminar), Rallis (C.J.), Garforth (A.M.), *8791*
- blowoff, flames, mathematical models, viscous flow, Mikolaitis (D.), Buckmaster (J.), *9755*
- fire control, fire spread, mathematical models, Quintiere (J.G.), Rinkinen (W.J.), (et al.), *9778*
- flames, gas solid interface, Blint (R.J.), Bechtel (J.H.), *10702*
- combustion products, flames, mixtures, quenching, Fukuda (M.), Korematsu (K.), (et al.), *11794*

Metten (S.), see Bauer (H.F.), *11607*

Mettke (H.), boundary value problems, interpolation, splines, Pfeifer (E.), (et al.), *8126*

Mettler (E.), resonance, solar system, three body problem, *2917*

Metwalli (S.M.), see Elzoughby (A.A.), *4995*

Meyer (C.), see Rojey (A.), *5591*

Meyer (G.H.), bearings (journal), cavitation, lubrication (hydrodynamic), numerical methods, reynolds equation, *9045*

Meyer (J.), fokker-planck equation, kinetic theory, mathematical methods, thermodynamics, Schroter (J.), *4958*

Meyer (K.J.), see Antonelli (R.G.), *3377*

Meyer (K.R.), hamiltonian equations, kepler orbits, n body problems, periodic orbits, restricted three body problem, *1786*
- existence theorems, n body problems, periodic orbits, *6880*

Meyer (M.E.), see Evans (A.G.), *7470*

Meyer (R.E.), see Stuart (J.T.), *4641*

Meyer (W.L.), acoustic measurements, acoustics, ducts, sound generation, Daniel (B.R.), (et al.), *900*

Meyer Zur Capellen (F.), see Meyer Zur Capellen (W.), *3084*

Meyer Zur Capellen (W.), dynamic properties, kinematics, mechanisms, Meyer Zur Capellen (F.), *3084*

Meyers (M.A.) eds., dynamic properties, metals, shock waves (normal), strain rate, Murr (L.E.), *1299, book*

Meyers (R.E.), see Lee (N.N.), *59*

Meynink (W.J.C.), flood routing, flood waves, floods, runoff, *5905*

Meyyappan (M.), bubble dynamics, surface tension, thermal effects, two phase flow, Wilcox (W.R.), (et al.), *12038*

Mezhova (N.Ya.), see Georgiev (M.N.), *1415*

Meziere (Y.), buckling, dynamic analysis, frequencies, *11126*

Miastkowski (J.), bars, imperfections, notch tests, tension, ultimate strength, Skrocki (H.), *8437*

Michael (A.), see Stenker (H.), *4543*

Michael (W.), mathematical models, nonlinear programming, optimization, shells (cylindrical), stress analysis, stresses, Siddall (J.N.), *10090*

Michaelidis (P.), see Contopoulos (G.), *9815*

Michalopoulos (D.), bearings (journal), damping, lubrication (hydrodynamic), rotors, stiffness, vibration (self excited), Dimarogonas (A.), *9020*

Michard (P.-J.), see Dutoya (D.), *5014*

Michau (B.), bearings (journal), lubricants (liquid), lubrication (hydrodynamic), *4902*

Michel (D.J.), cavities, crack propagation, creep rupture, numerical analysis, steel, *8374*

Michelet (G.), entropy, microstructures, structured continua, thermodynamics (nonequilibrium), Darrozes (J.-S.), *7143*

Michimura (S.), axial turbines, blades, dynamic response, rotating disks, vibration, Nagamatsu (A.), (et al.), *11130*

Micklow (J.), actuator theory, choked flow, compressors, flutter, Jeffers (J.), *7781*

microcirculation, blood flow, diffusion, Sheth (B.V.), Hellums (J.D.), *3063*
- blood flow, capillary flow, platelet concentration, shear flow, Beck (M.R.) Jr., Eckstein (E.C.), *4919*
- blood flow, experimental methods, Shagai (D.I.), Tavik (A.I.), (et al.), *6019*
- blood flow, capillary flow, Skalak (R.), Chien (S.), *8075*

microcracks, explosive loading, porous media, rocks, shock waves, Siegfried (R.W.), Mcqueen (R.G.), (et al.), *2388*
- fracture mechanics, stress analysis, stress intensity factor, Wilkinson (D.S.), Vitek (V.), *2435*
- fracture, inequalities, plastic behavior, Bazant (Z.P.), *2443*
- fatigue, flaw detection, fracture, surface flaws, Verpoest (I.), Aernoudt (E.), (et al.), *2503*
- alloys, crack arrest, crack growth, steel, Varga (T.), Allertshammer (W.), (et al.), *3432*
- fatigue, grain boundaries, thresholds, Tanaka (K.), Nakai (Y.), (et al.), *5281*
- heat transfer, rocks, Shurchkov (A.V.), Prikhodko (N.K.), (et al.), *5858*
- acoustic emission, damage, elastic waves, Rice (J.R.), *6355*
- aluminum alloys, crack initiation, fatigue, life expectancy, nondestructive tests, Buck (O.), Morris (W.L.), (et al.), *6419*
- crack propagation, edge cracks, fatigue, material testing, nickel alloys, Lankford (J.), Cook (T.S.), (et al.), *7476*
- cyclic loading, fatigue, fracture, inhomogeneities, Getman (A.F.), *7487*
- corrosion fatigue, crack growth, steel, Romaniv (O.N.), *7494*
- crack growth, crack opening displacement, finite element techniques, fracture, j-integral, reinforced concrete, Petersson (P.-E.), *7539*
- acoustic emission, cleavage, fracture toughness, stability, Khan (M.A.), Shoji (T.), (et al.), *7558*
- deformation (finite), deformation (plastic), micromechanisms, Luong (L.H.S.), Brown (R.H.), *8209*
- crack initiation, crack propagation, ductile fracture, high cycle fatigue, Nisitani (H.), Takao (K.I.), *9389*
- crack opening displacement, stress intensity factor, Mccartney (L.N.), *9399*

- brittle fracture, crack propagation, Kartashov (E.M.), Bartenev (G.M.), *9400*
- composite materials, computing techniques, crack growth, finite element techniques, Ito (Y.M.), Rosenblatt (M.), (et al.), *9418*

micromechanics, cosserat solids, elasticity (nonlinear), Brunk (G.), *3*
- composite structures, delamination, effective elastic moduli, interlaminar stresses, Salamon (N.J.), *288*
- clay, stress strain relationships, Desai (C.S.), Siriwardane (H.J.), *415*
- clay, modeling, Scott (R.F.), Craig (M.J.K.), *416*
- polar fluids, rheology, viscous flow, Rajagopal (K.R.), Gupta (A.S.), *1968*
- constitutive equations, granular media, Phan-Thien (N.), *1970*
- composite materials, effective elastic moduli, inclusions, nonhomogeneous media, Cleary (M.P.), Chen (I-W.), (et al.), *2224*
- finite element techniques, inhomogeneities, polycrystalline materials, Kuksa (L.V.), Elmanovich (V.I.), *3140*
- constitutive equations, continuum theory, granular media, Firoozbakhsn (K.), Ahmadi (G.), *5097*
- dynamic fracture, fracture mechanics, material testing, spallation, Golubev (V.K.), Novikov (S.A.), (et al.), *5291*
- composite materials, crack propagation, polymers, Theocaris (P.S.), Stassinakis (C.A.), *5292*
- cosserat solids, thermoelasticity, Smirnov (V.N.), *5798*
- macroscopic characterization, porous media, Burridge (R.), *5851*
- continuum mechanics, disclinations, dislocations, Kadic (A.), *6036*
- deformation, elastoplasticity, stress strain relationships, Getman (A.F.), *6189*
- deformation, granular media, spherical bodies, statistical continuum mechanics, Vaisman (A.M.), Goldshtik (M.A.), *7270*
- composite materials, resins, viscoelasticity (dynamic), Schaffer (B.G.), Adams (D.F.), *7273*
- crack growth, dugdale model, films, optical techniques, polymers, Donald (A.M.), Kramer (E.J.), *7500*
- damage (cumulative), low cycle fatigue, nuclear radiation, De Vries (M.I.), Tjoa (G.L.), (et al.), *7501*
- crack initiation, crack propagation, fatigue, stochastics, Ghonem (H.), *7533*
- ceramics, fatigue, Evans (A.G.), *8376*
- crack initiation, crack propagation, cyclic loading, fatigue, polymers, Sauer (J.A.), Richardson (G.C.), *8377*
- crystals, deformation (plastic), dislocations, stress concentration, Kulagina (V.V.), Dudarev (E.F.), (et al.), *8416*
- cavities, cracks, creep, fatigue, metals, surveys, Gittus (J.) ed., *9380, book*
- experimental results, faults, rocks, Wong (T.-F.), *10262*
- fracture mechanics, griffith cracks, nucleation, Bamiro (O.A.), Provan (J.W.), *10299*
- cosserat solids, plates, shells, Kayuk (Ya.F.), Zhukovskii (A.P.), *11116*

micromechanisms, continuum mechanics, thermodynamics, viscoelasticity, Morro (A.), *1053*
- composite materials, crack growth, finite element techniques, thermal effects, Braun (H.), Herrmann (K.), *2456*
- creep, crystals, grain boundaries, metals, Ghahremani (F.), *3255*
- failure, fibers, glass fibers, hybrid construction, stochastics, Manders (P.W.), Bader (M.G.), *3277*
- ferrous metals, fracture toughness, mechanical properties, stainless steels, toughness, Lula (R.A.) ed., *3501, book*
- continuum mechanics, crystals, plasticity, Lin (T.H.), Ribeiro (G.), *4351*
- creep, internal stresses, metals, power law geometrics, Argon (A.S.), Takeuchi (S.), *5101*
- necking, plastic behavior, plasticity, shear bands, Iwakuma (T.), Nemat-Nasser (S.), *5111*
- aluminum alloys, copper alloys, dislocations, experimental results, Cherns (D.), Hirsch (P.), (et al.), *5120*
- constitutive equations, couette flow, viscoelastic fluids, Quentrec (B.), *5382*
- polymers, rheology, viscoelastic fluids, Johnson (M.W.) Jr., Segalman (D.), *5386*
- bending (viscoelastic), ceramics, creep, Cohrt (H.), Grathwohl (G.), (et al.), *6175*
- metals, work hardening, yield criteria, Bastun (V.N.), *6183*
- polymers, viscosity, Budtov (V.P.), Romanovskii (G.K.), *6578*
- crack growth, creep, elasticity (nonhomogeneous), Venkateswaran (A.), Hasselman (D.P.H.), *7277*
- fatigue, fractography, fracture, fracture toughness, Stepanenko (V.A.), *7512*
- deformation (finite), deformation (plastic), microcracks, Luong (L.H.S.), Brown (R.H.), *8209*
- dilute solutions, polar fluids, polymers, Kroner (E.), Takserman-Krozer (R.), *8484*
- constitutive equations, stresses (normal), viscoelastic fluids, Barrett (A.J.), De Kee (D.), *8504*
- inclusions, phase changes, steel, thermoelasticity, Ling (H.C.), Owen (W.S.), *8884*

micromeritics, bubble dynamics, turbulent flow, Gavrilenko (V.G.), Martyanov (A.I.), *9685*
- particle fluid flow, power law fluids, reynolds number (high), Hua (T.N.), Ishii (T.), *12017*

microphones, acoustic waves, arrays, interference, transducers, Carnes (T.N.), Reynolds (D.D.), (et al.), *11927*

micropolar media, constitutive equations, cosserat solids, Cowin (S.C.), Leslie (F.M.), *4*
- continuum mechanics, differential equations (partial), integration, potential theory, Constanda (C.), *43*
- differential equations (ordinary), equations of motion, iterative methods, numerical methods, Anwar (M.), Guram (G.S.), *61*
- channel flow, cosserat fluids, hamel flow, polar fluids, Kaloni (P.N.), Kamel (M.T.), *550*
- continuum theory, liquid crystals (nematic), stability theory, Straughan (B.), *1056*
- beams (flexural), couple stresses, cylindrical bodies, Craciun (I.), *1057*
- anelasticity, elasticity (nonhomogeneous), magnetoelasticity, vibration, Hsieh (R.K.T.), Voros (G.), *1058*
- bifurcation, polar fluids, viscous flow, Russo (R.), Padula (M.), *1491*
- analysis, laminar flow, slots, Walicki (E.), Walicka (A.), *1562*
- continuum mechanics, cosserat solids, Capriz (G.), Podio-Guidugli (P.), *1969*
- poiseuille flow, polar fluids, variational methods, Rubi (J.M.), Casas-Vasquez (J.), *1974*
- convection, hydrodynamic stability, polar fluids, Lebon (G.), Perez-Garcia (C.), *1975*
- boundary layer, mathematical models, stagnation point, Unsworth (K.), Chiam (T.C.), *2806*
- crystals, diamond, dispersion relation, elastic constants, Minagawa (S.), Arakawa (K.), (et al.), *3079*
- channel flow, heat transfer, unsteady flow, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *3805*
- channel flow, convection, heat transfer, Migun (N.P.), *5538*
- boundary conditions, conservation laws, cosserat solids, Kozak (I.), Szeidl (G.), *7263*
- hydrodynamic stability, polar fluids, Perez-Garcia (C.), Rubi (J.M.), (et al.), *7644*
- combined loading, cosserat solids, cylindrical bodies, Cheverton (K.J.), Beatty (M.F.), *8182*
- couple stresses, polar fluids, rotating bodies, spherical bodies, Lakshmana Rao (S.K.), Iyengar (T.K.V.), *8487*
- heat transfer, non newtonian flow, pipe flow, Shirkot (K.S.), Thakur (D.S.), *8590*
- additives, bearings (journal), lubrication (hydrodynamic), reynolds equation, Singh (C.), Sinha (P.), *9963*
- boundary conditions, channel flow, convection (forced), microstructural fluids, thermal effects, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *10573*
- boundary layer, constitutive equations, heat transfer, plane flow, Takhar (H.S.), Soundalgekar (V.M.), *10583*

microprocessors, computer aided design, digital control, internal combustion engines, *1167*
- flaw detection, nondestructive tests, ultrasonics, welded joints, Rose (J.L.), Nestleroth (J.B.), (et al.), *2481*
- hopkinson bar, impact, strain gages, strain measurement, testing equipment, Signoret (C.), Pouyet (J.M.), (et al.), *4507*
- digital simulation, nondestructive tests, synthesis, ultrasonics, Hanstead (P.D.), *9423*
- adaptive systems, digital control, nonlinear systems, observers, Sinha (N.K.), Law (S.S.Y.), (et al.), *10081*

microstructures, abrasion, cutting, metals, wear, Ramalingam (S.), Wright (P.K.), *435*
- copper, crack growth, fatigue, fracture, stress intensity factor, Mullner (H.), Weiss (B.), *444*
- measurements, neutron, nondestructive tests, transmission, Palacios (J.), Schwahn (D.), (et al.), *1420*
- composite materials, diatomic solids, mixture theories, viscoelasticity, Demiray (H.), *5104*
- deformation (plastic), dislocations, hot working, steel, viscoplasticity, Teodosiu (C.), Soos (E.), (et al.), *5273*
- crack growth, fatigue, grain size, steel, Kitsunai (Y.), *5284*
- grain size, stress intensity factor, thresholds, yield condition, Mutoh (Y.), Radhakrishnan (V.M.), *5288*
- aerosols, measurements, Veretennikov (V.V.), Kozlov (V.S.), (et al.), *5821*
- cast steel, charpy tests, ductility, fracture control, steel, Fortner (E.) eds., Praeger (M.), *6476, book*
- oceanography, thermocline, turbulence (geophysical), Gregg (M.C.), *7057*
- entropy, structured continua, thermodynamics (nonequilibrium), Michelet (G.), Darrozes (J.-S.), *7143*
- acoustic measurements, flaw detection, j-integral, nondestructive tests, residual stresses, stress intensity factor, Kino (G.S.), Barnett (D.M.), (et al.), *7586*
- aluminum alloys, cyclic loading, deformation, macroscopic characterization, metallography, Wang (Z.G.), Ke (T.S.), *8429*
- creep, dislocations, grain boundaries, steel, Williams (K.R.), *8430*
- materials properties, refractories, Krivenyuk (V.V.), Zelenyuk (E.E.), *8885*
- creep, deformation, embrittlement, fracture mechanics, steel, Carlson (R.L.), Lo (H.C.), *11316*
- biaxial loading, fracture mechanics, fracture toughness, steel, Ziebs (J.), Aurich (D.), (et al.), *11317*
- contact stresses, fatigue, grinding, rolling contact, Dudragne (G.), Fougeres (R.), (et al.), *12096*

Middleton (D.), decay, jets, similarity methods, *3682*

Middleton (J.F.), diffusion, particle dynamics, turbulence, turbulence (geophysical), *11557*
Midha (A.), see Pandey (R.C.), *5371*
Mieras (H.), see Bennett (C.L.), *11986*
Miesch (H.), couette flow, heat transfer, rollers, rotating cylinders, slots, *6650*
Migdalovici (M.), see Visarion (V.), *69*
Migliore (M.), see Franciosi (V.), *3415*
Mignot (C.), coastal engineering, equilibrium, sediment transport, Viguier (J.), *2593*
Mignosi (A.), cryogenics, injectors, transonic flow, wind tunnels, Faulmann (D.), (et al.), *3763*
Migun (N.P.), see Kolpashchikov (V.L.), *3805*
- channel flow, convection, heat transfer, micropolar media, *5538*
- see Kolpashchikov (V.L.), *10573*

Mihelcic (M.), differential equations (ordinary), differential equations (stiff), integration, stability theory, Wingerath (K.), *10052*
Mijovic (J.), aluminum alloys, bonded joints, crack propagation, polymers, *7536*
Mikeladze (Sh.E.), approximations, differential equations (ordinary), integration, numerical analysis, *3116, book*
Mikelson (Yu.Ya.), axisymmetric flow, computing techniques, finite difference methods, magneto fluid dynamics, turbulent flow, Pavlov (S.I.), (et al.), *2876*
Mikhail (A.G.), compressible flow, drag, jets, nozzles, numerical methods, supersonic flow, Hankey (W.L.), (et al.), *7688*
Mikhailenko (B.G.), see Hron (F.), *8952*
Mikhailishchev (V.Ya.), beams, hinged bodies, optimization, structural optimization, *9438*
Mikhailov (A.M.), dynamic response, elastic waves, shells (stiffened), *397*
- see Kavlakan (M.V.), *5075*
- see Ermak (A.A.), *6192*

Mikhailov (A.V.), see Lvov (V.S.), *11965*
Mikhailov (B.K.), discontinuities, plates, shells (stiffened), theory, *2278, book*
Mikhailov (M.D.), diffusion, mathematical methods, mathematical models, transport phenomena, Ozisik (M.N.), *6828*
Mikhailov (V.V.), insulating materials (thermal), layered media, optimization, *793*
- see Katelkin (A.S.), *11412*

Mikhailova (N.A.), see Melekhova (N.A.), *5915*
Mikhalev (Yu.O.), ferrous metals, liquid metals, magneto fluid dynamics, seals, testing equipment, Orlov (D.V.), (et al.), *10755*
Mikhalevich (A.A.), see Volodin (V.I.), *1725*
- see Andrizhievskii (A.A.), *6975*

Mikhaylov (G.A.), diffusion, turbulence, turbulence (geophysical), Sabelfeld (K.K.), *10480*
Mikhin (N.M.), deformation (plastic), friction (sliding), surface profiles, wear, Frolov (S.V.), (et al.), *8050*
Mikhlin (J.A.), membranes, porous surfaces, rotating bodies, Tanny (G.B.), *3852*
Mikielewicz (J.), film flow, hydrodynamic stability, pressure gradient, thin films, Ihnatowicz (E.), (et al.), *11533*
Mikkola (M.J.), beams (box), bridges (box girder), finite element methods, Paavola (J.), *1220*
- elastoplasticity, impact, numerical methods, viscoelasticity (dynamic), Tuomala (M.), (et al.), *11175*

Mikolaitis (D.), blowoff, flames, mathematical models, methane, viscous flow, Buckmaster (J.), *9755*
Mikolas (M.), noncircular pipes, poiseuille flow, variable fluid properties, viscosity, viscosity (temperature dependent), Bardocz (L.), *2648*
Miksad (R.W.), air pollution, computing techniques, interpolation, Long (G.E.), *3127*
Miksis (M.), axisymmetric flow, bubble dynamics, drops, Vanden-Broeck (J.-M.), (et al.), *8905*
Miksis (M.J.), axisymmetric flow, bubble dynamics, shear flow, *6987*
Mikulcik (E.C.), autom obiles, dynamic response, stability theory, trailers, *6312*
Milan (D.), cavities, flow irregularities, structures, vibration, *4772*
Milancheva (N.V.), see Sorokin (G.M.), *5334*
Milano (R.), see Kopper (F.C.), *2655*
Milantev (V.P.), electric effects, kinetic theory (relativistic), plasma, theory, vlasov equation, *9800*
Mileiko (S.T.), composite structures, crack propagation, fibers, fracture mechanics, Rabotnov (Yu.N.), *8224*
Miler (M.), holography, optical techniques, theory, *2476*
Miles (J.H.), acoustic measurements, combustion, ducts, spectral analysis, Raftopoulos (D.D.), *3957*
- acoustic waves, compressible flow, ducts (variable area), nozzles, transmission, *8962*

Miles (J.W.), korteweg de vries equation, scattering, surveys, *664*
- canals, helmholtz resonator, lakes, oscillations, *3610*
- airy function, asymptotic behavior, nonlinear mechanics, special functions, *4951*
- gravity waves (solitary), surveys, *9622*
- cylindrical bodies, diffraction, flow irregularities, gravity waves (surface), *11572*
- diffraction, flow irregularities, gravity waves (finite depth), reefs, scattering, *11578*
- bottom irregularities, dispersion relation, edges, gravity waves (finite depth), *11584*

Miles (R.E.), see Wedzicha (B.L.), *489*
Miletic (J.), boundary value problems, elasticity (linear), laplace transform, *8193*
Milicka (K.), see Orlova (A.), *6472*
Milios (J.), see Theocaris (P.S.), *472*
- see Theocaris (P.S.), *475*
- see Theocaris (P.S.), *2451*
- see Theocaris (P.S.), *7532*

Miller (A.E.), see Bhansali (K.), *7087*
Miller (B.), combustion, flammability, ignition, textiles, Martin (J.R.), (et al.), *4739*
Miller (B.M.), nonlinear theory, optimal control, sampled data systems, *6143*
Miller (C.W.), geothermal reservoirs, storage, wells, *7996*
Miller (G.), combustion (turbulent), flow obstructions, fluidized beds, heat exchangers, Zakkay (V.), *6815*
Miller (G.H.), gases, polyatomic gases, spectral analysis, spectroscopy, thermal properties, Mulac (A.J.), *1660*
Miller (K.J.), see Brown (M.W.), *450*
Miller (K.L.), see Brown (M.W.), *1351*
Miller (L.N.), noise, noise measurements, rainfall, vegetation, wind, *5791*
Miller (N.R.), biomechanics, experimental mechanics, kinematics, photography, Shapiro (R.), (et al.), *1046*
- see Mclaughlin (T.M.), *7122*

Miller (R.E.), dynamic analysis, finite element methods, plates (reinforced), *5146*
Miller (R.K.), see Hedgepeth (J.M.), *3562*
- boundary value problems, composite structures, diffusion, mass transfer, models, moisture, *6827*
- see Skar (S.J.), *8103*

Miller (S.), design, machine design, mechanisms (planes), structure, Gronowicz (A.), (et al.), *7625*
milling, chip formation, turning, Venuvinod (P.K.), Lau (W.S.), (et al.), *7460*
Milling (R.W.), boundary layer (control), hydrodynamic stability, reynolds number (critical), tollmien schlichting waves, *1579*
Mills (A.F.), heat transfer, jets, mass transfer, turbulence, turbulent flow, Kim (S.), (et al.), *10473*
Mills (D.R.), solar collectors, solar concentrators, solar energy, *3944*
Mills (J.J.), absorption, chemical kinetics, drilling, rocks, Westwood (A.R.C.), *8353*
Mills (K.G.), see Isaacs (L.T.), *3597*
Mills (N.J.), crack growth, crack opening displacement, multiple cracks, Walker (N.), *9417*
Millward (A.), pitot tube, sensitivity, yawing, *7075*
Milne (J.S.), see Fraser (C.J.), *5430*
Milner (H.R.), see Mohr (G.A.), *3142*
- beams (elastic), deformation (finite), frames, large displacement, *6213*

Miloh (T.), cylindrical bodies, diffraction, flow irregularities, gravity waves, nonlinear waves, *667*
- fredholm equations, irrotational flow, ships, source distribution, *9015*

Milojevic (D.Z.), see Pavlovic (M.I.), *731*
Milov (L.T.), mathematical models, state space techniques, time varying systems, Solodovnikov (V.V.), *3157*
Milstein (F.), crystals, elastic constants, finite strain, *5085*
Milusheva (S.), see Bainov (D.), *22*
Minagawa (S.), crystals, diamond, dispersion relation, elastic constants, micropolar media, Arakawa (K.), (et al.), *3079*
- composite materials, finite element techniques, harmonic waves, layered media, variational methods, Nemat-Nasser (S.), (et al.), *8148*

Minashin (V.E.), fuel elements, nuclear reactors, safety, thermal effects, Gorelov (I.N.), (et al.), *3886*
Mindlin (I.M.), inviscid fluid, spherical bodies, unsteady flow, vortex flow, vortices, *4579*
Mindlin (R.D.), equations of motion, plates (sandwich), *1236*
mindlin plates, bending, finite element techniques, interpolation, locking, matrix methods, plates, shells, Tsach (U.), *2070*
- frequencies, plates (circular), vibration (free), Takahashi (S.), Suzuki (K.), (et al.), *2334*
- beams (timoshenko), plates (rectangular), vibration (free), Roufaeil (O.L.), Dawe (D.J.), *2335*
- approximations, plates (circular), vibration (free), Irretier (H.), *4428*
- finite element techniques, nonlinear analysis, Hughes (T.J.R.), Tezduyar (T.E.), *8144*
- bending, hybrid element methods, hybrid techniques, Spilker (R.L.), Munir (N.I.), *9290*
- plates, postbuckling behavior, shells (of revolution), shells (shallow), Pica (A.), Wood (R.D.), *9283*
- elastic foundations, plates (circular), vibration (free), Tomar (J.S.), Gupta (D.C.), *11129*

mines, heat transfer, mass transfer, rocks, Kremnev (O.A.), Zhuravlenko (V.Ya.), (et al.), *5609*
- columns, design, finite element methods, pillars, structural support, underground, Pariseau (W.G.), Sorensen (W.K.), *7610*
- mine shafts, pipes, reinforced bodies, stress analysis, thin walled structures, Tsoi (N.G.), Kolesnikov (A.V.), (et al.), *7621*

Mingle (J.O.), diffusion, porous surfaces, rarefied gases, *5425*

Minh (H.H.), closure, recirculation, turbulence model, turbulent flow, *6692*
minimax techniques, model reduction, synthesis, Zadorozhnyi (V.F.), Nurminskii (E.A.), (et al.), *107*
- discrete systems, filters, inertial guidance, Vathsal (S.), *200*
- regulator problem, stochastic control, Nakonechnyi (A.G.), *2101*
- filters, identification, Kats (I.Ya.), Kurzhanskii (A.B.), *2141*
- algorithms, identification, optimization, process control, Bakan (G.M.), Strashko (V.T.), *2154*
- algorithms, design, multivariable systems, Bakan (G.M.), Strashko (V.T.), *4280*
- design (optimum), duality, framed structures, Imai (K.), Shoji (M.), *6510*
- convergence, linear theory, Panin (V.M.), *10051*

minimization, channel flow, discharges, energy transport, sediment transport, Chang (H.H.), *556*
- camber, drag, wings, Sachs (G.), *1623*
- algorithms, computing techniques, Imai (M.), Fukumura (T.), (et al.), *2057*
- optimal control, regulator problem, synthesis, Romanenko (L.G.), *4305*
- lattices, structural optimization, trusses, Bauer (J.), Gutkowski (W.), (et al.), *4522*
- algorithms, computing techniques, gradient techniques, ridge-path method, Elzoughby (A.A.), Metwalli (S.M.), (et al.), *4995*
- algorithms, hybrid techniques, mathematical programming, Adamenko (G.M.), Gaishun (I.V.), *5047*
- design (optimum), trusses, Lagache (J.-M.), *6509*
- geometric nonlinearities, newton method, nonlinear analysis, structural analysis, Kamat (M.P.), Watson (L.T.), (et al.), *7188*
- algorithms, convergence, descent, Cohen (A.I.), *7193*
- convergence, ill posed problems, least squares, mathematical models, Seidman (T.I.), *8133*
- lipschitz condition, mathematical programming, Gupal (A.M.), *10054*
- collapse, limit analysis, plates (circular), plates (weakened), Yang (W.H.), *10154*

minimum fuel control, internal combustion engines, optimal control, vehicles, Sweet (L.M.), *5066*
mining, fracture, joints, photography, rocks, Hagan (T.O.), *426*
- noise, noise abatement, noise measurements, Utley (W.A.), *914*
- granular media, modeling, subsidence, Gustkiewicz (J.), Rogowska (J.), *1320*
- excavation, numerical methods, stress analysis, tunnels, Diering (J.A.C.), *1335*
- dams, embankments, granular media, mine tailings, Highter (W.H.), Tobin (R.F.), *2387*
- field tests, finite element methods, Pariseau (W.G.), Eitani (I.M.), *2392*
- ocean bed, pipelines, vibration (flow induced), Rogers (A.C.), Abramson (H.N.), *4665*
- boundary elements, finite element techniques, holes, infinite medium, mesh generation, Beer (G.), Meek (J.L.), *7206*
- elastoplasticity, excavation, materials properties, underground, Chugh (A.K.), *7288*
- failure, holes, plastic behavior, tunnels, Kaczmarek (J.), *8155*
- coal, elasticity (three dimensional), Vashakmadze (T.S.), Gotsulyak (E.A.), (et al.), *8184*
- ocean bed, pipelines, vibration (flow induced), Chung (J.S.), Whitney (A.K.), (et al.), *8626*

Minnetyan (L.), design (optimum), dynamic response, guideways, vehicles, Nelson (R.B.), (et al.), *1457*
Minor (J.), see Stages (A.H.), *2516*
Minozzi (D.), beams (open section), beams (thin section), finite element techniques, geometric nonlinearities, space frames, three dimensional formulation, Odorizzi (S.), (et al.), *8153*
Minsker (I.N.), algorithms, mathematical models, model reduction, process control, *2175*
Minster (J.B.), see Barker (T.G.), *961*
- see Cara (M.), *7020*

Minyaeva (L.N.), adaptive systems, algorithms, mathematical models, statistical modelling, stochastic control, stochastic systems, Sabinin (O.Y.), *4267*
Mioduchowski (A.), see Faulkner (M.G.), *1271*
- see Faulkner (M.G.), *9257*

Miquel (J.), see Bernier (J.), *4041*
Mir (J.M.), atomization, capillary waves, cavitation, ultrasonics, *4015*
Mircea (O.T.), darcy flow, filtration, immiscible fluids, porous media, *10837*
Mirhosseini (A.), blades, cylindrical bodies, film cooling, gas turbines, heat transfer, leading edge, thermal measurements, Barrow (H.), *733*
Mirkina (A.S.), approximations, asymptotic behavior, stability theory, Khodzhaev (K.Sh.), *9112*
Mirolyubov (S.G.), aneurysms, biomechanics, blood flow, viscous flow, *7117*
Mironchuk (N.S.), axisymmetric flow, compressible flow, flow obstructions, impingement, jets, shock waves, supersonic flow, vacuum, Nikulin (A.N.), (et al.), *8550*
Mironov (A.), see Mroz (Z.), *8446*
Mironov (A.A.), see Kartvelishvili (V.M.), *11325*
Mironov (B.P.), film cooling, fluid injection, mass transfer, porous media, turbulence (freestream), Lugovskiy (P.P.), (et al.), *11778*
Mironov (Yu.V.), boiling, channel flow, evaporation, *8760*
Mironovskii (L.A.), dynamic analysis, linear systems, observers, process control, reliability analysis, *2082*
- continuous systems, diagnostics, dynamic properties, reliability analysis, *8174*

Mironovskiy (L.A.), see Britov (G.S.), *2087*
Miropolskii (Z.L.), correlation, heat exchangers, heat transfer, real gas effects, turbulent flow, Karamysheva (A.I.), (et al.), *4648*
Miropolskiy (Z.L.), critical heat flux, flashing, friction (internal), pipe flow, pressure drop, thermodynamics (nonequilibrium), void fraction, Shneyerova (R.I.), (et al.), *747*
Miroshnikov (V.A.), magneto fluid dynamics, spherical bodies, stokes flow, transport phenomena, two phase flow, *11825*
Miroshnikov (V.K.), magneto fluid dynamics, suspensions, thermal effects, two phase flow, vortex flow, *11818*
Mirsalimov (V.M.), brittle fracture, cracks, holes, plates (weakened), singular integral equations, stress intensity factor, *10291*
Mirskii (V.N.), blunt bodies, hypersonic flow, vaporization, *3847*
Mirza (M.S.), see Hsu (C.-T.T.), *523*
Mirza (S.A.), ductility, reinforced concrete, slabs, strength, Macgregor (J.G.), *9445*
Mirzadzhanzade (A.Kh.), see Ogibalov (P.M.), *2574, book*
Mirzoev (R.G.), see Sytov (V.A.), *1400*
misalignment, dynamic loads, rolling, Kozachok (A.A.), *9473*
Mishra (M.), see Misra (J.C.), *7515*
Mishra (M.P.), boiling, convection (forced), evaporation, heat transfer, refrigeration, Varma (H.K.), (et al.), *1669*
Mishra (P.), see Lal (P.), *4729*
Mishra (R.N.), algorithms, model reduction, multivariable systems, process control, Wilson (D.A.), *2145*
Mishra (S.K.), fluid injection, immiscible fluids, porous media, two phase flow, Verma (S.P.), *9894*
Mishra (S.P.), boundary layer, convection (free), elastico-viscous liquids, oscillatory flow, viscoelastic fluids, Mohapatra (U.), *8723*
- couette flow, magneto fluid dynamics, plates (parallel), porous walls, unsteady flow, Muduli (J.C.), *10738*

Misici (L.), see De Socio (L.M.), *1683*
Misicu (M.), continuum mechanics, functional analyis, kinematics, *1967*
- boundary value problems, elasticity (linear), plates (thick), *10160*
- see Cornea (I.), *10845*

Miskioglu (I.), photoelasticity (dynamic), thermal stresses, thermoelasticity (transient), Gryzagorides (J.), (et al.), *7957*
Misovec (A.), see Wright (J.P.), *11664*
Misra (A.), abrasion, erosion, hardness, particle size, wear, Finnie (I.), *1928*
- deformation (plastic), holes, residual stresses, rings, strain gages, Peterson (H.A.), *6466*

Misra (B.), earth pressure, granular media, retaining walls, *6395*
Misra (G.C.), see Kumar (D.), *9515*
Misra (J.C.), anisotropic media, cylindrical bodies, thermal stresses, thermoelasticity (steady), Achari (R.M.), *2964*
- anisotropic media, strips, thermal stresses, thermoelasticity (steady), *2968*
- disks, heat sources, thermal stresses, Achari (R.M.), *3993*
- anisotropic media, nonhomogeneous media, plates (annular), rotating disks, thermal stresses, Achari (R.M.), *4815*
- bending (viscoelastic), elastic foundations, plates (rectangular), thermoviscoelasticity, viscoelastic materials, Samanta (S.), *6944*
- crack opening displacement, griffith cracks, orthotropic materials, Mishra (M.), (et al.), *7515*
- blood vessels, brain, muscles, tissues, viscoelasticity, Chakravarty (S.), *7646*

missile structures, nuclear radiation, x ray techniques, Cost (T.L.), *2977*
missiles, impact, punch problems, walls, Silter (G.E.), *510*
- rolling motion, stability theory, Ling (Y.L.), Han (K.W.), *693*
- algorithms, avoidance, singular control, trajectories, variable metric algorithm, Blank (D.), Shinar (J.), *1160*
- design, guidance systems, simulation, Zarchan (P.), *1162*
- cyclic loading, fracture mechanics, welding, Hrisafovic (N.), Ledey (J.P.), *1384*
- penetration, reinforced concrete, Degen (P.P.), *2372*
- aerodynamics, hypersonic flow, inlet flow, Dillon (J.L.), Marcum (D.C.) Jr., (et al.), *2742*
- design, guidance theory, Nesline (F.W.), *2926*
- aerodynamic loads, computer programming, pressure distribution, supersonic flow, vortices, wing body combinations, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- aerodynamic performance, ballistics (exterior), control stability, rockets, Murphy (C.H.), *3926*
- cylindrical bodies, numerical methods, shock waves, supersonic flow, three dimensional flow, turbulent flow, Hung (C.M.), Chaussee (D.S.), *5413*
- cruise missile, modeling, navigation, simulation, Schmidt (G.T.), Setterlund (R.H.), *5711*
- airplanes, evasion, pursuit, suboptimal control, Steinberg (A.M.), Forte (I.), *6146*
- ballistics (exterior), flight tests, subsonic flow, Whyte (R.H.), Winchenbach (G.L.), (et al.), *6722*
- aerodynamic performance, stability derivatives, transonic flow, viscous effects, Ericsson (L.E.), *6727*
- canard, mechanical systems, remote control, rolling motion, Blair (A.B.) Jr., *6728*

- aerodynamic performance, ballistics (exterior), control stability, drag, Qasrawi (A.M.S.), East (R.A.), *6892*
- composite structures, elastic behavior, random loading, stochastic systems, viscoelasticity, Weeks (G.E.), Cost (T.L.), *7301*
- hypersonic flow, propulsion, ramjets, rockets, Billig (F.S.), Waltrup (P.J.), (et al.), *8810*
- fins, numerical methods, shock layer, supersonic flow, Wardlaw (A.B.) Jr., Solomon (J.M.), *9551*
- aerodynamic interference, aerodynamic performance, moving surfaces, surface waves, wings, Putilin (S.I.), *9655*
- ramjets, rockets, solid propellants, testing equipment, Readey (H.J.) Jr., Cobb (E.R.), *10729*
- channels, leading edge, supersonic flow, wedges, Chushkin (O.I.), *11732*

mission analysis, inertial guidance, navigation, Harrison (J.V.), Adams (M.G.), (et al.), *5710*
- collision models, geosynchronous orbits, probability, Hechler (M.), Van Der Ha (J.C.), *6882*
- astronautics, celestial mechanics, design, optimization, orbits, space vehicles, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*
- ship design, surface effect, towing tanks, Balquet (R.J.), *8046*

Mitachi (T.), clay, modeling, plane strain, saturation, strength, Kitago (S.), *414*
Mitani (T.), see Joulin (G.), *11783*
Mitarai (O.), heating, macroscopic characterization, plasma (toroidal), tokamak, turbulence (mechanisms), *3902*
- density, interferometry, measurements (dynamic), plasma (toroidal), tokamak, Nakashima (H.), (et al.), *5693*

Mitchell (B.), automobiles, brakes, digital simulation, maneuverability, Abrams (R.), (et al.), *10057*
Mitchell (F.R.G.), see King (D.F.), *8934*
Mitchell (J.K.), see Banerjee (S.), *7445*
- electro-osmosis, field tests, mechanical properties, soils, Banerjee (S.), *7446*

Mitchell (L.D.), fast fourier transform, frequency response, vibration (free), *10196*
Mitchell (N.A.), blades, cascades, finite difference methods, unsteady flow, *7729*
- aerodynamic interference, axial compressors, axial turbines, cascades, wakes, *10624*

Mitchell (R.A.), see Pontius (P.E.), *10313*
Mitchell (R.E.), chemical kinetics, exhaust gases, flames (diffusion), methane, nitric oxide, Sarofim (A.F.), (et al.), *5635*
Mitchell (S.K.), explosions (underwater), sound propagation, underwater acoustics, Bedford (N.R.), (et al.), *5730*
- attenuation, ocean bed, sedimentation, underwater acoustics, Focke (K.C.), *5755*
- explosions (underwater), sound propagation, sound speed, underwater acoustics, Hampton (L.D.), *5763*

Mitchner (M.), see Leonard (G.), *4821*
Mitlin (B.I.), see Grigorenko (Ya.M.), *4382*
Mitnitskii (V.Ya.), see Belotserkovskii (O.M.), *7902*
Mitome (K.), cutting, design, gears, kinematics, *9471*
Mitra (P.), oscillating bodies, particle fluid flow, rotating disks, velocity profiles, *3618*
Mitrofanov (G.M.), see Landa (Ye.I.), *8011*
Mitrofanov (V.V.), deflagration, detonation, explosions, liquid fuels, thermal explosions, Pinaev (A.V.), (et al.), *1797*
Mitropolsky (Yu.A.), see Vladimirov (V.S.), *4158*
Mitrovic (J.), bubble dynamics, drops, liquid vapor interface, Stephan (K.), *1866*
Mitsis (S.), see Pelecudi (C.), *2553*
Mitsumura (Y.), acoustics, atmosphere, sound propagation, stratification, Makino (M.), *3929*
Mitsuya (Y.), bearings (gas lubricated), bearings (slider), film thickness, finite element methods, reynolds equation, *5983*
Mittal (M.L.), see Sarma (P.R.L.), *10752*
Miura (H.), dust, particles, shock tubes, shock waves, Glass (I.I.), *9874*
Miura (T.), see Goto (Y.), *6955*
Miura (Y.), see Hirao (M.), *4508*
Miwa (K.), see Ikegami (M.), *4742*
Miwa (S.), see Shimada (K.), *6558*
Miwa (T.), see Jimbo (M.), *7160*

mixed flow, fluidized beds, mathematical models, Buevich (Yu.A., Tsyrulnikov (I.M.), *7010*
- anisotropy, concentration, dispersion, porous media, Routaboul (F.), Quintard (M.), *7973*
- absorption, porous media, Tsabek (L.K.), *7974*
- convection (forced), porous media, stability theory, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *8942*
- galerkin method, porous media, Ewing (R.E.), Wheeler (M.F.), *9904*

mixed flow compressors, conformal mapping, turbomachinery, vorticity, Lewis (R.I.), Fairbairn (G.W.), *2754*
mixed flow turbines, axisymmetric flow, inviscid fluid, vortex flow, Zabolotnyi (F.T.), *2758*
mixed mode fracture, brittle materials, orthotropic materials, sheet metal, Lemant (F.), Pineau (A.), *454*
- brittle materials, crack initiation, fracture mechanics, Tirosh (J.), Catz (E.), *456*
- crack growth, fatigue, Sih (G.C.), Barthelemy (B.M.), *1371*
- fracture criteria, j-integral, unloading, Yoda (M.), *3458*
- alloys, crack growth, fatigue, strain energy, Badaliance (R.), *3469*
- crack propagation, photoelasticity, stress intensity factor, surface flaws, Smith (C.W.), Peters (W.H.), (et al.), *3479*
- cracks, energy release, fracture mechanics, j-integral, path integrals, Herrmann (A.G.), Herrmann (G.), *8398*
- crack opening displacement, elastoplasticity, Gai (Y.-C.), *9408*

mixed mode loading, complex variables, cracks, edge dislocations, kinked crack, singular integral equations, Karihaloo (B.L.), *4500*
mixing, injection, turbulence, turbulent flow, Schetz (J.A.), *653, book*
- decay, grids, temperature, turbulence, Sreenivasan (K.R.), Tavoularis (S.), (et al.), *654*
- concrete, mixtures, vibrators, Eyman (K.H.), *1436*
- condensation, modeling, three dimensional flow, visualization, Mostofizadeh (C.), Kriegel (E.), (et al.), *1642*
- plumes, smoke stacks, Sandroni (S.), Bacci (P.), (et al.), *2679*
- diffusion, powders, Hwang (C.L.), Hogg (R.), *4007*
- aquifers, particles, stochastics, stratification, Gelhar (L.W.), Gutjahr (A.L.), (et al.), *4025*
- channel flow, free boundary, jets, velocity measurement, weirs, Naib (S.K.A.), *4576*
- ejectors, pumps, supersonic flow, Ziv (A.), Wolfshtein (M.), *4679*
- filtration, powders, Cardew (P.T.), *4836*
- arrays, diffusers, diffusion, jets, Lee (J.H.W.), *5454*
- combustion chambers, gas turbines, jets, Spiridonov (Yu.A.), Premet (E.I.), (et al.), *5637*
- combustors, emissions, gas turbines, Noyce (J.R.), Sheppard (C.G.W.), (et al.), *5640*
- dispersion, rivers, water pollution, Shen (H.T.), *5911*
- eddy viscosity, impellers, tanks, turbulent flow, Hiraoka (S.), Fan (L.T.), *6651*
- turbulence, turbulence model, Fournier (J.L.), Gence (J.N.), (et al.), *6690*
- aerodynamics, combustion chambers, combustors, jets, Grigorenko (P.P.), Spiridonov (Yu.A.), (et al.), *6844*
- processes, suspensions, two phase flow, Einenkel (W.-D.), *6963*
- diffusion, dilute solutions, membranes (permeable), osmosis, Pedley (T.J .), *8078*
- compressible flow, jets, numerical methods, Lukerchenko (N.N.), *8545*
- buoyant flow, convection (free), mixing chambers, thermal instability, unsteady flow, Opanasenko (A.N.), Selivanov (V.M.), (et al.), *8704*
- dispersion coefficient, mathematical models, rivers, Lau (Y.L.), Krishnappan (B.G.), *9520*
- diffusers, jets, plumes, Sorrell (F.Y.), Smith (B.W.), *9593*
- annular flow, axial compressors, blades, boundary layer, wakes, Davino (R.M.), Lakshminarayana (B.), *10522*
- axial compressors, secondary flow, three dimensional flow, Adkins (G.G.) Jr., Smith (L.H.) Jr., *10523*
- concentration, jets, particle fluid flow, scattered light, Long (M.B.), Chu (B.T.), (et al.), *10539*
- diffusion coefficient, mixtures, particulate flow, Koga (J.), Yamaguchi (K.), (et al.), *10561*
- mixtures, particulate flow, solids, Too (J.R.), Fan (L.T.), (et al.), *10562*
- liquid metals, magneto fluid dynamics, unsteady flow, welding, Chernysh (V.P.), Shalda (L.M.), *10754*
- compressible flow, lasers (gasdynamic), nozzles, supersonic flow, Efimov (B.G.), Zaklyaziminskii (L.A.), *11403*
- jets, liquid liquid interface, pipe flow, Fitzgerald (S.D.), Holley (E.R.), *11492*
- gas-trips, laser doppler velocimeters, nozzles, supersonic flow, velocity profiles, Cenkner (A.A.) Jr., *11511*
- axisymmetric flow, entrainment, jets, two dimensional flow, Vatsa (V.N.), Werle (M.J.), (et al.), *11517*
- compressible flow, diffusers, geometrical properties, incompressible flow, pressure drop, Labendik (V.P.), Dantsyg (A.Ya.), (et al.), *11799*

mixing layers, channels, screens, turbulence, wind, Kit (E.), Berent (E.), (et al.), *559*
- experimental results, turbulence, turbulence (structure), Dimotakis (P.E.), Debussy (F.D.), (et al.), *643*
- stratified flow, Nof (D.), *979*
- shear flow, stratified flow, Popov (V.A.), Chashechkin (Yu.D.), *2667*
- turbulence, Voropayev (S.I.), Gavrilin (B.L.), (et al.), *2668*
- closure, curvature, reynolds stresses, turbulence, turbulence model, Gibson (M.M.), Rodi (W.), *2691*
- aquifers, storage, Singh (S.P.), *2996*
- turbulence, turbulence model, vortices, Kiya (M.), Arie (M.), (et al.), *4651*
- reattachment, steps, turbulence, turbulence (structure), Chandrsuda (C.), Bradshaw (P.), *5464*
- oceanography, stratified flow, turbulence (geophysical), Kundu (P.K.), *5926*
- boundary layer (atmospheric), convection, turbulence (geophysical), Coulman (C.E.), *5944*
- entrainment, heat transfer, mass transfer, oceanography, thermocline, turbulence (geophysical), Shapiro (G.I.), *7059*
- ocean air interaction, velocity measurement, velocity profiles, Weller (R.A.), *7067*

- entrainment, shear stress, stratification, wind, Kranenburg (C.), *7652*
- jets, supersonic flow, turbulent flow, Karpman (I.M.), Traskovskii (V.D.), *7737*
- chemical reactions, experimental methods, turbulence (structure), wakes, Breidenthal (R.), *7756*
- currents, ekman layer, ocean air interaction, rotating fluids, Csanady (G.T.), Shaw (P.T.), *8033*
- lakes, reservoirs, wind-wave interaction, Imberger (J.), Hamblin (P.F.), *8519*
- heat transfer, oceanography, thermal diffusion, thermocline, Posmentier (E.S.), *8993*
- boussinesq equation, buoyancy, convection, thermal diffusion, Cushman-Roisin (B.), *9533*
- jets, vorticity, Martinez-Val (R.), *9597*
- coherent structure, turbulent mixing, visualization, vortices, Bernal (L.P.), *9598*
- lasers, smoke tunnels, turbulent flow, visualization, Mensing (P.), Fiedler (H.), *9679*
- boundary layer (atmospheric), clouds, convection (free), Manton (M.J.), *9932*
- grids, thermal diffusion, turbulence, turbulent mixing, Larue (J.C.), Libby (P.A.), (et al.), *10474*
- coherent structure, lakes, loch ness, wind, Thorpe (S.A.), Hall (A.J.), *11521*

mixing length theory, eddy viscosity, film cooling, fluid injection, injection, Kikkawa (S.), Fujii (M.), *1666*

Mixson (J.S.), see Barton (C.K.), *10805*

mixture theories, continuum theory, porous media, Vodak (F.), *6*
- averaging, multiphase media, nonhomogeneous media, Nikolaevskii (V.N.), *1972*
- constitutive equations, elastic bodies, multiphase media, nonhomogeneous media, Khoroshun (L.P.), *4131*
- conservation laws, equations of motion, nonhomogeneous media, Kril (S.I.), *4135*
- composite materials, diatomic solids, microstructures, viscoelasticity, Demiray (H.), *5104*
- diffusion, metals, solid mechanics, Aifantis (E.C.), *6045*
- averaging, composite materials, multiphase media, Topovinina (I.V.) ed., *7130, book*
- composite materials, dynamic behavior, laminates, waves, Benveniste (Y.), Aboudi (J.), *7142*
- bending, composite materials, experimental results, plates, Constanda (C.), *8240*
- blood flow, couple stresses, particle fluid flow, polar fluids, Chaturani (P.), Upadhya (V.S.), *9060*

mixtures, binary flow, boiling, convection (forced), Bennett (D.L.), Chen (J.C.), *743*
- boussinesq equation, oscillating bodies, two phase flow, Matsufuji (H.), Hasegawa (E.), *936*
- concrete, mixing, vibrators, Eyman (K.H.), *1436*
- thermal effects, transport properties, viscosity, Dymond (J.H.), Young (K.J.), (et al.), *1658*
- entropy, thermodynamic properties, thermodynamics (nonequilibrium), Bree (J.), *2779*
- flame propagation, laminar flow, numerical analysis, Aldushin (A.P.), Zeldovich (Ya.B.), (et al.), *3860*
- multiphase flow, systems, Hetsroni (G.) ed., *4005, book*
- pressure drop, tube sheets, two phase flow, Grant (I.D.R.), Chisholm (D.), *4021*
- suspensions, viscoelastic waves, waves, D'Anna (A.), De Socio (L.M.), (et al.), *4130*
- conservation laws, thermal diffusion, transport properties, Zamskii (B.N.), Rabinovich (G.D.), *4134*
- multicomponent flow, Kitayner (A.G.), Markeyev (B.M.), *4595*
- composite materials, conduction (heat), laminates, Murakami (H.), Maewal (A.), (et al.), *5575*
- cycles, heat pumps, Rojey (A.), Meyer (C.), (et al.), *5591*
- binary flow, heat transfer, liquid vapor interface, vaporization, Fakhretdinov (I.A.), Chalyi (A.V.), *5611*
- condensation, evaporation, excitation, isotopes, lasers (gasdynamic), Druzhinin (A.A.), Ptitsyn (G.A.), (et al.), *5612*
- pipes, reynolds number (small), turbulent flow, two phase flow, Chisholm (D.), *5815*
- powders, separation, Lai (F.), Hersey (J.A.), (et al.), *5824*
- porous media, powders, Tikhomolova (K.P.), Shishkanova (L.A.), *5830*
- gases, particles, pipe flow, Ginestra (J.C.), Rangachari (S.), (et al.), *5833*
- alloys, mathematical methods, moving surfaces, solidification, Tao (L.N.), *6902*
- gases, modes, sound propagation, Huck (R.J.), Johnson (E.A.), *6920*
- buoyancy, oscillating bodies, particles, two phase flow, Matsufuji (H.), Hasegawa (E.), *6960*
- mechanical properties, two phase flow, viscosity, Oshima (N.), *6980*
- hydrodynamic stability, polar fluids, waves, Straughan (B.), *7141*
- digital simulation, two phase flow, Dorfman (A.L.), *7960*
- biomechanics, composite materials, continuum theory, discrete systems, porous media, Brulin (O.) eds., Hsieh (R.K.T.), *8090, book*
- binary flow, conduction (heat), conductivity, gases, kinetic theory, multicomponent flow, Assael (M.J.), Wakeham (W.A.), (et al.), *9675*
- composite materials, conduction (heat), fibers, variable thermal properties, Murakami (H.), Hegemier (G.A.), *8738*
- gases, sound propagation, sound speed, Huck (R.J.), Johnson (E.A.), *8860*
- chemical kinetics, porous media, Liu (I.-S.), *8897*
- gases, real gas effects, thermal properties, Nedostup (V.I.), Gaikevich (E.P.), *10548*
- boltzmann equation, gases, molecular theory, Bobylev (A.V.), *10550*
- liquids, solutions (material), thermal diffusion, Bukhtilova (M.A.), Gorogush (V.M.), (et al.), *10554*
- diffusion coefficient, mixing, particulate flow, Koga (J.), Yamaguchi (K.), (et al.), *10561*
- mixing, particulate flow, solids, Too (J.R.), Fan (L.T.), (et al.), *10562*
- diffusion, navier stokes equation, poiseuille flow, Shavaliev (M.Sh.), *10672*
- ethylene, propylene, self ignition, Tsolkovskii (T.I.), Mulyava (M.P.), (et al.), *10696*
- gases, heat transfer, plates (parallel), Nosik (V.I.), *11445*
- convection, diffusion, liquids, optical techniques, two component flow, Ruddick (B.R.), *11755*
- binary flow, critical region, liquid vapor mixture, thermodynamic properties, Wielopolski (P.), *11759*
- combustion products, flames, methane, quenching, Fukuda (M.), Korematsu (K.), (et al.), *11794*
- bubble dynamics, gravity, magneto fluid dynamics, models, Golosov (V.V.), Naletova (V.A.), (et al.), *11819*
- bubble dynamics, hydrodynamics, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12027*
- computing techniques, condensation (filmwise), Volkov (Yu.A.), Nikitin (V.M.), *12062*

Miyagawa (Y.), air conditioning, cooling, radiant interchange, scale models, variational methods, *5564*

Miyakawa (S.), see Totani (T.), *10011*

Miyake (Y.), see Murata (S.), *1555*
- see Murata (S.), *5995*
- see Murata (S.), *8067*
- see Murata (S.), *11744*

Miyamoto (M.), conduction (heat), convection (free), heat transfer (combined modes), Sumikawa (J.), (et al.), *764*

Miyanaga (Y.), diffusion, particle fluid flow, particle size, reservoirs, turbidity, Aki (S.), *6606*

Miyashita (K.), deformation, earthquakes, faults, simulation, *10847*

Miyata (H.), see Kojima (H.), *6249*

Miyata (N.), composite materials, crystals, glass fibers, hardness, indentation, Jinno (H.), *8219*

Miyatake (T.), crack propagation, earthquake source, earthquakes, rupture, *8961*

Miyauchi (M.), see Kano (M.), *1909*

Miyawaki (Y.), see Nakao (M.), *767*

Miyazaki (K.), bubble dynamics, conduction (heat), sodium, *5820*

Miyazaki (N.), computer programming, cracks, finite element techniques, pipes, stress intensity factor, three dimensional formulation, Watanabe (T.), (et al.), *10284*

Miyazaki (T.), conduction (heat), electron beam welding, welding, Giedt (W.H.), *8735*

Miyoshi (K.), correlation, friction, metals, shear strength, Buckley (D.H.), *3492*
- carbides, friction, high temperature, surfaces, Buckley (D.H.), *4002*
- abrasion, deformation (plastic), friction (sliding), metals, wear, Buckley (D.H.), *4891*

Miyoshi (M.), freezing, soils, tunneling, Tsukamoto (T.), (et al.), *6390*

Mizel (V.J.), see Gurtin (M.E.), *10182*

Mizera-Lesinska (B.), see Lesinski (J.), *6958*

Mizoguchi (K.), flexible bodies, shafts, shells (cylindrical), strength, Shirakawa (K.), (et al.), *3286*

Mizomoto (M.), see Andoh (E.), *6845*

Mizukawa (M.), see Ono (K.), *1939*

Mizumura (K.), beaches, coasts, erosion, Shiraishi (N.), *5916*

Mizuno (M.), see Takahashi (K.), *6210*

Mizushima (I.), see Hamada (M.), *3234*

Mizushina (T.), crossflow, cylindrical bodies, experimental results, plastic flow, Usui (H.), (et al.), *551*
- annular flow, convection, dielectrics, electro fluid dynamics, heat transfer, laminar flow, Ogino (F.), (et al.), *6768*

Mizuta (A.), cracks, fracture criteria, plasticity, upset forging, Tsuda (O.), (et al.), *1379*

Mizutani (M.), see Kobayashi (H.), *8592*

Mizyuk (V.G.), see Girol (A.P.), *10688*

Mkhitaryan (A.M.), multilayer, plane flow, temperature, thermal effects, Girol (A.P.), (et al.), *4698*

Mladenov (K.), see Kozarov (M.), *11687*

Mlynarek (Z.), see Kezdi (A.), *7442*

Moalem-Maron (D.), bubbly flow, buoyant flow, condensation, evaporation, immiscible fluids, two phase flow, Sokolov (M.), (et al.), *8696*

Moan (T.), see Taby (J.), *3557*
- see Nordsve (N.T.), *6261*

Mobarak (I.M.), see Sewailem (M.R.), *9376*
Mobbs (S.D.), circulation, conservation laws, theorems, vorticity, *8526*
mobility, bearings (journal), impedance methods, Moes (H.), Bosma (R.), *5994*
- design, linkages, rigid bodies, structures, Baker (J.E.), *7631*

Mochimaru (Y.), computing techniques, large scale systems, nonlinear analysis, Tomita (Y.), *2041*
Mochizuki (S.), annular flow, friction (internal), heat transfer, laminar flow, pressure drop, rotating disks, Yang (W.-J.), *761*
modal analysis, coding, computer programming, finite element methods, finite element techniques, nastran, programming, Schaeffer (H.G.), *75, book*
- columns, vibration, Gajewski (A.), *367*
- aerospace vehicles, dynamic response, Niedbal (N.), *533*
- shells (spherical), shells (thin), vibration (free), Skudrzyk (E.J.), *1278*
- experimental mechanics, structural response, vibration (forced), Bonnecase (D.), *1290*
- elastic waves, surface waves, Lapin (A.D.), *1297*
- eigenvalues, rotating shafts, vibration, Matsushita (O.), Kikuchi (K.), (et al.), *2342*
- frequencies, multistory frames, vibration (free), Roberts (E.H.), Wood (R.H.), *2343*
- eigenvalue problems, finite element techniques, fluid-structure interaction, Daniel (W.J.T.), *2716*
- computing techniques, dynamic analysis, nonlinear analysis, structures, Noor (A.K.), *3138*
- beams, bending, eigenvalues, vibration (free), Zarek (J.H.B.), Gibbs (B.M.), *3352*
- numerical methods, vibration (forced), Saunders (L.R.), Collings (A.G.), *3380*
- algorithms, large scale systems, model reduction, Kabamba (P.T.), *4210*
- modes, offshore structures, Natke (H.G.), Schulze (H.), *4545*
- shells (of revolution), vibration, Wang (D.-J.), Ren (J.-G.), (et al.), *5220*
- dynamic analysis, nonlinear analysis, substructuring, Bathe (K.-J.), Gracewski (S.), *5228*
- dynamic analysis, dynamic response, marine risers, ocean, vibration (forced), Kirk (C.L.), Etok (E.U.), (et al.), *6291*
- bridges (suspension), piers, seismic loading, substructuring, Balendra (T.), *6525*
- cams, design criteria, vibration, Wiederrich (J.L.), *6555*
- absorption, ducts, sound propagation, Nilsson (B.), Brander (O.), *6926*
- biomechanics, limit cycles, oscillators, time delay systems, van der pol oscillators, Linkens (D.A.), Kitney (R.I.), *7154*
- convection, diffusion, nonlinear analysis, rayleigh number, Riahi (N.), *7841*
- eigenvalues, frequencies, vibration, Bugeat (L.P.), Lallement (G.), *8323*
- dynamic response, piping systems, seismic loading, Krause (G.), *8467*
- rotary inertia, shear, shells (spherical), vibration (forced), Shenderov (E.L.), *9337*
- dynamic analysis, vibration, Natke (H.G.), *10226*
- refraction, underwater acoustics, Kuznetsov (V.K.), *11910*

modal control, control, satellites, Ganiev (R.F.), Zakrzhevskii (A.E.), (et al.), *192*
- discrete systems, distributed parameters, space vehicles, spinning bodies, Meirovitch (L.), Van Landingham (H.F.), (et al.), *198*
- beams, control, convection, distributed parameters, observability, phase locked loops, Balas (M.J.), *203*
- buildings (tall), structural design, wind loads, Chang (J.C.H.), Soong (T.T.), *222*
- beams (cantilever), control, vibration, vibration (flow induced), Horikawa (H.), Dowell (E.H.), (et al.), *228*
- adaptive systems, model reference systems, Eliseev (V.D.), *3208*
- design, feedback, multivariable systems, synthesis, Lutskiv (N.M.), Strepko (I.T.), *4221*
- structural analysis, vibration (forced), Coupry (G.), *6319*
- control, sensitivity, space vehicle structures, structural response, vibration, Hallauer (W.L.) Jr., Barthelemy (J.-F.M.), *7257*
- beams (cantilever), influence matrix, simply supported structures, structural analysis, time domain techniques, Vilnay (O.), *7592*
- artificial satellites, attitude control, flexible bodies, space vehicle structures, Sellappan (R.), Bainum (P.M.), *8847*
- adaptive systems, flexible bodies, space vehicle structures, Johnson (C.R.) Jr., *8849*
- control, distributed parameters, hyperbolic equations, optimal control, self-adjoint systems, Meirovitch (L.), Baruh (H.), *9170*
- optimal control, oscillations, structural elements, structural response, structural stability, Masri (S.F.), Bekey (G.A.), (et al.), *9171*
- damping, distributed parameters, numerical methods, Meirovitch (L.), Baruh (H.), *11061*
- optimal control, regulator problem, Gibson (J.S.), *11071*

model reduction, minimax techniques, synthesis, Zadorozhnyi (V.F.), Nurminskii (E.A.), (et al.), *107*
- dynamic analysis, redundancy, time invariant systems, Britov (G.S.), Mironovskiy (L.A.), *2087*
- algorithms, multivariable systems, process control, Mishra (R.N.), Wilson (D.A.), *2145*
- algorithms, estimation, identification, Semesenko (M.P.), Ramazanov (S.K.), *2148*
- algorithms, mathematical models, process control, Minsker (I.N.), *2175*
- algorithms, continued fraction method, linear systems, state space techniques, Khatwani (K.J.), Tiwari (R.K.), (et al.), *3155*
- algorithms, large scale systems, modal analysis, Kabamba (P.T.), *4210*
- algorithms, observers, Polotskii (V.N.), *4213*
- algorithms, controllability, linear systems, observability, principal component analysis, Moore (B.C.), *4217*
- frequency domain techniques, mathematical models, transfer functions, Shieh (L.S.), Datta-Barua (M.), (et al.), *4222*
- aggregation, control, large scale systems, linear systems, Gaitsgori (V.G.), Pervozvanskii (A.A.), *4227*
- algorithms, large scale systems, Moissenko (G.E.), *4279*
- optimization, transfer functions, Luus (R.), *4993*
- design, process control, sampled data systems, Atluri (R.), Kao (Y.K.), *5044*
- eigenvalues, mathematical models, spectral analysis, Allemong (J.J.), Kokotovic (P.V.), *8157*
- control, decoupling, multivariable systems, Shieh (L.-S.), Wei (Y.-J.P.), (et al.), *9158*
- inertial guidance, kalman filters, navigation, Bar-Itzhack (I.Y.), *10083*
- optimal control, suboptimal control, time optimal systems, Fuller (A.T.), *10088*
- failure, linear systems, Skelton (R.E.), *11053*
- approximation theory, large scale systems, Litz (L.), *11077*

model reference systems, feedforward control, modeling, Broussard (J.R.), O'Brien (M.J.), *2081*
- adaptive systems, discrete systems, stability, Narendra (K.S.), Lin (Y.-H.), *2134*
- adaptive systems, synthesis, Ichikawa (K.), *2135*
- adaptive systems, lyapunov's functions, optimal control, stability theory, Yadykin (I.B.), *3206*
- adaptive systems, modal control, Eliseev (V.D.), *3208*
- adaptive systems, algorithms, estimation, identification, Van De Ven (H.H.), Groenendaal (A.W.M.), *4255*
- control, design, gas turbines, lyapunov's functions, Monopoli (R.V.), *7256*
- adaptive systems, stability theory, Landau (I.D.), *11094*
- adaptive systems, control, stability theory, Johnstone (R.M.), Shah (S.L.), (et al.), *11096*

modeling, mathematical models, pattern recognition, relativity, Jumarie (G.), *104*
- design, digital control, modulated systems, Lim (Yu.A.), *137*
- algorithms, identification, process control, Stone (R.), Ivakhnenko (A.G.), (et al.), *149*
- dissipation, pore pressure, soils, Verruijt (A.), *411*
- clay, strength, Mayne (P.W.), *413*
- clay, plane strain, saturation, strength, Mitachi (T.), Kitago (S.), *414*
- clay, micromechanics, Scott (R.F.), Craig (M.J.K.), *416*
- railroads, soil mechanics, Chang (C.S.), Adegoke (C.W.), (et al.), *422*
- frames, reinforced concrete, statically indeterminate structures, Ford (J.S.), Chang (D.C.), (et al.), *509*
- reinforced concrete, shear transfer, Buyukozturk (O.), Connor (J.J.), (et al.), *534*
- bottom irregularities, channel flow, dimensional analysis, intakes, Venkataraman (P.), *555*
- fluid mechanics, transient effects, turbomachinery, Singh (R.), *698*
- fluid mechanics, transient effects, turbomachinery, Singh (R.), *699*
- bubble dynamics, cavitation flow, damage, leading edge, propellers (marine), Stinebring (D.R.), Holl (J.W.), (et al.), *708*
- granular media, mining, subsidence, Gustkiewicz (J.), Rogowska (J.), *1320*
- frost, heaving, soils, Gilpin (R.R.), *1322*
- nonhomogeneous soils, statistical theory, Hewitt (J.S.), Dexter (A.R.), *1323*
- avalanches, landslides, snow, Pariseau (W.G.), *1330*
- avalanches, landslides, snow, Danilova (E.M.), Eglit (M.E.), *1331*
- crossflow, fans, propulsion, Harloff (G.J.), Wilson (D.R.), *1634*
- condensation, mixing, three dimensional flow, visualization, Mostofizadeh (C.), Kriegel (E.), (et al.), *1642*
- boundary layer (atmospheric), injection, velocity measurement, wind tunnels, Sluman (T.J.), Van Maanen (H.R.E.), (et al.), *1648*
- feedforward control, model reference systems, Broussard (J.R.), O'Brien (M.J.), *2081*
- plasticity, soils, Mroz (Z.), *2381*
- algorithms, networks, water, Rahal (C.M.), Sterling (M.J.H.), (et al.), *2596*
- free boundary, laminar flow, n body problems, nonlinear theory, turbulent flow, Greenspan (D.), *2720*
- hydrodynamics, propellants, pumps, rockets, Kalnin (V.M.), Sherstiannikov (V.A.), *2872*
- dynamics, nuclear reactors, transient effects, KhatibRahbar (M.), Cady (K.B.), *2873*
- convection, earth, mantle, Dexiang (G.), Yinting (L.), (et al.), *3007*
- computing techniques, finite difference methods, finite element techniques, mesh generation, Thacker (W.C.), *3122*
- concrete, experimental mechanics, shells (hyperbolic paraboloid), Sambanthan (T.G.), Aravindan (P.K.), (et al.), *3309*
- bridges, structural analysis, Dean (D.L.), Ramsay (R.T.), *3543*
- plumes, simulation, wind tunnels, Korst (H.H.), White (R.A.), (et al.), *3681*
- earthquake engineering, Anagnostopoulos (S.A.), *4037*
- climatology, Voloshchuk (V.M.), *4075*
- climatology, Vinnikov (K.Ya.), Groisman (P.Ya.), *4076*

- biomechanics, kidneys, viscous flow, Radhakrishnamacharya (G.), Chandra (P.), (et al.), *4119*
- biaxial loading, cavities, compression, creep, tension, torsion, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- boundary layer, reynolds number (high), turbomachinery, wind tunnels, Blair (M.F.), Bailey (D.A.), (et al.), *4688*
- combustion, combustors, numerical methods, Mcdonald (H.), *4736*
- flutter, panels, perturbation methods, Sinay (L.R.), Reiss (E.L.), *4753*
- elasticity, ocean bed, viscoelasticity, Lambeck (K.), Nakiboglu (S.M.), *4844*
- tsunamis generation, Ward (S.N.), *4850*
- earthquakes, faults, generation, Bykovtsev (A.S.), Chernov (G.P.), *4851*
- contraction, heart, muscles, Shoucri (R.M.), *4909*
- bifurcation, blood flow, pulsatile flow, Stettler (J.C.), Niederer (P.), (et al.), *4913*
- bifurcation, blood flow, experimen tal results, pulsatile flow, Stettler (J.C.), Niederer (P.), (et al.), *4914*
- probabilistic design, reliability, structural analysis, Frangopol (D.), *5350*
- diesel engines, noise, Crocker (M.J.), Hamilton (J.F.), *5651*
- cruise missile, missiles, navigation, simulation, Schmidt (G.T.), Setterlund (R.H.), *5711*
- sound propagation, underwater acoustics, Etter (P.C.), *5723*
- ocean bed, underwater acoustics, Hamilton (E.L.), *5748*
- tsunamis generation, Ward (S.N.), *5897*
- watersheds, Mein (R.G.), Brown (B.M.), *5913*
- freezing, phase changes, soils, Hromadka (T.V.) II, Guymon (G.L.), *6388*
- blast effects, experimental results, fracture mechanics, oil shale, Grady (D.E.), Kipp (M.E.), (et al.), *6399*
- design (optimum), structural optimization, Carmichael (D.G.), *6502*
- design (optimum), railroad cars, railroads, vehicles, Haftka (R.T.), Prasad (B.), *6544*
- nuclear reactors, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *6548, book*
- boiling, condensation, liquid gas mixture, similarity methods, Kutateladze (S.S.), *6758*
- flame propagation, hot wire, spark ignition engines, Arques (P.), *6849*
- control, space vehicles, thrusters, Garg (S.), *6852*
- foundations, seismic loading, soil structure interaction, Fedock (J.J.), Schreyer (H.L.), *7033*
- algorithms, identification, linear systems, multivariable systems, pseudoinverse, static model, Mechetnyy (V.S.), *7235*
- design, digital control, mathematical models, synthesis, Neugebauer (G.), *7254*
- flow, prediction, valves, Collier (S.L.), Hoerner (C.C.), *7543*
- continuum mechanics, explosions, fracture, oil shale, rock mechanics, Grady (D.E.), Kipp (M.E.), *7551*
- mechanics, reactor structures, structural analysis, Jaeger (T.A.) eds., Boley (B.A.), *7618, book*
- bolted joints, bolts, connections, finite element methods, prediction, Krishnamurthy (N.), *7637*
- coastal engineering, computer programming, three dimensional flow, wind generation, Koutitas (C.), O'Connor (B.), *7662*
- bifurcation, elastic bodies, flutter, limit cycles, oscillators, Thompson (J.M.T.), Lunn (T.S.), *7910*
- earth, mantle, stability, thermomechanical model, Gavrilov (S.V.), Zharkov (V.N.), *8006*
- computer aided manufacturing, mathematical models, process control, robotics, Devries (W.R.) ed., *8173, book*
- corners, pressure change, vortices, Conlisk (A.T.), Rockwell (D.), *8536*
- helical flow, inviscid fluid, turbulence, Yamamoto (K.), Hosokawa (I.), *8610*
- aerodynamic performance, airplanes, dynamic loads, flexible bodies, structural response, Perry (B.) III, Kroll (R.I.), (et al.), *8647*
- blades, incompressible flow, three dimensional flow, turbomachinery, Buisine (D.), *8659*
- cavitation, turbomachinery, vortices, Billet (M.L.), *8660*
- combustion, diesel engines, evaporation, injection systems, Baumer (K.), Hartje (J.), (et al.), *8804*
- diesel engines, heat sources, pistons, thermal diffusion, Kao (T.K.), Wallace (F.J.), *8805*
- non-geometric effects, seismic waves, Hron (F.), Mikhailenko (B.G.), *8952*
- seismic loading, soil structure interaction, Balendra (T.), Tan (Y.-P.), (et al.), *8964*
- nuclear reactors, seismic loading, Benda (B.J.), Johnson (J.J.), (et al.), *8965*
- damping, seismic loading, structures, Singh (M.P.), *8966*
- biomechanics, heart, muscles, Panerai (R.B.), *9054*
- rocks, strain rate, strength, Nishimatsu (Y.), Yamaguchi (T.), (et al.), *9367*
- electron beams, pinch effect, relativity, vlasov equation, Zharinov (A.V.), Chikhachev (A.S.), *9802*
- attenuation, metals, shock waves (normal), Duan (Z.-P.), *10231*
- airplane performance, derivatives, dynamic analysis, dynamic testing, Stalford (H.L.), *10510*
- dynamic response, gust loads, magnetic levitation, suspension systems, vehicles, wind loads, Garg (D.P.), Barrows (T.M.), *10768*
- dislocations, faults, initiation, seismic waves, Cornea (I.), Misicu (M.), (et al.), *10845*
- earthquakes, fracture mechanics, time dependence, Das (S.), Scholz (C.H.), *10848*
- algorithms, estimation, identification, nonlinear systems, nonlinear theory, stochastic systems, volterra series, Fakhouri (S.Y.), *11080*
- discharges, steam, valves, Sonin (A.A.), *11366*
- dam breaks, dams, wave interactions, Chen (C.-L), Armbruster (J.T.), *11613*

models, breakwater, submerged bodies, wave trains, Abdul Khader (M.H.), Rai (S.P.), *677*

- absorption, chemical reactions, interface phenomena, packed beds, Patwardhan (V.S.), *832*
- harbors, hydraulics, sedimentation, Letter (J.V.) Jr., Mcanally (W.H.) Jr., *1500*
- combustion (turbulent), flames (laminar), Libby (P.A.), Bray (K.N.C.), (et al.), *1740*
- flames (diffusion), flames (turbulent), Kolbe (W.), Kollmann (W.), *1746*
- flames (turbulent), premixed fuel air, Libby (P.A.), *1747*
- finite difference methods, flame holders, recirculation, Majumdar (S.), Bhaduri (D.), *1748*
- combustion, numerical analysis, two component flow, Buldakov (V.F.), Romanov (O.Ya.), (et al.), *1752*
- catalyzed ignition, combustors, transient effects, Tien (J.S.), *1754*
- approximations, arcs (magnetically constrained), forced systems, heat transfer, Bublievskii (A.F.), *1776*
- critical flow, two phase flow, Isbin (H.S.), *1854*
- leaks, two phase flow, Pinet (B.), *1869*
- propellers (marine), ships, wakes, Zborowski (A.), Nginh (N.M.), *1921*
- lumped systems, vibration (flow induced), Naudascher (E.), Rockwell (D.), *2717*
- boilers, flow reversal, furnaces, visualization, Kaji (M.), Sallam (T.M.), (et al.), *2764*
- nonlinear analysis, solidification, Wollkind (D.J.), Notestine (R.D.), *2846*
- concentration, convection (free), solidification, Zavgorodnii (P.F.), Kolesnik (V.I.), (et al.), *2847*
- dispersions, particle dynamics, transport phenomena, Grossman (A.G.), *2850*
- dispersions, heat transfer, Grishin (A.M.), Loskutov (G.S.), (et al.), *2853*
- blades, cavitation inception, propellers (marine), Kuiper (G.), *3749, book*
- particle fluid flow, stochastics, suspensions, Bechteler (W.), *3856*
- flames (turbulent), premixed fuel air, Ballal (D.R.), *3862*.
- particles, pyrolysis, reaction rates, Villermaux (J.), Antoine (B.), *3872*
- heat transfer, particles, pyrolysis, reaction rates, Villermaux (J.), Verzaro (F.), (et al.), *3873*
- focusing, ionized gases, laser plasma interaction, radiation pressure, Del Pizzo (V.), Luther-Davies (B.), *3901*
- aeroelasticity, blunt bodies, nonlinear systems, oscillators, Dowell (E.H.), *3908*
- freezing, melting, transient, Cheung (F.B.), *4727*
- convection (free), ice, melting, Wilson (N.W.), Lee (J.J.), *4728*
- chemical kinetics, flames, two dimensional flow, Bracco (F.V.), O'Rourke (P.J.), *4737*
- plumes, shape factors, Henderson-Sellers (B.), *5456*
- aerodynamic interference, automobiles, blockage, flexible walls, wind tunnels, Stafford (L.G.), *5513*
- flames, furnaces, heat transfer, radiant interchange, Mastryukov (B.S.), *5639*
- discharges, magneto fluid dynamics, metallurgy, vortex flow, Boyarevich (V.V.), *5678*
- anisotropic media, magneto fluid dynamics, perturbation theory, turbulence, Montgomery (D.), Turner (L.), *5679*
- rocks, strength, time dependence, Kaiser (P.K.), Morgenstern (N.R.), *6402*
- boundary value problems, composite structures, diffusion, mass transfer, moisture, Miller (R.K.), *6827*
- flames, radiation, soot, Gouesbet (G.), *6842*
- linearization, magneto fluid dynamics, measurements (dynamic), navier stokes equation, Bondarenko (N.F.), Gak (M.Z.), (et al.), *6856*
- astrophysics, convection, magneto plasma dynamics, stability theory, Sankhla (V.D.), Bhatia (P.K.), *6957*
- drag, ship resistance, viscous effects, wakes, Townsin (R.L.), Wynne (J.B.), *7073*
- deformation, porous media, rocks, saturation, Abey (A.E.), *7450*
- scale effects, siphons, surface tension, weirs, Goldring (B.T.), *7542*
- froude number, hydraulics, particle size, sewerage, Halliwell (A.R.), Saul (A.J.), *7544*
- circulation, hydrology, inlet flow, lakes, outflow, Gatto (M.), Rinaldi (S.), *7660*
- energy dissipation, hydraulic structures, inlet flow, vortex flow, Hecker (G.E.), *7664*
- capsizing, resonance, rolling motion, safety, ship motion, Kuo (C.), Welaya (Y.), *8043*
- cavitation, noise measurements, propellers (marine), vortices, Latorre (R.), *8518*
- aerocrane, cranes, flight tests, helicopters, lift, lifting bodies, Curtiss (H.C.) Jr., Putman (W.F.), *8650*
- balance system, flight, flying platforms, gliders, strain gages, wing body combinations, Ramachandra (S.M.), *8651*
- aerodynamic interference, design, inlet flow, wind, wind tunnels, Eckert (W.T.), Mort (K.W.), *8669*
- coalescence, condensation (dropwise), kinetics, Srivastava (R.C.), Passarelli (R.E.), *8773*
- coal, combustion, dust, pyrolysis, Kansa (E.J.), Perlee (H.E.), *8800*
- hall effect, magneto plasma dynamics, plates (perforated), rotating fluids, Shivamoggi (B.K.), *8817*

- heat transfer, liquid metals, magneto fluid dynamics, welding, Atthey (D.R.), *8818*
- earth, energy conversion, geophysics, magneto fluid dynamics, Olson (P.), *8821*
- dispersion relation, oscillations, rayleigh taylor instability, stabilization, Chakraborty (B.B.), *8825*
- elastic behavior, joints, rocks, Gerrard (C.M.), *9366*
- bed thickness, fracture, joint spacing, joints, rocks, Ladeira (F.L.), Price (N.J.), *9371*
- flames, Peters (N.), *9756*
- combustion, diffusion, metals, Kudryavtsev (V.M.), Sukhov (A.V.), (et al.), *9774*
- combustion, solid fuels, Strunin (V.A.), Manelis (G.B.), *9775*
- compressional waves, earthquakes, initiation, Kopnichev (Yu.F.), *9912*
- earthquakes, initiation, seismic waves, Okada (Y.), *9913*
- creep, lead, ratchetting, stress concentration, thermal shock, Hyde (T.H.), Fessler (H.), (et al.), *10333*
- diffusion, evaporation, kinetics, Petersen (I.F.), *10648*
- dispersion, groundwater, mass transportation, stochastics, Smith (L.), Schwartz (F.W.), *10671*
- dispersion, fickian model, rivers, Nordin (C.F.) Jr., Troutman (B.M.), *10673*
- arrhenius reaction, hot spots, thermal explosions, Tam (K.K.), Kiang (M.T.), *10697*
- flame propagation, flames (turbulent), spark ignition engines, Tabaczynski (R.J.), Trinker (F.H.), (et al.), *10700*
- combustion (unsteady), powders, Zarko (V.E.), Kiskin (A.B.), *10706*
- fire, pyrolysis, slabs, wood, Holve (D.J.), Kanury (A.M.), *10717*
- atmosphere, clouds, dispersion, Eidsvik (K.J.), *11522*
- combustion, solid propellants, Beckstead (M.W.), Mccarty (K.P.), *11786*
- burning rate, chemical kinetics, deflagration, solid propellants, Ben-Reuven (M.), Caveny (L.H.), *11790*
- bubble dynamics, gravity, magneto fluid dynamics, mixtures, Golosov (V.V.), Naletova (V.A.), (et al.), *11819*
- generators, magnetic field, rotors, spherical bodies, Barash (Yu.S.), Kropachev (E.P.), *11830*
- coatings, friction (sliding), plastic flow, Heilmann (P.), Rigney (D.A.), *12089*
- fracture mechanics, friction (solid solid), stress intensity factor, wear, Rosenfield (A.R.), *12090*
- creep, dislocations, friction (internal), stress relaxation, Mclean (M.), *12093*

modes, electron beams, numerical methods, plasma, turbulence (mechanisms), Kirk (J.), Weiland (J.), *865*

- ocean, ocean bed, sound propagation, underwater acoustics, Thompson (I.J.), *887*
- ocean, sound propagation, underwater acoustics, Tindle (C.T.), *894*
- gyroscopes (rotary), vibration (random), Kuzman (V.M.), *1069*
- acoustics, ducts, nonhomogeneous media, waveguides, Felsen (L.B.), *1804*
- computing techniques, finite element techniques, integration, Flanagan (D.P.), Belytschko (T.), *2069*
- optimization, pontryagin's extremal, sliding, Kaganovich (S.L.), *2129*
- eigenvalue problems, helical flow, magneto fluid dynamics, stability theory, Lucas (R.J.), *2877*
- nonlinear theory, plasma (toroidal), stability theory, tokamak, Biskamp (D.), *3896*
- diffusers, plane waves, scattering, wave energy, Strube (H.W.), *3949*
- modal analysis, offshore structures, Natke (H.G.), Schulze (H.), *4545*
- dispersion relation, nonlinear characteristics, plasma, waves, Franklin (R.N.), Edgley (P.D.), (et al.), *4750*
- acoustic waves, reflection, resonance, transmission, viscoelastic materials, Madigosky (W.), Fiorito (R.), *4787*
- diffraction, sound propagation, underwater acoustics, Leung (R.), Deferrari (H.A.), *5732*
- ducts, pipes, sound propagation, vibration, Kerschen (E.J.), Johnston (J.P.), *5773*
- acoustic waves, acoustics (architectural), cavities, panels, transmission, Guy (R.W.), *5774*
- ducts, noise, sound propagation, Kerschen (E.J.), Johnston (J.P.), *5777*
- cylindrical bodies, equilibrium, magneto fluid dynamics, pressure gradient, Lortz (D.), Nuhrenberg (J.), *6860*
- couplings, scattering, shallow water, underwater acoustics, Mcdaniel (S.T.), *6902*
- ocean bed, underwater acoustics, Macpherson (M.K.), Frisk (G.V.), *6906*
- sound propagation, underwater acoustics, Gordon (D.F.), *6914*
- gases, mixtures, sound propagation, Huck (R.J.), Johnson (E.A.), *6920*
- noise, shells (cylindrical), Dowell (E.H.), *6925*
- bifurcation, ducts, reflection, sound propagation, Nilsson (B.), Brander (O.), *6927*
- ducts (curved), sound propagation, Cabelli (A.), Shepherd (I.C.), *7935*
- earth, magneto fluid dynamics, rotating bodies, spherical bodies, Gubbins (D.), *8816*
- dynamic behavior, flexible bodies, space vehicle structures, vibration, Hablani (H.B.), *9309*
- fluid-structure interaction, shells (fluid-filled), vibration, Parkus (H.), *9627*
- helical flow, magneto fluid dynamics, streamlines, two dimensional flow, Rakhimov (A.A.), *9788*
- compressibility, plasma, rayleigh taylor instability, theory, Shivamoggi (B.K.), *9801*
- eigenvalues, ocean, sound propagation, Williams (A.O) Jr., *10782*
- acoustic waves, reflection, underwater acoustics, Weston (D.E.), Tindle (C.T.), *11913*
- ducts (curved), reflection, sound propagation, Shepherd (I.C.), Cabelli (A.), *11934*
- junctions, plates, sound propagation, vibration, Craven (P.G.), Gibbs (B.M.), *11947*

Modest (M.F.), absorption, anisotropic media, radiant interchange, scattering, Azad (F.H.), *2824*

Modi (V.J.), see Lips (K.W.), *1067*

- see Lips (K.W.), *6884*

Modler (K.-H.), see Geise (G.), *9481*

modulated systems, design, digital control, modeling, Lim (Yu.A.), *137*

- chaotic modulation, oscillators, stochastics, Loginov (V.M.), Shapiro (V.E.), *4955*
- asymptotic behavior, bubble dynamics, chemically reactive flow, liquid gas mixture, waves, Bagdoev (A.G.), Oganyan (G.G.), *5488*
- displacement, holography, lasers, optical techniques, waves, Gilbert (J.A.), Herrick (J.W.), *8424*

Moek (G.), digital simulation, estimation, kalman filters, martingales, *10034*

Moen (I.O.), flame propagation, flow obstructions, methane, turbulence, Donato (M.), (et al.), *1745*

Moench (A.F.), finite difference methods, geothermal reservoirs, two phase flow, *8930*

Moes (H.), bearings (journal), impedance methods, mobility, Bosma (R.), *5994*

Moffat (P.H.), see Emerry (R.J.), *6755*

Moffat (R.J.), see Coleman (H.W.), *2629*

Moffatt (H.K.), diffusion, spectra, turbulence, *4643*

Moffatt (J.A.), see Koss (L.L.), *9851*

Moffitt (T.P.), see Whitney (W.J.), *3742*

Mofjeld (H.O.), coasts, eddy viscosity, ekman layer, kelvin waves, oceanography, *8978*

Moghisi (M.), drag coefficient, impact, spherical bodies, surfaces, water, Squire (P.T.), *9629*

Mogilev (V.A.), detonation, explosive loading, tubes, Ivanov (A.G.), (et al.), *8346*

Mohamed (F.A.), constitutive equations, creep, viscoelasticity, Ginter (T.J.), *7274*

Mohammadi (S.S.), conduction (heat), hot wire, thermal measurements, Graboski (M.S.), (et al.), *3808*

Mohammadi Tochai (M.T.), see Bakhtar (F.), *9781*

Mohan (R.), acoustic emission, damage, laminates, Prathap (G.), *6356*

Mohan Kumar (M.S.), see Sridharan (K.), *8506*

Mohapatra (P.), channel flow, convection, porous walls, viscoelastic fluids, Devi (P.), *3806*

Mohapatra (R.B.), computing techniques, crack opening displacement, infinite medium, penny shaped crack, stress intensity factor, Parhi (H.), *9415*

Mohapatra (U.), see Mishra (S.P.), *8723*

Mohiuddin (M.), see Soundalgekar (V.M.), *11505*

Mohler (R.R.), see Hsu (C.S.), *3153*

Mohr (G.), curved elements, finite element techniques, shells, shells (shallow), slabs, *7207*

Mohr (G.A.), restraint systems, stiffness matrix, structures, *3139*

- convergence, finite element techniques, flexible bodies, geometric nonlinearities, large displacement, Milner (H.R.), *3142*
- beams, finite difference methods, membranes, mesh generation, plates (folded), *6105*
- finite element techniques, penalty function, shells, *7348*
- finite element techniques, shells (thin), stiffness matrix, *7349*

Mohring (W.), ducts, scattering, sound propagation, *8864*

Mohsin (M.E.), approximation methods, beams, vibration (free), Sadek (E.A.), *4427*

moire methods, holography, lasers, optical techniques, stress analysis, Chiang (F.P.), *1393*

- curved surfaces, deflections, holography, Gilbert (J.A.), Herrick (J.W.), *1394*
- computer graphics, human body, surface profiles, Duncan (J.P.), Dean (D.P.), (et al.), *1958*
- in-plane displacement, measurements, photoelasticity, propagation, waves, Basehore (M.L.), Post (D.), *2472*
- automation, deformation, strain analysis, Sokolov (B.B.), *2473*
- grids, optical techniques, Murakami (K.), Murakami (Y.), (et al.), *2474*
- composite materials, optical techniques, strain analysis, Chiang (F.P.), Parker (B.), (et al.), *2475*
- density, optical techniques, supersonic flow, visualization, Stricker (J.), Kafri (O.), *5512*
- deflections, propellers, propellers (marine), Sikora (J.P.), *8423*
- deformation, holography, stress analysis, Rastogi (P.K.), Spajer (M.), (et al.), *9419*
- deformation, displacement, holography, vibration, Abramson (N.), Bjelkhagen (H.), *9420*

Moiseev (N.N.), algorithms, approximation methods, asymptotic methods, optimal control, Chernousko (F.L.), *11066*

Moiseev (S.S.), compressible flow, spectra, turbulence, vorticity, Tur (A.V.), (et al.), *11544*

Moissenko (G.E.), algorithms, large scale systems, model reduction, *4279*

moisture, heat transfer, mass transfer, soils, thermal instability, transient, Hartley (J.G.), Black (W.Z.), *830*

- porous media, transport phenomena, Faghri (M.), Eckert (E.R.G.), *951*
- flammability, textiles, Zeronian (S.H.), Ellison (M.S.), (et al.), *2867*
- atmosphere, mass transfer, meteorology (physical), ocean, Timofeev (N.A.), *3025*
- crack propagation, fractography, macroscopic characterization, polymers, Bretz (P.E.), Hertzberg (R.W.), (et al.), *3434*
- adhesives, airplane structures, bonded joints, composite materials, Delasi (R.J.), Schulte (R.L.), *3587*
- clouds, forecasting, meteorology (physical), Sholokhova (N.I.), *4077*
- heat transfer, mass transfer, porous media, Eckert (E.R.G.), Faghri (M.), *5623*
- infiltration, porous media, Dinulescu (H.A.), Eckert (E.R.G.), *5854*
- atmosphere, lasers, lidar, meteorology (physical), raman scattering, scattering, Zakharov (V.M.), Kalachinskii (S.F.), (et al.), *5959*
- boundary value problems, composite structures, diffusion, mass transfer, models, Miller (R.K.), *6827*
- diffusion coefficient, galerkin method, soils, Hromadka (T.V.) II, Guymon (G.L.), *8779*
- absorption, diffusion, galerkin method, soils, Tolikas (P.K.), Tzimopoulos (C.D.), (et al.), *8780*

Mojola (O.O.), corners, turbomachinery, turbulent flow, velocity measurement, *607*

- boundary layer, corners, secondary flow, viscous flow, *9567*

Mojtabi (A.), annuli, coaxial flow, convection, cylindrical bodies, helicoidal flow, laminar flow, Caltagirone (J.-P.), *9696*

Mokhanti (U.Ch.), see Kivganov (A.F.), *1904*

Mokhov (I.I.), see Golitsyn (G.S.), *4056*

Mokhtar (M.O.A.), bearings (journal), design, lubrication (hydrodynamic), optimization, *10377*

Molag (M.), drops, immiscible fluids, two phase flow, Joosten (G.E.H.), (et al.), *944*

Molchanova (L.A.), see Kozlov (V.F.), *1895*

Moldavskii (M.A.), see Merkurev (V.V.), *4281*

Moldavskiy (M.A.), mathematical programming, optimization, vector methods, *6081*

Mole (L.A.), arrays, underwater acoustics, *11999*

molecular beams, rarefied gases, tube bundles, Barashkin (S.T.), Neudachin (I.G.), (et al.), *591*

- jets, nozzles, supersonic flow, Abraham (O.), Binn (J.H.), (et al.), *623*

molecular diffusion, brownian motion, membranes (permeable), Ramshaw (J.D.), *3643*

- laminar flow, oscillatory flow, pipe flow, Purtell (L.P.), *11494*
- mass transfer, pipe flow, turbulence, Von Alfthan (C.), Rantapuska (S.), *11558*

molecular theory, crystals, elasticity (nonlinear), phase changes, Parry (G.P.), *2*

- radiation, spectroscopy, Bernstein (L.S.), *1653*
- radiating flow, spectral analysis, Khodyko (Yu.V.), Vitkin (E.I.), (et al.), *5587*
- fluids, high pressure, low temperature, transport properties, Chung (T.H.), Lee (L.L.), (et al.), *7821*
- corresponding states principle, critical region, hydrocarbons, thermophysical properties, Mansoori (G.A.), Patel (V.K.), (et al.), *8676*
- boltzmann equation, gases, mixtures, Bobylev (A.V.), *10550*
- equations of state, surface tension, water, Guerrero (M.I.), Davis (H.T.), *10553*
- creep, equations of state, polymers, thermophysical properties, Ainbinder (S.B.), Tyunina (E.L.), (et al.), *10556*
- condensation, evaporation, excitation, Abramov (A.A.), Makashev (N.K.), *11442*

Molenkamp (F.), see Smith (I.M.), *3558*

Molinari (A.), see Brun (L.), *924*

Molines (J.M.), see Helal (M.A.), *5471*

Molki (M.), see Sparrow (E.M.), *6689*

Mollenbruck (W.), choked flow, compressible flow, flow measurement, nozzles, saint venants equation, *7814*

Mollendorf (J.C.), buoyancy, density, plumes, water, Johnson (R.S.), (et al.), *9599*

Mollmann (H.), deformation (finite), nonlinear theory, shells (thin), solid mechanics, *6216, book*

Mollo-Christensen (E.), see Cavaleri (L.), *1607*

Molnar (K.), see Szentgyorgyi (S.), *801*

- capillary flow, diffusion, drying, evaporation, porous media, *3845*

Molodenskiy (M.S.), earth, elastic behavior, oscillations, rotating bodies, *4035*

Molodets (A.M.), see Dremin (A.N.), *10246*

Molorodov (Yu.I.), see Scobelev (B.Yu.), *3664*

Molotova (L.V.), see Vasilyev (Yu.I.), *8955*

Molski (K.), see Glinka (G.), *1354*

- elastoplasticity, notch sensitivity, stress concentration, Glinka (G.), *5300*

Molyneux (J.E.), contamination, diffusion, rivers, stochastic processes, Witten (A.J.), *10674*

moment coefficient, rotating bodies, stokes flow, toroids, viscous flow, Bhattacharyya (T.K.), *5406*

- channels, hinged bodies, pressure, wavemakers, Hudspeth (R.T.), Leonard (J.W.), (et al.), *9511*
- airfoil theory, flow reversal, heart, optimization, valves, Tuck (E.O.), *9513*
- asymptotic methods, conical bodies, reservoirs, stresses (normal), Layrangues (P.), *10395*

moment distribution, dynamic analysis, flow, poisson flow, Penev (P.B.), Romanov (V.G.), *148*

- bending (elastic), ship design, wave interactions, Loukakis (T.A.), Grivas (S.B.), *934*

Momoi (T.), rayleigh waves, scattering, surface flaws, *6350*

Monaco (R.), see Bellomo (N.), *2556*

- drops, heat transfer, liquid vapor mixture, mass transfer, mathematical models, *5610*
- heat transfer, rarefied flow, rarefied gases, Orsi (A.P.), *6635*

Monasa (F.), see Lewis (G.), *10141*

Mondal (S.K.), ocean waves, oceanography, pressure distribution, Chaudhuri (K.S.), *10873*

Monde (M.), boiling, critical heat flux, dispersed flow, drops, impact jets, impingement cooling, *3793*

- see Kusuda (H.), *12047*

monitoring, acoustic emission, crack propagation, Chelyshev (N.A.), Chervov (G.A.), (et al.), *2464*

- computing techniques, error, measurements, Zavarin (A.N.), *2484*
- air pollution, water pollution, Nazarov (I.M.), Fridman (Sh.D.), *4095*
- equipment, seismic waves, Kondratev (I.K.), Christov (P.I.), *5873*
- ship performance, Bradley (M.S.), *5971*
- acoustic emission, experimental methods, rocks, Koerner (R.M.), Mccabe (W.M.), (et al.), *10265*

Monkewitz (M.A.), see Monkewitz (P.A.), *2686*

Monkewitz (P.A.), asymptotic methods, hydrodynamic stability, orr sommerfeld equation, shear layer, stability theory, Monkewitz (M.A.), *2686*

Monnerie (B.), blades, helicopters, three dimensional flow, unsteady flow, wind tunnels, wings, Philippe (J.-J.), *10514*

monopoles, differential equations (partial), nonlinear systems, soliton theory, volterra equations, Leznov (A.N.), Savelev (M.V.), (et al.), *6063*

Monopoli (R.V.), control, design, gas turbines, lyapunov's functions, model reference systems, *7256*

Monson (D.J.), friction (skin), interferometry, lasers, *1644*

Montagnani (M.), see Albertini (C.), *2488*

Montague (P.), see Palaninathan (R.), *320*

- collapse, cylindrical bodies, holes, stress concentration, Horne (M.R.), *10168*

Montagut (J.L.), see Felder (E.), *7066*

Montanelli (P.), see Pareschi (A.), *1565*

monte carlo analysis, design (optimum), trusses, Jackiewicz (M.), *506*

- convection, heat transfer (combined modes), plates (parallel), radiation, Kobiyama (M.), Taniguchi (H.), (et al.), *783*
- radiant interchange, radiation, Edwards (D.K.), *3825, book*
- optimal control, stochastic control, Gorodetskiy (V.I.), Yusupov (R.M.), *4316*
- games, integration, random search, Goldfain (I.I.), *5011*
- conduction (heat), mathematical methods, mathematical models, transient effects, Vorobeva (L.S.), Zheviakov (G.N.), *6803*
- biomathematics, muscles, Nishiyama (K.), Shimizu (H.), *7107*
- radiography, scattering, x ray techniques, Smith (R.L.), *7554*
- acoustic loading, airplane structures, fatigue, galerkin method, panels, Maekawa (S.), *8434*
- cellular motions, rayleigh benard instability, thermal excitation, transient effects, transition flow, Jhaveri (B.), Homsy (G.M.), *8709*
- pipe flow, simulation, turbulent flow, two phase flow, Yoshida (H.), Masuda (H.), (et al.), *8893*
- liquid vapor interface, properties, Borstnik (B.), Janezic (D.), (et al.), *8903*
- mathematical models, radiant interchange, scattering, Antyufeev (V.S.), *9723*
- chemically reactive flow, real gas effects, turbulence model, turbulent flow, Pope (S.B.), *10479*

Montes (J.S.), see Lafe (O.E.), *9905*

Montfort (J.P.), see Marin (G.), *3591*

Montgomery (D.), anisotropic media, magneto fluid dynamics, models, perturbation theory, turbulence, Turner (L.), *5679*

Montpetit (R.), see Gagnon (M.), *7128*

Moodie (T.B.), see Barclay (D.W.), *1292*

- edge effects, elastic waves, holes, Haddow (J.B.), (et al.), *6330*
- dynamic response, tubes, viscoelastic waves, Haddow (J.B.), (et al.), *6339*
- dispersion, fast fourier transform, pressure change, tubes, waves, Haddow (J.B.), *6913*
- see Tait (R.J.), *8327*
- see Tait (R.J.), *11604*
- see Barclay (D.W.), *11661*

Moody (R.C.), see Wolfe (R.W.), *3493*

- see Marx (C.M.), *3528*

Moog (W.), air conditioning, closed conduit flow, similarity methods, *3789*

Moon (F.C.), see Chian (C.T.), *6945*

Moon (M.), see Armstrong (D.), *5057*

Moon-Uhn Kim, drag, plates, stokes flow, two dimensional flow, viscous flow, Chang-Ho Son, *573*

Moore (B.C.), algorithms, controllability, linear systems, model reduction, observability, principal component analysis, *4217*

Moore (I.D.), infiltration, layered media, soils, surface effect, *12064*
Moore (J.B.), see Weiss (H.), *119*
- see Anderson (B.D.O.), *11089*

Moore (W.I.), see Lin (F.N.), *4571*
mooring, attenuation, breakwater, floating bodies, wave loads, Yamamoto (T.), *526*
- currents, ship motion, stability theory, wind, Sorheim (H.-R.), *3032*
- elastic bodies, floating structures, wave interactions, Yamamoto (T.), Yoshida (A.), (et al.), *4100*
- drift waves, moored vessels, ship dynamics, waves, Flower (J.O.), *7077*
- buoys, cables, submerged bodies, Mariano (J.J.), *8047*
- floating structures, linear theory, nonlinear theory, wave interactions, Natvig (B.J.), Pendered (J.W.), *8049*
- design (optimum), floating bodies, Jones (H.L.), Nelson (J.K.) Jr., *10343*

Morabito (G.), cable stayed bridges, nonlinear analysis, structural analysis, Labini (F.S.), *3546*
Morasso (P.), see Benati (M.), *9084*
Moreadith (F.L.), see Chen (C.), *8968*
Moreau (J.J.), stresses, surface flow, tensor methods, viscous flow, *6619*
Moreau (P.), exhaust gases, flames (turbulent), methane, Borghi (R.), *2968*
- chemical kinetics, combustors, flames (turbulent), statistical mechanics, velocity profiles, *6838*

Moreau (R.), see Alemany (A.), *2893*
Morecki (A.), control, manipulators, mechanics, mechanisms, robotics, Bianchi, (et al.), *209, book*
Morel (T.), base flow, cylindrical bodies, wakes, *1573*
Moreno (C.), see Bermudez (A.), *2030*
Moresco (L.L.), heat transfer, liquid liquid interface, precipitation, solidification, Marschall (E.), *8737*
- contact problems, dispersed flow, heat transfer, liquid liquid interface, spray columns, sprays, Marschall (E.), *9731*

Moretti (G.), aerodynamics, computing techniques, *696*
- see De Neef (T.), *6713*

Moretti (P.M.), design, propellers, wind power, wind turbines, Thresher (R.W.), *6855*
Morfey (C.L.), airplanes, atmosphere, noise, nonlinear waves, sound propagation, Howell (G.P.), *5766*
- see Edwards (A.V.J.), *8598*

Morgan (H.S.), see Jones (R.M.), *4358*
Morgan (K.), casting, conduction (unsteady), heat transfer, thermal stresses, Lewis (R.W.), (et al.), *2402*
- see Thomas (H.R.), *8783*
- compaction, finite element methods, multiphase flow, reservoir engineering, subsidence, Lewis (R.W.), (et al.), *8912*
- see Lewis (R.W.), *9149*

Morgan (M.), see Sinclair (M.), *1629*
Morgan (P.R.), see Schmidt (L.C.), *3550*
Morgenstern (N.R.), see Kaiser (P.K.), *6402*
- see Hungr (O.), *7538*
- see Kaiser (P.K.), *10365*

Mori (A.), bearings (gas lubricated), bearings (journal), dynamic behavior, lubrication (hydrostatic), whirling shafts, Aoyama (K.), (et al.), *8066*
Mori (K.), combined cycles, combustors, gas turbines, power generation, reheat, Kitajima (J.), (et al.), *8806*
- asymptotic methods, boundary layer (three dimensional), parabolic equations, ships, wakes, *9016*

Mori (K.-I.), see Asada (Y.), *4004*
Mori (S.), heat exchangers, heat exchangers (crossflow), laminar flow, plates (parallel), Kataya (M.), (et al.), *3835*
Mori (Y.), see Okazaki (K.), *857*
- heat exchangers, high temperature, radiant interchange, Yamada (Y.), (et al.), *5594*
- discrete systems, eigenvalues, pole placement, riccati equation, Shimemura (E.), *7228*
- see Nakagawa (H.), *10491*
- heat transfer, nonequilibrium flow, real gas effects, stagnation point, Himeno (N.), (et al.), *10605*

Mori (Y.H.), boiling, bubble dynamics, emulsions, nucleation, visualization, Sano (H.), (et al.), *1693*
- cooling, drops, heat transfer, Nagai (K.), (et al.), *6825*

Morihira (M.), see Kawahara (M.), *11609*
Morikawa (T.), see Manabe (K.), *4416*
Morikawa (Y.), particle fluid flow, pipes, pressure drop, sediment transport, slurries, *3607*
Morimoto (H.), see Matsuura (Y.), *8432*
Moritoh (Y.), dynamic response, rails, soil structure interaction, vibration (free), *3376*
Moritz (R.E.), see Saltzman (B.), *9940*
Morjaria (M.), see Mukherjee (S.), *2459*
- creep, deformation (plastic), metals, thermal stresses, thermoelasticity (transient), Mukherjee (S.), *4818*

Morley (H.), see Hughes (J.D.H.), *3282*
Morley (J.G.), crack growth, fatigue, fracture mechanics, metallic composites, Mccoll (I.R.), *2409*
Morman (K.N.) Jr., see Meredith (D.), *514*
Morooka (S.), fluid mechanics, fluidized beds, particle fluid flow, Kawazuishi (K.), (et al.), *5846*
- see Shibayama (S.), *10628*

Morosanu (G.), see Barbu (V.), *2006*
- existence theorems, hyperbolic equations, nonlinear methods, *2012*

Morozov (A.I.), see Anisimkin (V.I.), *5236*
Morozov (A.M.), see Rybin (V.V.), *6424*
Morozov (E.M.), see Markochev (V.M.), *497*
- see Georgiev (M.N.), *2462*
- see Georgiev (M.N.), *5341*
- crack growth, crack initiation, experimental mechanics, fracture mechanics, fracture toughness, j-integral, *7572*

Morozova (N.I.), see Izrailovich (M.Ya.), *3188*
Morris (J.L.), see Gourlay (A.R.), *6090*
Morris (P.J.), hydrodynamic stability, jets, mathematical models, two dimensional flow, *637*
Morris (W.D.), ferrous metals, magneto fluid dynamics, rotating bodies, seals, suspensions, *3888*
- see Woods (J.L.), *4711*

Morris (W.L.), see Buck (O.), *6419*
Morrison (F.A.) Jr., flow reversal, heat transfer, transient effects, transport mechanisms, Griffiths (S.K.), *6766*
- see Stewart (M.B.), *11362*

Morro (A.), continuum mechanics, micromechanisms, thermodynamics, viscoelasticity, *1053*
- see Bampi (F.), *1971*
- clausius-duhem inequality, conduction (heat), shock waves, thermodynamics, viscoelastic fluids, *3722*

Morse (A.), design, internal combustion engines, laser doppler velocimeters, piston driven flow, swirl, Whitelaw (J.H.), (et al.), *706*
Morse (A.P.), engines, internal flow, laser doppler velocimeters, piston driven flow, Whitelaw (J.H.), (et al.), *1758*
Mort (K.W.), see Eckert (W.T.), *8669*
Morton (K.W.), see Barrett (J.W.), *8749*
- convection, diffusion, finite difference methods, parabolic equations, stability (numerical), *9126*

Moruzzi (V.L.), see Teaney (D.T.), *5789*
Moser (K.), buried structures, finite element methods, flexible bodies, pipes, underground, Swoboda (G.), *5260*
Moshenskii (N.L.), dynamic properties, shells (cylindrical), shells (of revolution), shells (stiffened), vibration, *5219*
Mosi (D.R.), see Krishnamoorthy (C.S.), *8451*
Mosin (A.A.), see Grishin (Yu.M.), *11489*
Moskalkov (M.N.), compressible flow, numerical methods, *6633*
Moskvitin (V.V.), composite materials, dynamic stresses, fibers, rupture, Ovchinskii (A.S.), *285*
- composite materials, dynamic analysis, fibers, structural analysis, *7299*

Moss (J.N.), ablation, conservation laws, interplanetary probes, planetary atmospheres, shock layer, Simmonds (A.L.), (et al.), *7777*
Moss (P.J.), large displacement, nailed joints, shells (hyperbolic paraboloid), shells (sandwich), wood structures, Carr (A.J.), (et al.), *2281*
Moss (T.R.) ed., mechanical components, probabilistic design, reliability, safety, *1434, book*
Moss (W.D.), flow measurement, fluid mechanics, recirculation, steps, turbulent flow, Baker (S.), *5434*
Mossaheb (S.), multivariable systems, nyquist theory, stability theory, time delay systems, *8159*
Mostaghel (N.), see Ahmadi (G.), *4849*
Mostaghimi (J.), conduction (heat), freezing, phase changes, soils, Pfender (E.), *10563*
Mostofizadeh (C.), condensation, mixing, modeling, three dimensional flow, visualization, Kriegel (E.), (et al.), *1642*
Mota Soares (C.A.), see Oliveira Faria (L.M.), *8215*
Motallebi (F.), airfoils, base pressure, compressible flow, vortex shedding, Norbury (J.F.), *7736*
Motayed (A.K.), boundary roughness, rivers, waterways, Krishnamurthy (M.), *3598*
motors, electric power, noise, noise abatement, Yang (S.J.), *2937, book*
- electric power, propulsion, ship performance, Rains (D.A.), Vanlandingham (D.J.), (et al.), *5965*
- dynamic response, electromechanical components, mathematical methods, startup, Myklebust (A.), *9087*

Motoyoshi (T.), see Kamiwano (M.), *7813*
Mottaghian (R.), see Nejat (Z.), *6774*
Motz (L.H.), aquifers, porous media, *5909*
Moura (J.M.F.), detection, tracking, underwater acoustics, *12002*
Mouton (H.), channel flow, convection, nusselt number, solar collectors, Couanon (J.C.), (et al.), *2808*
Moutsoglou (A.), boundary layer, convection, heat transfer, hydrodynamic stability, vortex flow, Chen (T.S.), (et al.), *10465*
Movchan (A.A.), see Grinfeld (M.A.), *2371*
- see Grinfeld (M.A.), *8957*

Movchan (V.T.), empirical methods, turbulence, turbulence model, viscosity, *10469*

moving loads, elastic behavior, plates (annular), plates (circular), winkler foundation, El-Sirafy (I.H.), *3302*
- beams (continuous), dynamic behavior, Hayashikawa (T.), Watanabe (N.), *3358*
- bridges, dynamic interaction, railroads, Chu (K.H.), Garg (V.K.), (et al.), *3382*
- buckling, dynamic stability, hinged bodies, portal frames, Zaslavsky (A.), *3541*
- buckling (nonlinear), shells (cylindrical), shells (orthotropic), Bryukalo (L.A.), Gulyaev (V.I.), *4399*
- beams, contact problems, Adams (G.G.), Manor (H.), *5143*
- beams, Jezequel (L.), *5150*
- beams (flexural), dynamic behavior, Raske (T.F.), *6207*
- response, shells (cylindrical), underground, Pozhuev (V.I.), *6327*
- dynamic response, shells (cylindrical), shells (sandwich), Pozhuev (V.I.), *6344*
- finite element techniques, mesh generation, Padovan (J.), Zeid (I.), *8149*
- half space, transient effects, Watanabe (K.), *8331*
- impact, random loading, Wood (L.A.), Byrne (K.P.), *8341*
- beams, foundations, Kerr (A.D.), *9263*
- beams, dynamic response, elastic foundations, vibration (free), Apaydin (T.A.), *9328*
- spectral analysis, structural analysis, time dependence, Padovan (J.), *9332*
- shells (cylindrical), vibration (free), Mulyukov (R.M.), *10215*
- layered media, viscoelasticity (dynamic), Privarnikov (A.K.), Radovskii (B.S.), *11160*

moving media, dynamic analysis, kinematics, mathematical methods, Mcgill (D.J.), Kim (T.D.), *1981*
- heat transfer, mass transfer, porous media, saturation, Verigin (N.N.), Khabibullin (I.L.), (et al.), *5853*
- conduction (unsteady), mesh generation, Padovan (J.), *7223*
- bodies (liquid filled), boussinesq fluid, cavities, convection (free), perturbation methods, Zarubin (A.G.), Ngo Zui Kan, *7838*
- supersonic flow, uniqueness, wave equations, Manwell (A.R.), *8109*
- plane flow, polymers, porous walls, Kalita (W.), Lubonski (J.), *8561*
- cylindrical waves, green function, sound generation, Tanaka (K.), Ishii (S.), *9847*
- oil removal, particle fluid flow, two phase flow, Singhal (A.K.), Dranchuk (P.M.), *9893*
- acoustic waves, boundary value problems, subsonic flow, wave equations, Krasilshchikova (E.A.), *10798*

moving surfaces, conduction (unsteady), finite element techniques, nonlinear theory, Padovan (J.), *98*
- asymptotic methods, boundary layer, laminar flow, Chernyy (G.G.), *593*
- infiltration, numerical methods, Koussis (A.D.), Chow (S.-L.), *953*
- elliptical bodies, laminar flow, noncircular pipes, viscous flow, Lal (K.), Chorlton (F.), *1568*
- slots, turbulent flow, two dimensional flow, Tognola (S.), *3663*
- continuum mechanics, jump conditions, singular waves, waves, Beda (G.), *4127*
- acoustic waves, half space, reflection, sound fields, spectra, Hwang (Y.F.), Tichy (J.), *4763*
- anisotropic media, cosserat solids, membrane theory, shells (thin), Murdoch (A.I.), Cohen (H.), *4926*
- continuum mechanics, jump conditions, singular waves, Kraiko (A.N.), *4929*
- boundary layer, recirculation, supersonic flow, Zhuk (V.I.), Ryzhov (O.S.), *5431*
- capillary flow, contact angle, viscous flow, Benney (D.J.), Timson (W.J.), *6618*
- annular flow, friction factor, pipe flow, transition, Shands (J.), Alfredsson (H.), (et al.), *6648*
- alloys, mathematical methods, mixtures, solidification, Tao (L.N.), *6802*
- boundary layer, shock waves, Zhuk (V.I.), Ryzhov (O.S.), *7707*
- laminar flow, separated flow, Inoue (O.), *7708*
- channel flow, flow reversal, laminar flow, navier stokes equation, Brady (J.F.), Acrivos (A.), *8566*
- experimental results, noncircular pipes, turbulent flow, El Telbany (M.M.M.), Reynolds (A.J.), *8570*
- boundary layer, heat transfer, mass transfer, thermal diffusion, Chen (T.S.), Strobel (F.A.), *8776*
- annuli, laminar flow, porous walls, Kalita (W.), Szaniawski (A.), *9584*
- aerodynamic interference, aerodynamic performance, missiles, surface waves, wings, Putilin (S.I.), *9655*
- aerodynamic interference, flight (unsteady), ground effect, jets, vtol, Kammer (J.H.), Hall (C.L.), (et al.), *9668*
- analogies, asymptotic behavior, drag, plates, Burkina (R.S.), Vilyunov (V.I.), *10425*
- dissociation, fluid mechanics, gases, porous media, Verigin (N.N.), Khabibullin (I.L.), (et al.), *10691*

Movsisyan (L.A.), see Bagdoev (A.G.), *9334*

Mow (V.C.) ed., biomechanics, blood flow, human engineering, prosthetic devices, *1945, book*

Mowbray (D.F.), endurance limit, environmental tests, fatigue, high cycle fatigue, life expectancy, nickel alloys, Glaquinto (E.V.), (et al.), *443*

Moyer (T.D.), astrodynamical constants, circumnavigation, gravity, solar system, *869*

Moylan (P.J.), interconnected systems, large scale systems, linear theory, stability theory, *3166*

Mozharovskaya (T.N.), constitutive equations, plasticity, shells (thin), torsion, *6178*

Mozharovskii (N.S.), elastoplasticity, experimental results, rupture, yield criteria, Bobyr (N.I.), (et al.), *5110*
- cyclic loading, ductility, plastic behavior, shells (cylindrical), Bobyr (N.I.), *6186*

Mozzhukhin (E.V.), see Zaslonko (I.S.), *1734*

Mroz (Z.), see Pietruszczak (S.), *94*
- see Gierlinski (J.), *1223*
- modeling, plasticity, soils, *2381*
- see Dems (K.), *3522*
- materials possessing memory, work hardening, yield criteria, *8211*
- constraints, design (optimum), structural design, Mironov (A.), *8446*

Mshana (J.), see Krausz (A.S.), *6453*

Mubeen (A.), crack propagation, fatigue, low temperature, rocks, steel, *7480*
- bending, crack growth, fracture toughness, steel, *9433*

Mucciardi (A.N.), see Cleveland (D.), *7578*

Muchmore (C.B.), see Davis (P.K.), *3594*

Mucino (V.H.), finite element techniques, matrix methods, substructuring, Pavelic (V.), *8146*

Mucklow (P.A.), gas turbines, particles, wear, *5976*

Mudd (C.P.), see Mccartney (M.L.), *4789*

Mudie (J.D.), maneuverability, towed body dynamics, Kastens (K.A.), *5963*

Muduli (J.C.), see Mishra (S.P.), *10738*

Mueller (A.), see Ramaprian (B.R.), *2632*

Mueller (R.D.), see Breitenberger (E.), *7370*

Mueller (T.J.), see Figliola (R.S.), *1960*

Mugler (D.H.), see Dunne (E.G.), *8089*

Muir (T.G.), acoustic waves, biomedical frequencies, nonlinear waves, ultrasonics, Carstensen (E.L.), *890*

Muju (M.K.), adhesion, cutting, diffusion, magnetic field, tool wear, wear, Ghosh (A.), *8055*

Mujumdar (A.S.), heat transfer, mass transfer, transport phenomena, Masheikar (R.A.), *1735, book*
- see Gupta (R.), *1871*
- evaporation, heat transfer, impingement, jets, mass transfer, navier stokes equation, Li (Y.-K.), (et al.), *10665*

Mukai (Y.), bending, crack propagation, fatigue, surface flaws, Matsuno (H.), (et al.), *4482*

Mukherjee (H.), holdup, liquid liquid interface, oil-water flow, pipe flow, pressure drop, Brill (J.P.), (et al.), *1558*

Mukherjee (M.K.), composite materials, cyclic loading, strength, thermal loading, *7300*

Mukherjee (S.), boundary elements, cracks, elliptical cracks, plates, time dependence, Morjaria (M.), *2459*
- half space, plane surfaces, stokes flow, viscous flow, Bhattacharyya (P.), *3619*
- see Morjaria (M.), *4818*
- see Gupta (R.N.), *10427*

Mukherjee (S.G.), see Som (S.K.), *6986*

Mukherji (P.), earth, earth's crust, faults, sliding, stress concentration, viscoelasticity, Pal (B.P.), (et al.), *4031*

Mukhopadhyay (A.), plates (nonhomogeneous), plates (thick), shear, torsion, Mukhopadhyay (J.), *2266*

Mukhopadhyay (J.), see Mukhopadhyay (A.), *2266*

Mukhopadhyay (M.), bending, plates (rectangular), plates (simply supported), theory, *4368*
- dynamic response, edge effects, plates (rectangular), vibration (forced), *8309*
- finite element techniques, plane stress, plates (stiffened), ship structures, *9140*
- plates (annular), vibration (free), *10202*

Mukoseev (Yu.K.), see Zaslonko (I.S.), *829*

Mukudai (Y.), beams, ductility, multistory frames, seismic loading, Matsuo (A.), *5882*

Mukunda (H.S.), see Paul (P.J.), *9770*

Mukunoki (I.), see Ting (T.C. T.), *2364*

Mulac (A.J.), see Miller (G.H.), *1660*

Mulcahy (T.M.), see Wambsganss (M.W.), *383*
- cylindrical bodies, damping, scale models, vibration (flow induced), *11626*

Mulhaupt (B.), granular media, particles, particulate flow, pressure drop, surfaces, Kampfen (Y.), *3772*

Mullen (R.), see Belytschko (T.), *2711*

Mullenger (G.), see Davis (R.O.), *417*
- constitutive equations, continuum theory, granular media, yield criteria, Davis (R.O.), *7291*

Muller (A.A.), damping, dynamic analysis, rotating shafts, vibration (forced), *11140*

Muller (G.), bridges, gravel, interaction, railroads, Jovanovic (D.), (et al.), *5259*

Muller (H.G.), see Geisler (H.), *6579*

Muller (J.), aerodynamic interference, airplanes, noise abatement, propellers, Rouha (L.), *4680*

Muller (J.-A.), computer programming, mathematical models, prediction, Ivachnenko (A.G.), *6101*

Muller (K.H.), boltzmann equation, chemical reactions, diffusion, pollution, *11525*

Muller (L.), anisotropic media, nonhomogeneous media, piezoelectrics, *4337*

Muller (P.), eddies, ocean air interaction, oceanography, rotating fluids, stratification, Frankignoul (C.), *8996*

- elastic waves, torsional waves, waveguides, *9333*

Muller (P.C.), eigenvalues, rotating bodies, vibration, *381*

Muller (W.C.), eigenvalue problems, fluid-structure interaction, numerical methods, *5479*

Mulligan (J.C.), see Parsons (J.R.) Jr., *2802*
- see Thomason (S.B.), *5578*

Mullins (M.L.), see Gadala (M.S.), *2243*

Mullner (H.), copper, crack growth, fatigue, fracture, microstructures, stress intensity factor, Weiss (B.), *444*

Multhei (H.N.), approximations (polynomial), computing techniques, differential equations (ordinary), initial value problems, splines, *10049*

multiaxial fatigue, brittle fracture, fracture criteria, fracture mechanics, Awaji (H.), *1368*
- biaxial loading, fibers, rotating bodies, Calil (S.F.), Goswami (B.C.), (et al.), *2255*
- aluminum alloys, combined loading, fatigue, life expectancy, Sines (G.), Ohgi (G.), *2407*
- bending, fatigue, torsion, Mcdiarmid (D.L.), *6414*

multicomponent flow, condensation, mass transfer, Krishna (R.), *1727*
- continuum mechanics, magneto fluid dynamics, plasma, radiation properties, Pai (S-I.), *2896, book*
- mixtures, Kitayner (A.G.), Markeyev (B.M.), *4595*
- channels, multiphase flow, Barrau (J.-J.), Fabre (J.), (et al.), *4824*
- hydrodynamics, statistical mechanics, thermodynamics (nonequilibrium), transport phenomena, Bashkirov (A.G.), *6747*
- condensation, mass transfer, tubes, Webb (D.R.), Sardesai (R.G.), *7870*
- interface phenomena, mass transfer, two phase flow, Rohm (H.-J.), Vogelpohl (A.), *7876*
- binary flow, conduction (heat), conductivity, gases, kinetic theory, mixtures, Assael (M.J.), Wakeham (W.A.), (et al.), *8675*

multifluid flow, elastic bodies, heat exchangers, hydrodynamic stability, separating wall, Hasegawa (E.), *3697*
- three dimensional flow, vortex flow, De Josselin De Jong (G.), *7979*

multilayer, blades, layered media, porous surfaces, temperature, turbomachinery, Lokai (V.I.), Zhuikov (V.V.), (et al.), *2822*
- baroclinic waves, hydrodynamic stability, stability theory, Donahue (J.F.), *3704*
- plane flow, temperature, thermal effects, Mkhitaryan (A.M.), Girol (A.P.), (et al.), *4698*
- design (minimum weight), laminates, optimization, tubes, Doroginin (V.V.), *5164*

multiphase flow, heat transfer, power generation, two phase flow, Bergles (A.E.), Collier (J.G.), (et al.), *934, book*
- fluidized beds, inversion, laplace transform, numerical analysis, special functions, Petho (A.), Kuhne (J.), *1101*
- power plants, prediction, Spalding (D.B.), *1851*
- condensation (dropwise), kinetics, saturation, supersaturation, Bazarov (S.M.), Shpenzer (G.G.), *2845*
- hypersonic flow, interaction, Blagosklonov (V.I.), Kuznetsov (V.M.), (et al.), *2983*
- darcy flow, porous media, Wright (R.J.), Dawe (R.A.), *2997*
- boiling, condensation, nuclear reactors, safety, Veziroglu (T.N.) ed., *3794, book*
- mixtures, systems, Hetsroni (G.) ed., *4005, book*
- channels, multicomponent flow, Barrau (J.-J.), Fabre (J.), (et al.), *4824*
- porous media, transport phenomena, Veziroglu (T.N.) ed., *5827, book*
- porous media, reservoirs, Leventhal (S.H.), *5860*
- dispersion, particles, Nevolin (V.G.), Kirchanov (V.G.), *6966*
- coal, heat transfer, prediction, slurries, Trela (M.), *7962*
- compaction, finite element methods, reservoir engineering, subsidence, Morgan (K.), Lewis (R.W.), (et al.), *8912*
- fluidized beds, transition flow, Didwania (A.K.), Homsy (G.M.), *9895*
- fluidized beds, heat transfer, Kato (Y.), Uchida (K.), (et al.), *9896*
- reactors, safety, transport, Veziroglu (T.N.), *10819*
- slurries, suspensions, transport, Bajura (R.A.) ed., *10820*
- acoustic waves, compressible flow, nonequilibrium flow, numerical methods, rarefied flow, shock waves, Cook (T.L.), Demuth (R.B.), (et al.), *11426*
- fluidized beds, heat transfer (combined modes), packed beds, Kato (Y.), Kago (T.), (et al.), *12068*

multiphase media, averaging, mixture theories, nonhomogeneous media, Nikolaevskii (V.N.), *1972*
- constitutive equations, elastic bodies, mixture theories, nonhomogeneous media, Khoroshun (L.P.), *4131*
- conduction, low temperature properties, superconductors, Kogan (V.G.), *5531*
- fluidized beds, reactors, Kuhne (J.), Wippern (D.), *5844*
- averaging, composite materials, mixture theories, Topovinina (I.V.) ed., *7130, book*
- edge dislocations, orthotropic materials, stress analysis, Wu (R.S.), Chou (Y.T.), *8191*
- casting, ingots, isotopes, solidification, Deryabina (G.N.), Ripp (A.G.), *9434*

multiple cracks, shells (cylindrical), stress intensity factor, three dimensional formulation, torsion, Shibuya (T.), Koizumi (T.), (et al.), *3457*
- computing techniques, elasticity, stress intensity factor, Vialaton (G.), Brunet (M.), (et al.), *5298*
- crack opening displacement, fracture, yield condition, Smith (E.), *5305*
- finite element techniques, fracture mechanics, singularities, stress intensity factor, Staab (G.H.), Sun (C.T.), *5313*
- interaction, stress intensity factor, transforms, Gecit (M.R.), *9401*
- crack arrest, crack branching, crack propagation, dynamic fracture, Theocaris (P.S.), *9413*
- crack growth, crack opening displacement, Mills (N.J.), Walker (N.), *9417*
- flaws, fracture mechanics, nondestructive tests, Chang (R.), *10285*
- cylindrical bodies, interface cracks, stress intensity factor, torsion, Shibuya (T.), Koizumi (T.), (et al.), *10293*
- biaxial loading, finite element techniques, holes, stress intensity factor, Oladimeji (M.K.), *10295*

multiple degree of freedom, dynamic response, random loading, seismic loading, Der Kiureghian (A.), *7038*
- earthquake resistant structures, frames, stiffness, Capecchi (D.), Rega (G.), (et al.), *7040*
- approximation methods, seismic loading, structural response, Tansirikongkol (V.), Pecknold (D.A.), *7041*
- analytical methods, rocks, seismic loading, Gheorghiu (Z.), *9921*

multiple scales, decision theory, pattern recognition, Clarke (D.), Rivett (B.H.P.), *157*
- hydrodynamic stability, nonlinear theory, poiseuille flow, Weinstein (M.), *6678*
- coherent structure, jets, turbulence, Mankbadi (R.), Liu (J.T.C.), *7752*
- fourier transform, oscillations, Jeffrey (A.), Kawahara (T.), *9111*

multistory frames, buildings, earthquake effects, fatigue, floors, Wilson (J.C.), *970*
- critical load, framed structures, structural stability, Roberts (T.M.), *1251*
- frequencies, modal analysis, vibration (free), Roberts (E.H.), Wood (R.H.), *2343*
- frames, shear walls, structural analysis, Basu (A.K.), Nagpal (A.K.), *2536*
- plates (folded), shear walls, walls, Kristek (V.), *2542*
- buckling, hysteresis, Jain (A.K.), Goel (S.C.), (et al.), *3339*
- buildings (tall), combined loading, Anderson (D.), *4539*
- buckling (local), cold working, cold-formed steel, collapse, failure, steel, Zamecnik (F.J.), *5349*
- cladding, structural analysis, Williams (F.W.), *5360*
- beams, ductility, seismic loading, Mukudai (Y.), Matsuo (A.), *5892*
- damping, dynamic behavior, experimental results, framed structures, wind loads, Lam (L.C.H.), Lam (R.P.), *6529*
- bracing, buildings (tall), matrix methods, structural analysis, Bozzo (E.), Gambarotta (L.), *7611*
- buildings, field tests, pressure distribution, wind loads, wind tunnels, Lam (R.P.), Lam (L.C.H.), *7908*

multivariable systems, feedback, frequency domain techniques, synthesis, Doyle (J.C.), Stein (G.), *108*
- linear systems, regulator problem, tracking, Wolovich (W.A.), Ferreira (P.), *112*
- decoupling, feedback, linear systems, time invariant systems, Sinha (P.K.), *113*
- algorithms, regulator problem, synthesis, Cheng (L.), Pearson (J.B.) Jr., *160*
- digital control, frequency domain techniques, process control, state space techniques, Seborg (D.E.), Fisher (D.G.), *205*
- algorithms, optimization, Meerov (M.V.), Bershchanskiy (Ya.M.), (et al.), *1152*
- design, heat exchangers, process control, regulator problem, Davison (E.J.), Taylor (P.A.), (et al.), *1163*
- nonlinear systems, pole placement, time varying systems, Sommer (R.), *2085*
- design, digital control, sampled data systems, Rao (G.V.), *2093, book*
- algorithms, model reduction, process control, Mishra (R.N.), Wilson (D.A.), *2145*
- control, design, jet engines, turbofan engines, Taiwo (O.), *2179*
- gas turbines, jet engines, optimal control, Dehoff (R.L.), Hall (W.E.) Jr., *2186*
- newton method, penalty function, Khenkin (M.Z.), *3124*
- approximation theory, finite element methods, splines, Blaga (P.), Coman (G.), *3126*
- nyquist theory, robustness, sensitivity, stability theory, Lehtomaki (N.A.), *3151*
- decoupling, frequency domain techniques, pole placement, Koussiouris (T.G.), *3152*
- algorithms, nonlinear systems, stability theory, stochastic systems, Shibata (H.), Mayeda (H.), (et al.), *3171*
- algorithms, digital simulation, mathematical models, stochastic systems, Razevig (V.D.), *3179*
- control, design, linear systems, observers, pole placement, process control, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- control, linear systems, pole placement, regulator problem, Kimura (H.), *4209*
- design, pid, pole placement, Seraji (H.), *4220*
- design, feedback, modal control, synthesis, Lutskiv (N.M.), Strepko (I.T.), *4221*
- algorithms, automatic control, design, frequency domain techniques, matrix methods, Frisch (H.P.), *4224*
- frequency domain techniques, linear systems, nyquist theory, stability theory, Postlethwaite (I.), Edmunds (J.M.), (et al.), *4225*
- design, feedback, sensitivity, stability theory, Safonov (M.G.), Laub (A.J.), (et al.), *4226*
- feedback, linear systems, stability theory, time lag, Gosiewski (A.), Olbrot (A.W.), *4231*
- controllability, frequency domain techniques, graph theory, interconnected systems, observability, Fessas (P.), *4234*

- computer aided design, linear systems, structural analysis, Van Der Weiden (A.J.J.), Bosgra (O.H.), *4235*
- adaptive systems, design, linear systems, process control, tracking, Davison (E.J.), *4236*
- algorithms, discrete systems, identification, stochastic approximation, stochastic processes, El-Sherief (H.), Sinha (N.K.), *4238*
- design, synthesis, Horowitz (I.), Wang (T.-S.), *4268*
- algorithms, design, pole placement, Bogachev (A.V.), Grigorev (V.V.), (et al.), *4276*
- algorithms, design, minimax techniques, Bakan (G.M.), Strashko (V.T.), *4280*
- control, large scale systems, optimization, Findeisen (W.), Brdys (M.), (et al.), *4289*
- gradient techniques, nonlinear characteristics, optimization, scale effects, Bruet (B.), *4944*
- algorithms, linear systems, optimal control, schur form, Sima (V.), *5055*
- control, design, feedback, linear systems, pole placement, Balestrino (A.), Celentano (G.), *6125*
- control, design, feedback, linear systems, pole placement, Seraji (H.), *6126*
- inequalities, robustness properties, sensitivity, Nuzman (D.W.), Sandell (N.R.) Jr., *6130*
- adaptive systems, algorithms, discrete systems, linear systems, state space techniques, Goodwin (G.C.), Ramadge (P.J.), (et al.), *7233*
- algorithms, identification, linear systems, modeling, pseudoinverse, static model, Mechetnyy (V.S.), *7235*
- numerical methods, simulation, Arays (Ye.A.), Dmitriyev (V.M.), *7255*
- nyquist theory, stability theory, time delay systems, Mossaheb (S.), *8159*
- control, design, linear systems, optimization, servomechanisms, Davison (E.J.), Ferguson (I.J.), *8168*
- control, decoupling, model reduction, Shieh (L.-S.), Wei (Y.-J.P.), (et al.), *9158*
- control, feedback, state space techniques, Preuss (H.-P.), *9159*
- design, feedback, frequency domain techniques, process control, state space techniques, Bar (W.), *9163*
- algorithms, analytical methods, design, synthesis, Graser (A.), *9164*
- control, decoupling, design, linear systems, nonlinear systems, synthesis, Mercier (O.), *9165*
- nonlinear systems, stability theory, Herz (B.), *9167*
- control, large scale systems, optimal control, power generation, Ikeda (M.), Siljak (D.D.), (et al.), *9175*
- design, time optimal systems, trajectory optimization, Frick (K.), *9178*
- linear systems, linear theory, matrix methods, state space techniques, Field (A.D.), Owens (D.H.), *10079*
- algorithms, design, matrix methods, Wolovich (W.A.), *11039*
- nyquist theory, pole placement, root loci, Brockett (R.W.), Byrnes (C.I.), *11041*
- design, large scale systems, observers, Das Gupta (R.), Fairman (F.W.), *11046*
- feedback, linear systems, nyquist theory, Nwokah (O.D.I.), *11054*

Mulyava (M.P.), see Tsolkovskii (T.I.), *10696*

Mulyukov (R.M.), moving loads, shells (cylindrical), vibration (free), *10215*

Mulyukov (R.R.), conduction (heat), conductivity, liquids, specific heat, Pavlov (P.A.), *5518*
- conduction (heat), heat transfer, hot wire, thermal excitation, thermal measurements, *6798*

Mumford (J.C.), eddies, experimental methods, jets, shear flow, turbulence (structure), turbulent flow, *11545*

Munier (A.), backlund transformation, conduction (unsteady), group theory, nonlinear characteristics, transformation, Burgan (J.R.), (et al.), *2004*

Munin (A.G.), see Zhmulin (E.M.), *910*

Munir (N.I.), see Spilker (R.L.), *2072*
- see Spilker (R.L.), *4379*
- see Spilker (R.L.), *9279*
- see Spilker (R.L.), *9280*

Munjal (M.L.), see Panicker (V.B.), *902*
- see Panicker (V.B.), *11939*
- see Panicker (V.B.), *11940*

Munk (W.H.), diffraction, eddies, sound propagation, underwater acoustics, *8912*

Munro (J.), see Maier (G.), *79999*

Munson (B.R.), jets, orifices, reservoirs, viscous buckling, *8529*
- see Cruickshank (J.O.), *9526*
- see Suleiman (S.M.), *11378*

Munz (D.), aluminum alloys, crack growth, crack resistance, fracture toughness, notch tests, *6478*
- brittle materials, crack propagation, fracture toughness, notch tests, stress intensity factor, Bubsey (R.T.), (et al.), *7571*
- see Bubsey (R.T.), *9430*

Mura (T.), see Tanaka (K.), *9387*

Murad (S.), see Afshar (R.), *4692*

Murai (H.), bodies of revolution, cavitation inception, reynolds number, turbulence (freestream), water tunnels, Ihara (A.), *10397*
- axisymmetric flow, bodies of revolution, cavitation flow, sound generation, turbulence, ultrasonics, Ihara (A.), *10532*

Murakami (H.), composite materials, conduction (heat), laminates, mixtures, Msewal (A.), (et al.), *5575*
- composite materials, conduction (heat), fibers, mixtures, variable thermal properties, Hegemier (G.A.), *8738*
- elastodynamics, finite element techniques, harmonic waves, Shioya (S.), (et al.), *11173*

Murakami (K.), grids, moire methods, optical techniques, Murakami (Y.), (et al.), *2474*

Murakami (M.), calibration, nozzles, pressure measurement, swirl flow, velocity measurement, Kito (O.), *3755*
- discharges, flow measurement, mathematical models, potential flow, swirl flow, Kito (O.), *3756*
- see Kikuyama (K.), *9591*
- cooling, heat pipes, superfluids, *10627*

Murakami (T.), extrusion, plane strain, slip line methods, Takahashi (H.), *4470*
- contact problems, interference fits, shells (cylindrical), Yanuki (T.), (et al.), *6169*

Murakami (Y.), see Murakami (K.), *2474*

Murakawa (H.), energy methods, finite element methods (hybrid), structural stability, Reed (K.W.), (et al.), *6236*

Muramatsu (M.), see Hirashima (K.-I.), *4366*

Murase (K.), large displacement, thin walled structures, tubes, viscoplasticity, Nishimura (T.), *3291*

Murase (Y.), see Nakao (Y.), *10851*

Murashkina (V.A.), see Lykov (V.A.), *1782*

Murata (H.), algorithms, design, manipulators, mechanisms (planes), robotics, Hayashi (I.), *8480*

Murata (S.), approximations (higher order), ducts (curved), helical flow, laminar flow, Miyake (Y.), (et al.), *1555*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), reynolds equation, whirling shafts, Miyake (Y.), (et al.), *5995*
- bearings (gas lubricated), bearings (journal), dynamic behavior, lubrication (hydrostatic), perturbation methods, Miyake (Y.), (et al.), *8067*
- cascades, centrifugal compressors, compressible flow, three dimensional flow, vortices, Miyake (Y.), (et al.), *11744*

Muravev (E.V.), liquid metals, magneto fluid dynamics, particles, reactor structures, thermonuclear energy, *11824*

Muravin (G.B.), see Finkel (V.M.), *3506*

Murayama (Y.), see Nishitani (T.), *1189*

Murdoch (A.I.), anisotropic media, cosserat solids, membrane theory, moving surfaces, shells (thin), Cohen (H.), *4926*

Murdock (J.), see Robinson (C.), *2915*

Murdock (J.W.), see Taylor (T.D.), *8608*
- hydrodynamic stability, perturbations, sound flow interaction, tollmien schlichting waves, *9602*

Mure-Ravaud (A.), pattern recognition, walsh-hadamard transform, *3175*

Murff (J.D.), bearing capacity, piles, soils, *1327*
- anisotropic media, experimental methods, plasticity, soils, *4461*

Murfitt (P.G.), filtration, granular media, hoppers, powders, Bransby (P.L.), *6959*

Murota (A.), buoyant flow, entrainment, surface jets, Nakatsuji (K.), *6673*

Murotsu (Y.), failure, matrix methods, probability theory, reliability analysis, trusses, Okada (H.), (et al.), *8448*

Murphy (C.H.), aerodynamic performance, ballistics (exterior), control stability, missiles, rockets, *3926*
- control stability, projectiles, trajectories, *7792*

Murphy (C.K.), see Shaub (H.), *3757*

Murphy (C.P.), see Evans (D.J.), *5072*

Murphy (D.N.S.), see Sherbourne (A.N.), *305*

Murphy (M.J.), see Tuft (D.B.), *1312*

Murphy (W.D.), see Malmuth (N.D.), *2658*

Murr (L.E.), see Meyers (M.A.) eds., *1299, book*

Murray (C.G.), see Willetts (B.B.), *4670*

Murray (J.C.), boundary value problems, coordinate systems, mathematical methods, nonlinear methods, numerical analysis, *1071*
- perturbation methods, rotating bodies, stokes flow, toroids, viscous flow, *8530*

Murray (N.W.), buckling (local), plates (rectangular), thin walled structures, Khoo (P.S.), *10186*

Murthy (A.), computing techniques, high temperature, plastic flow, rolling, steel, stochastics, Lenard (J.G.), *7456*

Murthy (H.S.), balance system, blowdown, rolling motion, supersonic flow, wind tunnels, *9681*

Murthy (T.S.R.), bearings (conical), bearings (hydrodynamic), friction (solid fluid), lubrication (hydrodynamic), oil films, stiffness, *12094*

Muruyama (K.), bolted joints, bolts, deformation, holography, Yoshimoto (I.), (et al.), *3582*

Murzewski (J.), limit analysis, probabilistic design, random loading, safety, structural design, *7588*

Murzinov (I.N.), see Levin (A.L.), *6946*

Musaev (D.A.), beam columns, cylindrical bodies, elasticity (nonlinear), elasticity (three dimensional), *9291*

Muschik (W.), constraints, dynamic analysis, lagrange equations, *1061*
- dynamic analysis, lagrange equations, mathematical methods, Poliatzky (N.), (et al.), *1979*
- see Heidug (W.), *7817*

muscles, arteries, cell behavior, dynamic response, shear stress, Dewey (C.F.) Jr., Bussolari (S.R.), (et al.), *3065*

- contraction, heart, modeling, Shoucri (R.M.), *4909*
- biological joints, gait, kinematics, Boccardi (S.), Pedotti (A.), (et al.), *4910*
- biocontrol, nervous system, Armstrong (D.), Moon (M.), *5067*
- biological joints, biomechanics, An (K.N.), Hui (F.C.), (et al.), *6003*
- aorta, blood flow, Nerem (R.M.), Levesque (M.J.), (et al.), *6017*
- biomathematics, monte carlo analysis, Nishiyama (K.), Shimizu (H.), *7107*
- creep, dynamic behavior, stress strain relationships, Phillips (C.A.), Petrofsky (J.S.), *7108*
- biomechanics, blood flow, heart, Arts (T.), Reneman (R.S.), (et al.), *7109*
- blood vessels, brain, tissues, viscoelasticity, Misra (J.C.), Chakravarty (S.), *7646*
- heart, stress strain relationships, tissues, Capelo (A.), Comincioli (V.), (et al.), *8070*
- biomechanics, blood flow, flexible walls, fluid-structure interaction, navier stokes equation, Melbin (J.), Noordergraaf (A.), *8073*
- acoustics (physiological), arteries, blood flow, sound generation, Grigoryan (S.S.), Saakyan (Yu.Z.), (et al.), *8077*
- biodynamics, gait, optimization, Patriarco (A.G.), Mann (R.W.), (et al.), *9052*
- biocontrol, nervous system, oscillations, Oguztoreli (M.N.), Stein (R.B.), *9053*
- biomechanics, heart, modeling, Panerai (R.B.), *9054*
- diagnostics, scattering, tissues, ultrasonics, Engin (A.E.), Peindl (R.D.), (et al.), *9072*

musculoskeletal system, scoliosis, spine, x ray techniques, Hindmarsh (J.), Larsson (J.), (et al.), *1964*

Musgrave (M.J.P.), anisotropic media, elastic waves, half space, propagation, Payton (R.G.), *11164*

Musher (S.L.), isothermal processes, kinetic theory, numerical methods, plasma, waves, *11836*

Musialek (J.), see Baranski (F.), *10600*

Musio (G.), dynamic response, towers, wind loads, *5362*

Musker (A.J.), friction factor, natural surfaces, reynolds number, roughness, *1564*

Musoff (H.), see Mckern (R.), *8846*

Mustacchi (C.), codes, numerical methods, solar collectors, solar energy, solar radiation, Cena (V.), (et al.), *3830*

Mustafaev (M.I.), control, control surfaces, optimization, telescopes, *11320*

Mutharasan (R.), see Giger (G.K.), *3001*

Muthu (K.U.), see Desayi (P.), *4531*

Muto (T.), laminar flow, pipelines, pulsatile flow, unsteady flow, visualization, Nakane (K.), *3666*

- conical bodies, ducts (variable area), dynamic response, frequency domain techniques, unsteady flow, Kinoshita (Y.), (et al.), *8574*

Mutoh (Y.), see Krishnan (V.M.R.), *1357*

- grain size, microstructures, stress intensity factor, thresholds, yield condition, Radhakrishnan (V.M.), *5288*
- ductile fracture, high temperature, prestrain, steel, Toyoda (M.), (et al.), *6450*

Muzyiev (N.V.), conduction (heat), inverse problems, theorems, uniqueness, *4545*

Muzylev (S.V.), currents, ocean air interaction, oceanography, Felzenbaum (A.I.), *3024*

Mvungi (J.), see Jeffrey (A.), *11676*

My Dao Thien, cyclic loading, probabilistic design, reliability analysis, springs, Massoud (M.), *6518*

Myachenkov (V.I.), deformation, elasticity (nonlinear), shells (of revolution), Yusov (V.N.), *316*

Myers (A.W.), see Viswanathan (S.P.), *6300*

Myers (M.K.), boundary value problems, duct flow, sound fields, vibration (flow induced), *6935*

Myers (R.B.), spectral analysis, stratified flow, two dimensional flow, vortex flow, Taylor (T.D.), (et al.), *5396*

Myklebust (A.), dynamic response, electromechanical components, mathematical methods, motors, startup, *9087*

Myrhaug (D.), damping, friction (skin), rolling motion, roughness, ship motion, *4038*

Mysak (L.A.), see Leblond (P.H.), *4860*

- baroclinic instability, hydrodynamic stability, ocean waves, *10468*

Myshanov (A.I.), experimental results, nozzles, particle fluid flow, transonic flow, Shorokov (N.N.), *5447*

Myshenkov (V.I.), jets, laminar flow, supersonic flow, *2662*

Myska (J.), see Vocel (J.), *8581*

Myuller (R.), see Semena (M.G.), *8762*

Myznikova (B.I.), see Kazaryan (V.A.), *10586*

N

n body problems, hamiltonian equations, kepler orbits, periodic orbits, restricted three body problem, Meyer (K.R.), *1786*
- free boundary, laminar flow, modeling, nonlinear theory, turbulent flow, Greenspan (D.), *2720*
- artificial satellites, stability theory, three body problem, Walker (I.W.), Emslie (A.G.), (et al.), *4756*
- contact transformation, dynamics, group theory, hamiltonian equations, Bryant (J.), *6873*
- existence theorems, periodic orbits, Meyer (K.R.), *6880*
- mathematical methods, orbit mechanics, Saari (D.G.), Hulkower (N.D.), *8836*
- bifurcation, circumnavigation, libration theory, mathematical methods, periodic orbits, solar system, Szebehely (V.) ed., *10769, book*
- collision models, mathematical methods, stability theory, Simo (C.), Llibre (J.), *10770*

Na (T.Y.), diaphragms, large displacement, membranes, Kurajian (G.M.), *323*
- see Aziz (A.), *1703*
- see Kurajian (G.M.), *2433*
- see Chiou (J.P.), *3799*
- see Aziz (A.), *3817*
- see Aziz (A.), *3822*
- see Aziz (A.), *4581*
- see Aziz (A.), *8556*
- convection (free), cylindrical bodies, heat transfer, turbulent flow, Chiou (J.P.), *9610*

Naaman (A.E.), see Visalvanich (K.), *6439*
Nabarro (F.R.N.), cylindrical bodies, fluids, thermal stresses, *6941*
Nachinkina (G.N.), adaptive systems, dynamic analysis, estimation, search-free systems, Shnaidman (M.A.), *3203*
Nachman (A.), see Lakin (W.D.), *10198*
Nachtigal (C.L.), see Glaser (D.J.), *6148*
Nack (W.V.), dynamic analysis, dynamic response, finite element methods, structural response, *7417*
Naerlovic-Veljkovic (N.), elastic waves, electroelasticity, thermodynamics, *8330*
Naert (P.A.), cost uncertainty, mathematical models, operations research, optimization, Weverbergh (M.), *3215*
Naeser (H.), gravity waves, gravity waves (surface), ocean waves, spectra, surface waves, wind-wave interaction, *8018*
Nafikov (I.M.), atomization, centrifugation, films, Zinnatullin (N.Kh.), *4826*
Naftzger (R.A.), dynamic analysis, floating structures, Chakrabarti (S.K.), *8039*
Nagabhushan (B.L.), airships, design, flight stability, helicopters, rotors, Tomlinson (N.P.), *7799*
Nagaev (R.F.), see Guzev (V.V.), *4419*
- see Kremer (E.B.), *12045*

Nagahisa (Y.), lagrange multiplier, linear theory, optimization, *6138*
Nagai (K.), see Mori (Y.H.), *6825*
Nagaki (S.), see Inoue (T.), *7951*
Nagakura (H.), see Kojima (E.), *11957*
Nagamatsu (A.), dynamic analysis, finite element methods, impedance methods, vibration (forced), Ookuma (M.), *6281*
- see Michimura (S.), *11130*

Nagamura (K.), see Terauchi (Y.), *8472*
Nagaraj (T.S.), see Krishna Murthy (M.), *2379*
Nagaraja (Y.R.), adhesives, bonded joints, viscoelastic materials, Alwar (R.S.), *6568*
Nagasawa (K.), orbit mechanics, tides, *8024*
Nagata (H.), bubble dynamics, cylindrical bodies, impulse, unsteady flow, velocity profiles, visualization, Matsui (T.), (et al.), *3633*
Nagaya (K.), see Hirano (Y.), *3353*
- bars, dispersion, elastic waves, elasticity (three dimensional), *4442*
- see Hirano (Y.), *5204*
- beams (timoshenko), deflections, design, dynamic loads, gear teeth, transmissions, Uematsu (S.), *10372*

Naghdi (A.K.), bars, cavities, conduction (heat), cylindrical bodies, shape factors, *7847*
Naghdi (P.M.), free boundary, inviscid fluid, supercritical flow, waterfalls, Rubin (M.E.), *554*
- see Casey (J.), *3266*
- see Casey (J.), *6158*
- jets, non newtonian flow, poiseuille flow, *6665*

Nagle (R.K.), differential equations (ordinary), mathematical methods, nonlinear theory, Singkofer (K.), *3096*
Nagnibeda (E.A.), see Laptev (V.A.), *7695*
Nagorski (R.), axisymmetric loading, bending, shells (perforated), shells (spherical), *2273*
Nagpal (A.K.), see Basu (A.K.), *2536*
Nagrelli (V.E.), deformation (plastic), half space, plastic waves, thermoplasticity, *3996*
- elastoplasticity, half space, thermal shock, thermal waves, *8882*

Nagtegaal (J.C.), computing techniques, elastoplasticity, finite strain, De Jong (J.E.), *2232*

Nahlik (A.), bending (viscoplastic), blades, dynamic response, dynamic testing, matrix methods, steam turbines, Pastia (A.), *10209*
Nahlik (S.), see Konorski (A.), *6984*
Naib (S.K.A.), channel flow, free boundary, jets, mixing, velocity measurement, weirs, *4576*
Naidenov (V.I.), see Aleksapolskii (N.B.), *9836*
- see Aleksanopolskii (N.B.), *11501*

Naidu (D.S.), see Rajagopalan (P.K.), *11043*
- see Rajagopalan (P.K.), *11076*

Naidu (G.M.), convection, heat transfer, laminar flow, plates (parallel), power law geometrics, solar collectors, Agarwal (J.P.), *7864*
Naik (T.R.), aging, concrete, strength, *1440*
nailed joints, large displacement, shells (hyperbolic paraboloid), shells (sandwich), wood structures, Moss (P.J.), Carr (A.J.), (et al.), *2281*
Nair (S.), displacement, edge effects, shells, *313*
Naito (I.), oceanography, tides, *4883*
Naito (K.), finite difference methods, mass transfer, oxygen, stratified flow, thermocline, Nakamura (Y.), (et al.), *9509*
Naitoh (T.), couette flow, statistical mechanics, thermodynamics (nonequilibrium), viscosity, Ono (S.), *6749*
Najjar (M.S.), heat transfer, materials properties, thermal properties, Bell (K.J.), *5806*
Nakabayashi (K.), annular flow, numerical methods, reynolds number (high), rotating bodies, spherical bodies, Nishida (H.), (et al.), *11375*
Nakagaki (M.), see Atluri (S.N.), *8420*
Nakagawa (H.), bed load, sediment transport, shear stress, stability theory, Tsujimoto (T.), *3604*
- channel flow, experimental results, turbulence, turbulence (structure), Nezu (I.), (et al.), *5468*
- bubble dynamics, bubbly flow, compressional waves, nozzles, subsonic flow, supersonic flow, Mori (Y.), (et al.), *10491*

Nakagawa (K.), see Baba (S.), *6516*
Nakagawa (N.), transient effects, viscoelastic materials, viscoelastic waves, Kawai (R.), *5238*
Nakahara (I.), see Kawakami (T.), *2212*
- see Matsumoto (H.), *7279*

Nakahara (T.), bearings (gas lubricated), bearings (liquid lubricated), bearings (thrust), lubrication (hydrostatic), stiffness, Kurisu (T.), (et al.), *4896*
Nakahashi (K.), see Karashima (K.), *1733*
Nakai (M.), see Yokoi (M.), *11945*
- see Yokoi (M.), *11946*

Nakai (T.), constitutive relations, shear, soils, Matsuoka (H.), *9354*
Nakai (Y.), see Tanaka (K.), *5281*
Nakajima (H.), see Ochi (M.), *4619*
Nakajima (M.), see Hitomi (K.), *3214*
Nakajima (T.), see Kase (S.), *548*
Nakamura (A.), estimation, mathematical models, population estimation, simulation, Nakamura (M.), *215*
- gravity waves (finite depth), integral methods, transformation, two dimensional waves, Matsuno (Y.), *668*
- see Nakamura (T.), *2954*
- see Nakamura (T.), *3942*
- see Nakayama (I.), *11953*

Nakamura (I.), conical flow, diffusers, inlet flow, inlet flow (sheared), shear flow, velocity profiles, Ishikawa (K.), (et al.), *3679*
- axial flow, boundary layer (turbulent), spinning bodies, Yamashita (S.), (et al.), *9564*

Nakamura (K.), energy spectrum, high temperature, measurements (dynamic), plasma (toroidal), tokamak, Hiraki (N.), (et al.), *5692*
Nakamura (M.), see Nakamura (A.), *215*
- airfoil characteristics, design criteria, transonic flow, two dimensional flow, *685*
- see Matsumoto (J.), *6974*

Nakamura (T.), absorption, acoustic measurements, porous media, reflection, Nakamura (A.), (et al.), *2954*
- acoustic waves, nonlinear waves, pipes, reflection, Nakamura (A.), (et al.), *3942*
- see Suzuki (T.), *11095*

Nakamura (Y.), bending, plastic behavior, plates (circular), shear, Tatenami (T.), (et al.), *1229*
- axisymmetric flow, navier stokes equation, swirl, vortex breakdown, vortex flow, Uchida (S.), *1504*
- blunt bodies, galloping, turbulent flow, vortex shedding, Tomonari (Y.), *7905*
- see Naito (K.), *9509*
- axisymmetric flow, numerical analysis, parabolic equations, swirl flow, Uchida (S.), *9585*

Nakane (K.), see Muto (T.), *3666*
Nakanishi (E.), decoupling, linear systems, time lag, time varying systems, Nanbara (K.), *4204*
Nakanishi (S.), see Ishigai (S.), *1664*
- see Ishigai (S.), *3792*

Nakano (H.), see Kawaguchi (T.), *2152*
Nakano (M.), see Ohtsuka (N.), *1398*
- see Ochiai (K.), *5652*

Nakano (Y.), one dimensional flow, porous media, saturation, travelling waves, *10834*
- porous media, travelling waves, two phase flow, *12065*

Nakao (M.), conduction (heat), conductivity, thermal contact resistance, thermal properties, Miyawaki (Y.), *767*

Nakao (Y.), boilers, elastoplasticity, foundations, seismic loading, Murase (Y.), (et al.), *10851*

Nakashima (H.), see Mitarai (O.), *5693*

Nakatsuji (K.), see Murota (A.), *6673*

Nakayama (I.), experimental methods, impulse, plates, sound generation, Nakamura (A.), *11953*

Nakayama (T.), containers (partially filled), nonlinear analysis, oscillations, pitching, sloshing, Washizu (K.), *5483*
- boundary elements, containers (partially filled), finite element techniques, sloshing, Washizu (K.), *11640*

Nakazatomi (M.), see Sekoguchi (K.), *10566*

Nakazawa (S.), see Kawahara (M.), *3023*
- see Kelly (D.W.), *8786*

Nakazawa (T.), beams, bending, elastoplasticity, reinforced concrete, shear, Ohta (T.), *9444*

Nakazawa (Y.), dynamic plasticity, radial loading, tubes, Yaji (S.), (et al.), *1302*

Nakiboglu (S.M.), see Lambeck (K.), *4844*

Nakonechnyi (A.G.), minimax techniques, regulator problem, stochastic control, *2101*

Nakoryakov (V.E.), see Gasenko (V.G.), *6917*
- see Alekseenko (S.V.), *11612*
- see Gasen'ko (V.G.), *12030*

Nakoryakov (V.Ye.), absorption, film cooling, heat transfer, mass transfer, Grigoryeva (N.I.), *798*

Naletova (V.A.), see Gogosov (V.V.), *850*
- see Gogosov (V.V.), *9790*
- see Golosov (V.V.), *11819*

Namikawa (T.), collision models, heat transfer, plasma, propagation, waves, Hamabata (H.), *8828*

Nanasi (T.), see Markus (S.), *7391*

Nanayakkara (V.K.N.), see Jayatilaka (A. De S.), *7563*

Nanbara (K.), see Nakanishi (E.), *4204*

Nanbu (K.), expansion, gases, nozzles, rarefied flow, Watanabe (Y.), *3646*

Nandakumar (K.), see Masliyah (J.H.), *7715*

Nannei (E.), see Guglielmini (G.), *2793*

Nanri (H.), see Urano (Y.), *9742*

Nansteel (M.W.), channel flow, closed conduit flow, convection (free), laminar flow, Greif (R.), *8701*

Nanyaro (A.P.), see Tennyson (R.C.), *6435*

Naot (D.), shear flow, swirl flow, turbulence, turbulence model, *5466*

Napolitano (M.), cauchy integral, collocation, singular integral equations, splines, Rubini (F.), (et al.), *3119*
- boundary layer, fluid injection, laminar flow, reynolds number (high), subsonic flow, Messick (R.E.), *3656*

Naraghi (M.H.N.), see Chung (B.T.F.), *1704*

Narasimhamurthy (G.S.R.), see Srivastava (R.P.S.), *5814*

Narayan (R.), see Deonath, *5123*

Narayanan (R.), see Efthymiou (M.), *3718*
- bottom irregularities, channel flow, force, gates, hydraulic jump, Schizas (L.S.), *6602*
- experimental results, girders (plate), postbuckling behavior, ultimate strength, Rockey (K.C.), *7322*
- bending, fiber reinforced concrete, fibers, reinforced concrete, torsion, Toorani-Goloosalar (Z.), *9450*
- see Efthymiou (M.), *10394*

Narayanan (S.), beams, damping, structural response, vibration (free), Verma (J.P.), (et al.), *5203*
- panels, plates (sandwich), sound, transmission, Shanbhag (R.L.), *11935*
- acoustics, elasticity, panels, plates (sandwich), Shanbhag (R.L.), *11971*

Narayanaswami (R.), see Venkateswara Rao (G.), *10351*

Narendra (K.S.), adaptive systems, discrete systems, model reference systems, stability, Lin (Y.-H.), *2134*

Narendran (G.), see Venkatarangan (S.N.), *9109*

Narita (Y.), see Leissa (A.), *4426*

Narkiewicz (J.), see Lucjanek (W.), *9317*

Narusawa (U.), see Takao (S.), *5619*
- bgk model, gases, kinetic theory, shock waves, *11441*

Narusberg (V.L.), geometric nonlinearities, optimization, shells (orthotropic), shells (thin), Rikards (R.B.), (et al.), *5348*

Narzullaev (B.N.), fracture, life expectancy, polymers, Karimov (S.N.), (et al.), *6426*

NaseriNeshat (H.), see Chen (C.-J.), *2605*

Nasonov (E.A.), heat transfer, heating, solar energy, Bondarenko (Yu.I.), *10631*

Nassar (E.A.-A.M.), see Nayfeh (A.H.), *4193*

Nasser (A.E.M.), catalytic surfaces, dissociation, heat transfer, hydrogen, real gas effects, shock tubes, East (R.A.), *5562*

Nasser (M.S.), bottom irregularities, channel flow, free boundary, slots, Venkataraman (P.), (et al.), *3599*
- embankments, finite difference methods, nonlinear waves, reflection, wave interactions, *8511*

Nastase (A.), aerodynamic performance, conical flow, delta wings, design, supersonic flow, *2731*

Natarajan (R.), see Tayal (A.K.), *1339*
- see Subbiah (J.), *10179*

Nath (B.), finite element methods, scale effects, stress analysis, Nath (P.), *2069*
- elasticity, finite element methods (hybrid), stress analysis, transformation, *9139*

Nath (G.), see Kumari (M.), *1545*
- see Venkatachala (B.J.), *2886*
- see Venkatachala (B.J.), *11371*

Nath (J.H.), buoys, dynamic stability, gravity waves (breaking), scale models, Chester (S.T.), (et al.), *11695*

Nath (P.), see Nath (B.), *2069*

Nath (S.C.), see Desikan (V.), *6597*

Natke (H.G.), modal analysis, modes, offshore structures, Schulze (H.), *4545*
- dynamic analysis, modal analysis, vibration, *10226*

Natkovich (Yu.S.), see Zlibershteyn (A.M.), *2103*

natural gas, containment, fracture mechanics, lng tankers, tanks, Kaufman (J.G.), Bucci (R.J.), (et al.), *1349*
- flames (diffusion), recirculation, Hatami (R.), *1749*
- dispersion, finite element methods, simulation, Chan (S.T.), Gresho (P.M.), (et al.), *8902*
- boiling, heat exchangers, hydrocarbons, lng, porous walls, Dvoiris (A.D.), Sirotin (A.G.), (et al.), *11770*

Natvig (B.J.), floating structures, linear theory, mooring, nonlinear theory, wave interactions, Pendered (J.W.), *8049*

Natyaganov (V.L.), approximations, magneto fluid dynamics, rotating bodies, spherical bodies, torque, *2888*

Nau (B.S.), seals, vibration, vibration (self excited), *9476*

Naudascher (E.), lumped systems, models, vibration (flow induced), Rockwell (D.), *2717*

Naudascher (E.) eds., bridges (suspension), buildings (tall), heat exchangers, hydraulic machinery, hydraulic structures, nuclear reactors, ship structures, vibration (flow induced), Rockwell (D.), *2906, book*

Naugolnykh (K.A.), see Kozyaev (E.F.), *906*
- see Varavin (V.Yu.), *2946*

Naumann (J.), existence theorems, navier stokes equation, three dimensional flow, uniqueness, *2013*

Naumenko (V.P.), see Volkov (G.S.), *7521*

Naumkina (N.I.), see Zeinetdinova (R.Z.), *5194*

Naumov (A.V.), see Borishanskii (K.N.), *8312*

Naumov (G.E.), see Alekseichik (M.I.), *9113*

naval mechanics, ship dynamics, ship towing, towing cables, Latorre (R.), Bernitsas (M.M.), *8036*

navier stokes equation, existence theorems, incompressible flow, three dimensional flow, Saut (J.C.), Temam (R.), *41*
- cavities, finite difference methods, internal flow, Glotz (G.), Schonauer (W.), (et al.), *570*
- inertia, reynolds number (small), rotating disks, Bar-Yoseph (P.), Salan (A.), (et al.), *579*
- cylindrical bodies, oscillating bodies, secondary flow, two dimensional flow, Kubo (S.), Kitano (Y.), *581*
- compressible flow, reynolds number (high), unsteady flow, Zeytounian (R.), *585*
- compressible flow, finite difference methods, supersonic flow, Berezin (Yu.A.), Kovena (V.M.), (et al.), *589*
- boundary layer, numerical analysis, reynolds number, Hedstrom (G.W.), Osterheld (A.), *606*
- boundary layer, incompressible flow, laminar flow, Krause (E.), Kordulla (W.), *608*
- ducts (curved), laminar flow, turbulent flow, Buggeln (R.C.), Briley (W.R.), (et al.), *621*
- mathematical models, statistical theory, turbulence, Foias (C.), Temam (R.), *641*
- turbulence, turbulence (structure), Larisch (E.), *642*
- diffusion, finite difference methods, gases, stratified flow, Ukeguchi (N.I), Okamoto (H.), (et al.), *825*
- axisymmetric flow, swirl, vortex breakdown, vortex flow, Nakamura (Y.), Uchida (S.), *1504*
- finite difference methods, rotating bodies, spherical bodies, viscous flow, Dennis (S.C.R.), Ingham (D.B.), (et al.), *1507*
- compressible flow, computing techniques, finite difference methods, Abarbanel (S.), Gottlieb (D.), *1526*
- boundary layer, computing techniques, recirculation, viscous flow, Brandeis (J.), Rom (J.), *1548*
- numerical analysis, pipe flow, rotational flow, Pareschi (A.), Montanelli (P.), *1565*
- existence theorems, three dimensional flow, uniqueness, Naumann (J.), *2013*
- finite element methods (hybrid), stability (numerical), variational methods, Letallec (P.), *2078*
- bodies of revolution, drag, rotating bodies, secondary flow, Majhi (S.N.), Vasudeviah (M.), *2603*

N

- finite element methods, incompressible flow, two dimensional flow, Piva (R.), Di Carlo (A.), (et al.), *2611*
- aorta, blood flow, finite element methods, shear stress, Gokhale (V.V.), Tanner (R.I.), (et al.), *3067*
- iterative methods, numerical analysis, reynolds number (high), two dimensional flow, Cebeci (T.), Hirsh (R.S.), (et al.), *3130*
- finite element techniques, iterative methods, stream function, Dhatt (G.), Fomo (B.K.), (et al.), *3143*
- axisymmetric flow, finite element techniques, two dimensional flow, Wille (S.O.), *3145*
- two dimensional flow, viscous flow, Govindaraju (K.), *3617*
- conical bodies, laminar flow, rotating bodies, viscous flow, Patni (G.C.), Rawat (M.L.), *3620*
- cylindrical bodies, finite difference methods, internal flow, rotating disks, Schultz (D.H.), Shah (V.L.), *3621*
- stagnation point, stream function, unsteady flow, vorticity, Da Cunha (D.M.), Nee (V.W.), *3625*
- cavities, discretizations, finite difference methods, networks, Amit (R.), Hall (C.A.), (et al.), *3636*
- boundary conditions, compressible flow, subsonic flow, Rudy (D.H.), Strikwerda (J.C.), *3642*
- ducts (variable area), heat transfer, sudden expansion, viscous flow, Kharin (B.E.), Dvortsov (V.N.), *3784*
- rheology, statistical continuum mechanics, turbulence (structure), viscous flow, Enz (C.P.), *4126*
- compressible flow, lifting surfaces, oseen flow, plates, Homentcovschi (D.), *4522*
- cylindrical bodies, drag, linear theory, membranes, Hughes (B.D.), Pailthorpe (B.A.), (et al.), *4584*
- finite difference methods, internal flow, two dimensional flow, vorticity, Shay (W.A.), *4586*
- finite difference methods, reynolds number (small), stream function, vorticity, Rubin (S.G.), Khosla (P.K.), *4588*
- computing techniques, coordinate systems, mathematical methods, shear flow, Hirschel (E.H.), Kordulla (W.), *4596, book*
- computing techniques, fluid injection, laminar flow, reynolds number, Smith (F.T.), Dennis (S.C.R.), *4613*
- boundary layer, finite difference methods, laminar flow, separated flow, Horton (H.P.), *4614*
- arteries, blood flow, stenoses, Wille (S.O.), *4918*
- eulerian approaches, fluid mechanics, lagrangian approach, laminar flow, stability theory, Huffenus (J.), Khaletzky (D.), *4999*
- conservation laws, three dimensional flow, Spradley (L.W.), Stalnaker (J.F.), (et al.), *5407*
- algorithms, finite difference methods, free boundary, Bulgarelli (U.), Casulli (V.), (et al.), *5408*
- finite difference methods, numerical methods, spectral analysis, Roy (P.), *5410*
- compressible flow, numerical methods, reynolds number (high), Davydov (Yu.M.), *5422*
- boundary layer, interaction, mach number, reynolds number, shock waves, Mateer (G.G.), Viegas (J.R.), *5432*
- boundary layer, stability theory, turbulent flow, viscous flow, Solopenko (V.M.), *6615*
- coatings, film flow, finite element techniques, viscous flow, Saito (H.), Scriven (L.E.), *6616*
- disks, heat transfer, oscillating bodies, second order analysis, Dohara (N.), *6617*
- spectra, turbulence, turbulence (structure), Deissler (R.G.), *6684*
- linearization, magneto fluid dynamics, measurements (dynamic), models, Bondarenko (N.F.), Gak (M.Z.), (et al.), *6856*
- boundary value problems, existence theorems, infinite medium, Ladyzhenskaya (O.A.), Solonnikov (V.A.), *7169*
- evolution equations, linear equations, nonlinear analysis, Teman (R.), *7170*
- computer algebra, dynamics, Howard (J.C.), *7181, book*
- finite difference methods, marching procedures, mesh generation, parabolic equations, stability theory, Rubin (S.G.), *7191*
- galerkin method, rotating disks, stream function, vorticity, Adams (M.L.), Szeri (A.Z.), *7665*
- integral methods, plates, rotating disks, viscous flow, Datta (S.), *7670*
- finite element techniques, galerkin method, reynolds number (small), viscous flow, Heinrich (J.C.), Marshall (R.S.), *7679*
- boundary layer, finite difference methods, parabolic equations, shear flow, Spradley (L.W.), Stalnaker (J.F.), (et al.), *7684*
- compressible flow, mathematical models, one dimensional flow, viscous effects, Sakurai (A.), Kukuyu (A.), *7685*
- boundary layer, computing techniques, cyclones, laminar flow, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7704*
- boundary layer (turbulent), computing techniques, cyclones, rotating fluids, Bhattacharyya (P.), Ghosh (A.), *7705*
- boundary layer, computing techniques, laminar flow, transition, Dumitrescu (H.), Savulescu (S.N.), *7706*
- flow obstructions, three dimensional flow, vorticity, Kitchens (C.W.) Jr., Gerber (N.), (et al.), *7711*
- combustion, convection, Makhviladze (G.M.), Shcherbak (S.B.), *7888*
- channel flow, incompressible flow, lubrication (hydrodynamic), plates (parallel), squeeze films, Verma (R.L.), *8057*
- finite element methods, galerkin method, lubrication (hydrodynamic), non newtonian flow, Tayal (S.P.), Sinhasan (R.), (et al.), *8062*
- biomechanics, blood flow, flexible walls, fluid-structure interaction, muscles, Melbin (J.), Noordergraaf (A.), *8073*
- cauchy problem, three dimensional formulation, time dependence, Bell (J.B.), *8111*
- cavities, finite difference methods, reynolds number (small), two dimensional flow, Gupta (M.M.), *8543*
- channel flow, flow reversal, laminar flow, moving surfaces, Brady (J.F.), Acrivos (A.), *8566*
- hydrodynamic stability, mathematical models, spectral analysis, Taylor (T.D.), Murdock (J.W.), *8608*
- mathematical models, reynolds number (high), turbulence, Deissler (R.G.), *8617*
- convection (forced), cylindrical bodies, integral methods, transient loading, Lin (S.P.), *8683*
- ellipsoids, numerical methods, vortex rings, Durst (F.), Schonung (B.), *9524*
- boundary conditions, numerical methods, stability (numerical), stokes flow, vorticity, Quartapelle (L.), ValzGris (F.), *9527*
- compressible flow, numerical methods, unsteady flow, Kuo-Pen-Yu, *9558*
- combustion, convection (free), Zakarin (E.A.), Kashkarov (V.P.), (et al.), *9779*
- data analysis, existence theorems, finite element techniques, galerkin method, penalty function, Sani (R.L.), Gresho (P.M.), (et al.), *10072*
- cylindrical bodies, internal flow, rotating disks, torque, Bertela (M.), Gori (F.), *10404*
- crossflow, cylindrical bodies, numerical methods, viscous flow, vorticity, Kravchenko (V.I.), *10413*
- coordinate systems, heat transfer, plane surfaces, three dimensional flow, Agrawal (A.K.), Peckover (R.S.), *10415*
- asymptotic behavior, boundary layer, fluid mechanics, heat transfer, Kuiken (H.K.), *10424*
- compressible flow, reattachment, shear layer, turbulent flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10431*
- stratified flow, thermal instability, viscous effects, Makarenko (I.P.), Simuni (L.M.), *10569*
- boussinesq equation, convection (benard), convection (free), heat addition, Frick (H.), Clever (R.M.), *10579*
- evaporation, heat transfer, impingement, jets, mass transfer, Mujumdar (A.S.), Li (Y.-K.), (et al.), *10665*
- diffusion, mixtures, poiseuille flow, Shavaliev (M.Sh.), *10672*
- energy conservation, magneto fluid dynamics, nonlinear theory, uniqueness, Bershadskii (A.G.), *10747*
- lubrication (hydrodynamic), reynolds number, squeeze films, variational methods, Verma (R.L.), *10892*
- finite difference methods, oscillating bodies, spherical bodies, streams, Urakawa (T.), Takahashi (K.), *11365*
- eccentric rotating cylinders, rotating cylinders, stokes flow, two dimensional flow, Suematsu (Y.), Ito (T.), (et al.), *11374*
- blunt bodies, finite difference methods, flow obstructions, unsteady flow, Daiguji (H.), Kobayashi (S.), *11385*
- compressible flow, finite element techniques, shear layer, supersonic flow, unsteady flow, Cooke (C.H.), Blanchard (D.K.), *11429*
- compressible flow, numerical methods, viscous flow, Davis (R.T.), Rubin (S.G.), *11432*
- compressible flow, one dimensional flow, rarefied flow, Aristov (V.V.), Makhmudov (A.A.), (et al.), *11434*

navigation, geophysics, kalman filters, linearization, Dmitriev (S.P.), Shimelevich (L.I.), *184*
- estimation, kalman filters, space vehicles, Madrid (G.A.), Bierman (G.J.), *194*
- airplanes, digital control, flight control, fly-by-wire system, reliability analysis, Berman (H.), Boudreau (J.), *2159*
- calibration, electrostatic gyro, estimation, gyroscopes, kalman filters, mathematical models, strapdown systems, Blanchard (R.L.), *2162*
- inertial guidance, Draper (C.S.), *5060*
- inertial guidance, mission analysis, Harrison (J.V.), Adams (M.G.), (et al.), *5710*
- cruise missile, missiles, modeling, simulation, Schmidt (G.T.), Setterlund (R.H.), *5711*
- algorithms, optimal control, tracking, Reid (J.G.), Chaffin (D.E.), (et al.), *7249*
- feedback, guidance, stability theory, time varying systems, Dorrscheidt (F.), Leuer (A.), *9169*
- inertial guidance, kalman filters, model reduction, Bar-Itzhack (I.Y.), *10083*

Navin (F.P.D.), see Buckland (P.G.), *8454*

Navoznov (O.I.), axisymmetric flow, jets, turbulent mixing, Pavelev (A.A.), *1572*

Nayak (G.C.), see Aggarwal (S.K.), *3566*
- see Aggarwal (S.K.), *10368*

Nayak (J.H.), dynamic analysis, kinematics, mathematical methods, Roth (B.), *4932*

Nayak (P.), see Roy (J.S.), *11509*

Nayfeh (A.H.), constitutive relations, continuum theory, space frames, thermoelasticity, Hefzy (M.S.), *522*

- finite element techniques, simulation, singularities, Nassar (E.A.-A.M.), *4193*
- see Vajravelu (K.), *7714*
- fourier transform, incompressible flow, porous surfaces, suction, two dimensional flow, Reed (H.L.), (et al.), *8563*
- see Asfar (K.R.), *10190*

Nazaroff (G.J.), coordinate systems, differential equations (ordinary), orbit mechanics, *5705*

Nazarov (A.G.), constitutive equations, seismic loading, viscoelastic fluids, *6575*

Nazarov (I.M.), air pollution, monitoring, water pollution, Fridman (Sh.D.), *4095*

Nazarov (N.G.), algorithms, operations research, optimization, pattern recognition, sequential search, Tarasenko (V.F.), *3198*

Nazarov (S.A.), asymptotic behavior, bending (elastic), boundary layer, perturbation methods, plates (rectangular), *8243*

Nazarov (V.A.), buckling, shells (cylindrical), *348*

Nazarova (E.A.), see Pecherskiy (D.M.), *8001*

Nazir (C.P.), rocks, tunneling, *5269*
- bending, columns (eccentrically loaded), design (ultimate strength), reinforced concrete, tension, *6500*

Nazirov (R.R.), see Bakshian (B.T.), *8843*

Nazmeev (Yu.G.), channel flow, convection (forced), pipe flow, viscous effects, Feifer (L.I.), (et al.), *9684*

Neale (K.W.), anisotropic media, necking, rate sensitivity, sheet metal, strain rate, Chater (E.), *274*
- constitutive equations, deformation (finite), deformation (plastic), finite strain, *1197*

Nealy (D.A.), cascades, contamination, deposition, gas turbines, inlets, nozzles, Timmerman (W.H.), (et al.), *4744*

near ground effects, engines, jets, vtol, Lummus (J.R.), *687*
- attenuation, sound propagation, Soom (A.), Gu (R.-R.), *6934*
- environmental tests, flow obstructions, separated flow, siting considerations, vortex flow, wind turbines, Frost (W.), Shieh (C.F.), *10516*
- internal flow, runoff, saturation, soil mechanics, Ahuja (L.R.), Ross (J.D.), (et al.), *10831*

Necas (J.), elasticity, inequalities, plastic flow, plasticity, variational methods, *51*
- elasticity, functional analyis, plasticity, solid mechanics, Hlavacek (I.), *5068, book*

necking, anisotropic media, rate sensitivity, sheet metal, strain rate, Neale (K.W.), Chater (E.), *274*
- elastoplasticity, forming, nucleation, Chu (C.C.), Needleman (A.), *4471*
- micromechanisms, plastic behavior, plasticity, shear bands, Iwakuma (T.), Nemat-Nasser (S.), *5111*
- copper, creep, material testing, Baranov (N.A.), Likhachev (V.A.), (et al.), *6430*
- plane strain, slip line methods, strips, Dei (G.D.), Oding (S.S.), *8203*
- forming, strain analysis, Chu (C.-C.), *10269*

Nedbai (A.Ya.), see Malyutin (I.S.), *11135*

Nedostup (V.I.), gases, mixtures, real gas effects, thermal properties, Gaikevich (E.P.), *10548*

Nee (V.W.), see Da Cunha (D.M.), *3625*

Needleman (A.), see Triantafyllidis (N.), *350*
- see Chu (C.C.), *4471*
- see Triantafyllidis (N.), *10144*

Neerhoff (F.L.), discontinuities, elastic waves, half space, scattering, *404*

Nefedov (N.N.), acoustic measurements, acoustic waves, arrays, radiation, reflection, *5786*

Nefedov (S.N.), cyclohexane, hydrocarbons, thermophysical properties, Filippov (L.P.), *5519*
- see Filippov (L.P.), *10555*

Neiland (V.Ya.), see Dudin (G.N.), *598*

Neilson (H.C.), fluid-structure interaction, pressure distribution, shells (spherical), submerged bodies, transient effects, transient loading, Everstine (G.C.), (et al.), *11635*

Neiman (A.I.), see Aizenberg (Ya.M.), *5894, book*

Neimitz (A.), see Achenbach (J.D.), *3471*

Neise (W.), see Koopmann (G.H.), *8866*
- centrifugal fans, fans, noise abatement, *10801*
- centrifugal fans, fans, noise abatement, Barsikow (B.), *10802*

Neishlos (H.), explosions (underwater), fluid-structure interaction, numerical methods, stability (numerical), submerged bodies, Israeli (M.), (et al.), *1604*

Neittaanmaki (P.), acoustics, boundary value problems, elliptic equations, harmonic waves, time dependence, Picard (R.), *5026*

Neizvestnyy (A.I.), collision models, drops, two phase flow, Kobzunenko (A.G.), *4832*

Nejat (Z.), heat transfer, tubes, two phase flow, *1855*
- bond number, critical heat flux, pipe flow, tubes, Mottaghian (R.), *6774*

Nekrasova (M.N.), delta wings, pressure distribution, subsonic flow, swept wings, visualization, *2732*

Nelin (V.M.), see Dremin (A.N.), *9825*

Nelkin (M.), decay, turbulence (isotropic), turbulent flow, Kerr (R.M.), *5469*

Nelson (F.C.), dynamic response, substructuring, vibration, *394*

Nelson (J.K.) Jr., see Jones (H.L.), *10343*

Nelson (N.D.), beams (timoshenko), rotating shafts, vibration (torsional), *380*

Nelson (R.B.), see Minnetyan (L.), *1457*

Nelson (R.D.), see Sackinger (W.M.), *10870*

Nelson (R.L.), cooling towers, dynamic analysis, vibration (free), *3381*
- cooling towers, dynamic response, vibration (free), *6522*

Nelson (V.), see Clark (R.N.), *9667*

Nemat-Nasser (S.), composite materials, conduction (unsteady), discontinuities, eigenvalue problems, variational methods, Horgan (C.O.), *3110*
- see Iwakuma (T.), *5111*
- anisotropy, composite materials, dynamic behavior, fibers, harmonic waves, orthotropic materials, Yamada (M.), *7408*
- densification, liquefaction, sand, texture, Tobita (Y.), *7437*
- see Minagawa (S.), *8148*
- see Horii (H.), *10184*
- see Hayashi (K.), *10289*
- composite materials, harmonic waves, layered media, Yamada (M.), *11169*

Nemat-Nasser (S.) ed., composite materials, computing techniques, eigenvalue problems, elasticity, finite element methods, fracture, optimization, plasticity, variational methods, viscoelasticity, *3109, book*

Nemira (M.), annular flow, channel flow, heat transfer, turbulent flow, variable fluid properties, Vilemas (J.), (et al.), *7827*

Nemirovsky (Yu.V.), earth, in situ stress distribution, stress analysis, Tyrymov (A.A.), *8956*

Nemkova (L.N.), see Kiiko (I.A.), *11666*

Nepershin (R.I.), brittle fracture, composite materials, fracture toughness, laminates, plates (holed), Klimenov (V.V.), (et al.), *1213*

Nepraz (F.), hydraulic machinery, mathematical models, nonlinear mechanics, *9099*

Nerem (R.M.), aorta, blood flow, muscles, Lovesque (M.J.), (et al.), *6017*

Nerenberg (M.A.H.), see Beaudoin (Y.), *66*

Nerli (G.), see Lisini (G.G.), *7314*

Nerodenko (L.M.), alloys, creep, high temperature, thermoviscoelasticity, Dabizha (E.V.), *1192*

Nersesov (I.L.), see Sadovskiy (M.A.), *5867*

Nersisian (G.G.), see Petrosian (G.L.), *1875*

Nerubenko (G.P.), see Babitskii (V.I.), *4103*

nervous system, biocontrol, biomathematics, mathematical models, Gorozhanin (V.S.), *1172*
- biomathematics, catastrophe theory, mathematical models, zeeman's equations, Stewart (I.), Woodcock (A.E.R.), *2206*
- biomathematics, mathematical models, respiratory system, Chestnova (A.A.), Chetayev (A.N.), *3224*
- biocontrol, identification, Penev (G.D.), Tairov (O.P.), *3225*
- biocontrol, muscles, Armstrong (D.), Moon (M.), *5067*
- biocontrol, dynamic analysis, electroencephalography, mathematical models, nonlinear systems, nonlinear theory, Freeman (W.J.), *6149*
- experimental methods, spine, stress strain relationships, tissues, Hung (T.-K.), Chang (G.-L.), (et al.), *7105*
- brain, heat transfer (biological), high temperature, Epstein (Y.), Keren (G.), (et al.), *7124*
- biocontrol, muscles, oscillations, Oguztoreli (M.N.), Stein (R.B.), *9053*

Nesline (F.W.), design, guidance theory, missiles, *2926*

Nesterenko (B.N.), boundary layer (turbulent), friction, pressure gradient, Fedorov (A.V.), (et al.), *5429*

Nesterenko (V.B.), axisymmetric flow, heat transfer, mass transfer, Tverkovkin (B.Ye.), (et al.), *806*

Nesterenko (V.F.), see Roman (O.V.), *4474*

Nesterko (N.A.), combustion, extinguishment, inhibition, reaction rates, Taran (E.N.), *5636*

Nesterov (A.A.), see Zelentsov (V.V.), *11400*

Nesterov (E.D.), see Khabibullin (M.G.), *5661*

Nesteruk (I.G.), axisymmetric flow, bodies of revolution, cavities, irrotational flow, unsteady flow, *3630*

Nestleroth (J.B.), see Rose (J.L.), *2481*

Neta (B.), diffusion, finite element techniques, inequalities, *3137*

Netes (V.A.), analytical methods, discrete systems, reliability analysis, *4260*

Neth (V.W.), columns, connections, plates, punch problems, reinforced concrete, De Paiva (H.A.R.), (et al.), *9446*

networks, gates, karnaugh map, synthesis, Srivatsa (S.K.), Biswas (N.N.), *105*
- continuum theory, fibers, Pipkin (A.C.), *255*
- cables, Sinclair (G.B.), Hodder (S.B.), *292*
- bonding, computing techniques, mathematical models, paper, Smith (J.C.), *1137*
- design, graph theory, optimization, piping systems, Bhaskaran (S.), Salzborn (F.J.M.), *1165*
- constraints, functional analyis, graph theory, optimization, Burdyuk (V.Ya.), Reva (V.N.), *2032*
- computer programming, queue theory, Vishnevskii (V.M.), Tverdokhlebov (A.S.), *2106*
- cable nets, cables, dynamic analysis, Batchelor (B. De V.), Gambhir (M.L.), *2257*
- impact, strings, Brody (H.), *2374*
- impact, strings, Brody (H.), *2375*
- algorithms, modeling, water, Rahal (C.M.), Sterling (M.J.H.), (et al.), *2596*
- design, graph theory, integer programming, optimization, pipelines, Groaz (M.), *3193*

- dynamic response, perturbation methods, ropes, vibration (nonlinear), Ivovich (V.A.), *3351*
- design (optimum), drainage, highways, stormwater, Templeman (A.B.), Walters (G.A.), *3418*
- cavities, discretizations, finite difference methods, navier stokes equation, Amit (R.), Hall (C.A.), (et al.), *3636*
- chains, kinematics, theory, Davies (T.H.), *5373*
- characteristic methods, coding, fluidics, unsteady flow, Haloulakos (V.E.), *5487*
- cables, dynamic response, experimental mechanics, Argyris (J.H.), Aicher (W.), (et al.), *7390*
- iterative methods, watersheds, Divenot (A.), *8136*
- numerical methods, piping systems, Wood (D.J.), Rayes (A.G.), *8583*
- impact, net, projectiles, ropes, submerged bodies, Wortman (A.), *10881*
- adaptive systems, design, feedback, pierce loop, queue theory, Yu (W.), Majithia (J.C.), *11093*
- acoustic properties, noise abatement, refraction, strips, Amram (M.), Stern (R.), *11969*

Netzer (D.W.), see Hewett (M.E.), *5646*

Neu (J.C.), convection, diffusion, hydrodynamic stability, nonlinear theory, perturbation methods, *8602*

Neuberger (A.W.), annuli, compressible flow, irrotational flow, pipe flow, rotating cylinders, swirl flow, *9586*

Neuberger (J.W.), compressible flow, differential equations (partial), numerical methods, transonic flow, *2616*

Neubert (J.A.), arrays, sound fields, underwater acoustics, *7945*

Neubert (V.H.), see Rangaiah (V.P.), *3360*

- beams, dynamic response, elastic behavior, seismic loading, Rangaiah (V.P.), *7383*

Neudachin (I.G.), see Barashkin (S.T.), *591*

Neuerburg (W.), deformation, optical instruments, towers, wind loads, *3906*

- deformation, pressure measurement, towers, wind loads, *7909*

Neugebauer (G.), design, digital control, mathematical models, modeling, synthesis, *7254*

Neuhoff (H.G.), see Grahl (K.), *10529*

Neuimin (V.M.), see Suachev (I.P.), *1632*

Neuman (C.P.), see Baradello (C.S.), *2092*

neural nets, bifurcation, biomathematics, mathematical models, Ermentrout (G.B.), Cowan (J.D.), *9197*

- bifurcation, biomathematics, neurons, Plant (R.E.), *9198*

neurons, bifurcation, biomathematics, neural nets, Plant (R.E.), *9198*

Neuzil (C.E.), permeability, porous media, rocks, Cooley (C.), (et al.), *5266*

- fracture, poiseuille flow, rocks, viscous flow, Tracy (J.V.), *10832*

Nevolin (V.G.), dispersion, multiphase flow, particles, Kirchanov (V.G.), *6966*

Newberger (P.A.), experimental results, spectra, turbulence, turbulence (geophysical), turbulence (structure), Caldwell (D.R.), *644*

Newcomb (T.P.), brakes, friction (sliding), heat transfer (direct contact), *5974*

- automobiles, brakes, design, *9469*

Newhall (B.K.), currents, nonhomogeneous media, sound propagation, underwater acoustics, Jacobson (M.J.), (et al.), *5728*

- eddies, random media, sound propagation, Jacobson (M.J.), (et al.), *11904*

Newman (B.G.), flexible bodies, fluid-structure interaction, membranes, strouhal number, two dimensional flow, Low (H.T.), *11632*

Newman (J.C.) Jr., elliptical cracks, finite element techniques, flaws, stress intensity factor, Raju (I.S.), *7518*

Newsom (J.R.), design, flight control, flutter, optimal control, *2180*

Newton (S.G.), beams (timoshenko), dynamic effects, elastic foundations, vehicles, winkler foundation, Clark (R.A.), *1460*

newton method, convergence, design (optimum), mathematical methods, Watson (L.), Yang (W.H.), *56*

- computing techniques, iterative methods, large scale systems, nonlinear methods, Geradin (M.), Idelsohn (S.), (et al.), *64*
- convergence, kepler equation, numerical methods, orbit mechanics, Broucke (R.), *880*
- gradient techniques, iterative methods, matrices (sparse), Gambolati (G.), *1116*
- approximations, computing techniques, convergence, Potra (F.A.), *1123*
- finite element techniques, fluid mechanics, incompressible flow, viscous flow, Engelman (M.S.), Strang (G.), (et al.), *1128*
- computing techniques, differential equations (partial), iterative methods, nonlinear methods, Carey (G.F.), Krishnan (R.), *2036*
- computing techniques, finite element techniques, nonlinear analysis, Mansfield (L.), *2064*
- multivariable systems, penalty function, Khenkin (M.Z.), *3124*
- constraints, finite element techniques, inelasticity, penalty function, Malkus (D.S.), *3134*
- algorithms, computing techniques, iterative methods, Herzberger (J.), *4185*
- gradient techniques, nonlinear analysis, nonlinear programming, optimization, Tanabe (K.), *4996*
- algorithms, nonlinear systems, Mah (R.S.H.), Lin (T.D.), *5007*
- convergence, frechet derivative, iterative methods, Groze (S.), *5010*
- boundary value problems, computer algebra, differential equations, Hanson (J.N.), *6098*
- computing techniques, elastoplasticity, fracture, Delorenzi (H.G.), *6446*
- geometric nonlinearities, minimization, nonlinear analysis, structural analysis, Kamat (M.P.), Watson (L.T.), (et al.), *7188*
- eigenvalue problems, iterative methods, matrix methods, mesh generation, Mccormick (S.F.), *7190*
- boundary value problems, convergence, iterative methods, Paumier (J.-C.), *7195*
- finite element techniques, heat transfer, nonlinear analysis, Hogge (M.A.), *7225*
- algorithms, boundary value problems, eigenvalue problems, sturm-liouville problem, Bailey (P.B.), *8130*
- computing techniques, elastoplasticity, iterative methods, Atrek (E.), *9117*
- computing techniques, mathematical methods, Von Gudenberg (J.W.), *10050*
- acoustic emission, computing techniques, flaw detection, nondestructive tests, Vasilev (A.M.), Maslov (B.Ya.), *10317*

Neymark (Yu.I.), markov processes, optimization, stochastic processes, stochastic systems, Preobrazhenskaya (A.M.), *4277*

Nezlin (M.V.), see Antipov (S.V.), *7051*

Neznaev (A.N.), see Ustinov (A.N.), *5648*

Nezu (I.), see Nakagawa (H.), *5468*

Ng (K.S.), see Cho (Y.I.), *3670*

Ng (K.W.), plates, submerged bodies, transmission, ultrasonics, Ngoc (T.D.K.), (et al.), *11657*

Ngan (K.M.), see Chow (C.L.), *2438*

Ngian (K.-F.), expansion, fluidized beds, granular media, Martin (W.R.B.), *5843*

Nginh (N.M.), see Zborowski (A.), *1921*

Ngo Zui Kan, see Zarubin (A.G.), *7838*

Ngoc (D.M.), chemical reactors, filtration, porous media, *7006*

Ngoc (T.D.K.), liquid solid interface, numerical methods, reflection, ultrasonics, Mayer (W.G.), *3944*

- see Ng (K.W.), *11657*

Nguyen (D.L.), liquid gas mixture, sound speed, two phase flow, Winter (E.R.F.), (et al.), *4823*

Nguyen (H.T.), see Banon (G.), *8122*

Nguyen (L.T.), airplane performance, airplanes, controllability, *694*

Nguyen (M.D.), see Berest (P.), *3262*

Nguyen (Q.S.), continuum mechanics, crack propagation, fracture mechanics, fracture toughness, j-integral, *7529*

Nguyen Dang Hung, see Frangopol (D.), *335*

- contact problems, elastic bodies, finite element techniques, variational methods, De Saxce (G.), *5093*
- creep, finite element techniques, nonlinear analysis, shear, stiffness matrix, *7218*

Nguyen Xuan Hung, beams (flexural), dynamic analysis, shear loading, vibration (nonlinear), *1263*

- shells (cylindrical), vibration (nonlinear), *6301*

Ni (A.L.), see Kraiko (A.N.), *1803*

- chemically reactive flow, compressible flow, shock waves, supersonic flow, Ryzhov (O.S.), *11424*

Niazy (A.), layered media, love waves, scattering, Kazi (M.H.), *4453*

Nicholas (T.), see Zukas (J.A.), *9350*

Nicholls (B.H.), acoustic measurements, impedance, materials properties, *2953*

Nichols (B.D.), see Hirt (C.W.), *1115*

Nichols (R.W.) ed., forming, materials properties, nuclear reactors, pressure vessels, structural materials, welding, *3564, book*

Nicholson (A.J.C.), detection, flames, ionization, spectral analysis, Swingler (D.L.), *1750*

Nicholson (D.W.), damage, metals, plastic flow, viscoplasticity, *3078*

Nicholson (H.), see Fernando (K.V.M.), *9118*

- see Fernando (K.V.M.), *10077*

Nicholson (J.W.), see Simmonds (J.G.), *3229*

nickel alloys, endurance limit, environmental tests, fatigue, high cycle fatigue, life expectancy, Mowbray (D.F.), Giaquinto (E.V.), (et al.), *443*

- creep rupture, high temperature, material testing, Dwivedi (V.S.), *1410*
- creep, dispersion hardening, mechanical properties, tensile strength, Whittenberger (J.D.), *3500*
- endurance limit, fatigue, gas turbines, high temperature, Palienko (E.Ya.), *7475*
- crack propagation, edge cracks, fatigue, material testing, microcracks, Lankford (J.), Cook (T.S.), (et al.), *7476*
- resistance, resistance thermometers, thermal measurements, Lushchaev (G.A.), Karchkov (V.A.), (et al.), *7822*

Nicklason (G.), see Lardner (R.W.), *9103*

Nicodemo (L.), see Apicella (A.), *2576*

Nicolae (V.), dynamic analysis, energy conservation, lagrange equations, Chiroiu (V.), *1065*

- see Chiroiu (V.), *10234*

Nicolaides (R.A.), see Fix (G.J.), *5787*

Nicolis (C.), climatology, heat transfer (atmospheric), *988*

Nicoll (W.B.), see El-Hawary (M.A.), *7749*

Nicolle (K.), see Van'T Woudt (B.D.), *976*

Niedbal (N.), aerospace vehicles, dynamic response, modal analysis, *533*

Niederer (P.), see Stettler (J.C.), *4913*

- see Stettler (J.C.), *4914*

Nielsen (J.N.), see Dillenius (M.F.E.), *3738*

Nielsen (M.P.), bending, plates (rectangular), slabs, twisting, Bach (F.), *1228*

Nielsen (R.S.), see Lin (Y.-H.), *218*

Niemann (H.J.), see Hamach (R.), *1450*
- cooling towers, experimental mechanics, shells, wind loads, Ruhwedel (J.), *4542*

Niemeyer (G.), circulation, finite difference methods, ocean waves, oceanography, surface waves, *4862*
Niessen (E.), design, shells (stiffened), ship structures, structural stability, submarine, *6542*
Niessner (H.), see Ribaut (M.), *2654*
Niethammer (J.E.), see Sparrow (E.M.), *7836*
Nieto De Castro (C.A.), see Alizadeh (A.), *10667*
Nieuwstadt (F.T.M.), boundary layer (atmospheric), diffusion, mathematical methods, mathematical models, *6830*
Niewiadomski (M.), see Haman (K.E.), *9931*
Nigam (K.M.), see Manohar (K.), *9958*
Niggemann (M.), constitutive equations, non newtonian flow, viscoelastic fluids, *6574*
Nigh (G.L.), finite element techniques, rotating disks, vibration (forced), Olson (M.D.), *3369*
Nigin (A.A.), see Getsov (L.B.), *516*
Nigmatulin (B.I.), bubble dynamics, heat transfer, liquid vapor mixture, mass transfer, two phase flow, Kroshilin (A.Ye.), (et al.), *10650*
Nigmatulin (R.I.), heat transfer, liquid gas mixture, liquid vapor mixture, mass transfer, two phase flow, Khabeyev (N.S.), *1847*
- bubble dynamics, heat transfer, oscillations, two phase flow, Khabeev (N.S.), *12031*

Nigro (L.), see Brusa (L.), *6318*
Nigul (U.K.), inverse problems, laplace transform, viscoelastic waves, *5239*
Nihoul (J.C.J.), currents, ocean air interaction, oceanography, turbulence (geophysical), *4852, book*
Niiler (P.P.), circulation, eddies, oceanography, *8974*
Niinobe (Y.), girders (plate), plastic behavior, postbuckling behavior, shear loading, *6239*
Nikiforov (I.V.), estimation, faults, reliability analysis, stochastic processes, *4269*
Nikiforovskii (V.S.), dynamic response, numerical methods, plates, Tetenov (E.V.), (et al.), *2377*
Nikiforuk (P.N.), adaptive systems, control, flight control, stol, Ohta (H.), (et al.), *2157*
Nikishkov (G.P.), crack growth, finite element techniques, stress intensity factor, Vainshtok (V.A.), *4494*
Nikitenko (A.F.), creep, elastoplasticity, fatigue, life expectancy, structural design, Zaev (V.A.), *6431*
Nikitenko (N.I.), deformation, inverse problems, numerical methods, thermoelasticity, *1833*
- channel flow, cooling, heat exchangers, heat transfer, laminar flow, Tsybulenko (E.V.), (et al.), *2829*

Nikitin (N.V.), see Dunskii (V.F.), *1512*
Nikitin (S.K.), see Ivashchenko (B.P.), *7765*
Nikitin (V.M.), see Volkov (Yu.A.), *12052*
Nikitina (G.D.), see Kozlov (L.F.), *3661*
Nikolaev (B.A.), see Tomashevskii (V.T.), *7594*
Nikolaev (Yu.A.), see Vasilev (A.A.), *882*
Nikolaevskii (V.N.), averaging, mixture theories, multiphase media, nonhomogeneous media, *1972*
- crack growth, fracture criteria, inelasticity, thermodynamics, *7524*
- brittle fracture, crack propagation, fracture, material testing, *7530*

Nikolaichik (L.V.), see Sheiman (V.A.), *10664*
Nikolayev (I.V.), plane surfaces, processing, seismic waves, Leontyeva (T.N.), *7025*
Nikolskiy (A.A.), compressible flow, plane flow, rotational flow, streamlines, subsonic flow, vortex flow, *568*
Nikonov (N.T.), dilute solutions, polymers, viscometry, viscosity, *7641*
Nikonov (V.G.), see Kalachev (M.G.), *3161*
Nikonova (F.I.), earth, gravimagnetic anomalies, gravity, inverse problems, magnetic field, Tsurilskiy (A.V.), *5879*
Nikulin (A.N.), see Mironchuk (N.S.), *8550*
Nikulin (V.A.), cavitation, erosion, rotating disks, testing equipment, wear, Konovalov (V.M.), (et al.), *7573*
Nikulin (V.V.), solid-fluid interaction, stability, stratification, tornados, vortices, *9528*
Nilmani (M.), bubble dynamics, prediction, two phase flow, Maxwell (T.T.), (et al.), *12041*
Nilson (R.H.), asymptotic behavior, porous media, transition flow, *7004*
- conduction (unsteady), darcy flow, diffusion, half space, mass transfer, *8778*

Nilsson (B.), absorption, ducts, modal analysis, sound propagation, Brander (O.), *6926*
- bifurcation, ducts, modes, reflection, sound propagation, Brander (O.), *6927*

Nilsson (G.E.), blood flow, flow measurement, laser doppler velocimeters, tissues, Tenland (T.), (et al.), *9059*
Nilsson (J.-O.), see Wirmark (G.), *9393*
Nimmons (M.J.), see Characklis (W.G.), *6812*
Ninomiya (K.), see Takezawa (S.), *1791*
Niquet (J.J.), see Bouvard (M.), *10838*
Nir (A.), see Pismen (L.M.), *9538*
Nishida (H.), see Nakabayashi (K.), *11375*
Nishida (O.), combustion products, flames (diffusion), soot formation, *11795*
Nishida (S.), see Fukumoto (Y.), *2263*
Nishijima (S.), data analysis, estimation, fatigue, statistical theory, strength, *10323*
Nishikawa (K.), empirical methods, freon, heat transfer, nucleate boiling, Fujita (Y.), (et al.), *739*
Nishimatsu (Y.), modeling, rocks, strain rate, strength, Yamaguchi (T.), (et al.), *9367*
Nishimura (H.), see Ohsawa (H.), *8358*
- calibration, data analysis, flow measurement, pitot tube, three dimensional flow, velocity measurement, *8673*
- heat exchangers, maximum principle, optimization, *10620*

Nishimura (N.), see Kobayashi (S.), *4344*
Nishimura (S.), see Yamaguchi (K.), *1345*
Nishimura (T.), see Murase (K.), *3291*
- oscillations, riccati equation, time invariant systems, Kano (H.), *5041*

Nishioka (T.), earthquakes, markov processes, prediction, probability, Shah (H.C.), *8962*
Nishitani (T.), combined loading, experimental results, polymers, viscoelastic materials, Murayama (Y.), *1189*
- birefringence, cyclic loading, elastoviscoplasticity, photoelasticity, polymers, Koike (Y.), *2466*
- drawing, photoelasticity, polymers, viscoplasticity, *2471*

Nishiwaki (H.), see Fujii (S.), *3951*
Nishiyama (E.), annular flow, condensation (filmwise), tubes, tubes (horizontal), *8699*
Nishiyama (K.), biomathematics, monte carlo analysis, muscles, Shimizu (H.), *7107*
Nishiyama (T.), bubble dynamics, cavitation, collapse, compressional waves, Akaizawa (M.), *6994*
Nisitani (H.), anisotropy, fatigue, heat treatment, life expectancy, rolling, strength, Kage (M.), *6422*
- crack initiation, crack propagation, ductile fracture, high cycle fatigue, microcracks, Takao (K.-I.), *9389*

Nissim (E.), airplanes, control, design, external stores, flutter, Lottati (I.), *2183*
- see Lottati (I.), *7782*
- airfoils, control, flutter, incompressible flow, trailing edge, Lottati (I.), *7906*

Nistor (I.), acceleration waves, cosserat solids, shock waves, thermoelasticity (transient), *4129*
Nita (J.), see Kajdas (C.), *7080*
Nita (M.M.), airplanes, dynamic analysis, variable mass, *3088*
Nitescu (P.N.), kinematics, linkages, mechanisms (spatial), *3579*
- graphical methods, kinematics, linkages, mechanisms (spatial), *3580*
- kinematics, manipulators, robotics, structural support, *4141*
- kinematics, manipulators, robotics, *4934*
- kinematics, manipulators, robotics, *4935*
- dynamic analysis, kinematics, spatial mechanisms, structural elements, *4937*

Nitsche (W.), boundary layer, calibration, friction (skin), preston tubes, shear, *5507*
Niumpradit (B.), load transfer, loads, piles, porous media, saturation, soils, Karasudhi (P.), *2385*
Niwa (A.), buckling, seismic loading, tanks, Clough (R.W.), *8015*
Niwa (Y.), catastrophe theory, discrete systems, structural stability, Watanabe (E.), (et al.), *4388*
Nix (W.D.), see Pharr (G.M.), *3452*
- see Blum (W.), *6187*

Nixon (D.), see Mcintosh (S.C.) Jr., *1104*
- see Kerlick (G.D.), *5417*

Niyogi (P.), airfoils, compressible flow, numerical methods, transonic flow, Dutta (S.), *1525*
- compressible flow, numerical methods, shock waves, transonic flow, Das (T.K.), *8548*

Noack (G.), see Franck (D.), *4556*
Noah (S.T.), dynamic response, stability theory, vibration (parametric), Hopkins (G.R.), *8289*
Noakowski (P.), design, loads, reinforced concrete, *1442*
Noback (R.), airplanes, computer aided design, damping, gust loads, power spectral density, yawing, Blaauboer (C.), *11843*
Nobile (L.), ceramics, fracture criteria, fracture mechanics, griffith cracks, *8392*
Noble (A.E.), see Barker (H.A.), *226*
Noble (F.W.), crack growth, fatigue, foam, material testing, polymers, Lilley (J.), *3437*
Noblesse (F.), boundary value problems, green function, integral methods, ship resistance, wavemaking resistance, *9008*
- fredholm equations, gravity waves, green function, hulls, potential flow, wave trains, *9944*

Nocilla (S.), averaging, dynamic analysis, vibration (nonlinear), *3344*
Noda (N.), convection, cylindrical bodies, thermal stresses, thermoelasticity (transient), Sugano (Y.), *7950*
Noda (T.), see Sugiyama (Y.), *11685*
Nof (D.), mixing layers, stratified flow, *979*
- channel flow, estuaries, rotating fluids, *4869*

- channel flow, currents, estuaries, rotating fluids, *7053*

Nogami (T.), piles, soil structure interaction, vibration, Novak (M.), *10258*

noise, dynamic response, noise (random), random excitation, Kiureghian (A.D.), *517*
- bubble dynamics, nonhomogeneous media, sound generation, viscosity, Mccomb (W.D.), Ayyash (S.), *889*
- acoustics, jet engines, sound generation, supersonic flow, Zhmulin (E.M.), Munin (A.G.), (et al.), *910*
- mining, noise abatement, noise measurements, Utley (W.A.), *914*
- compressible flow, jets, pressure measurement, Hoglund (L.E.), Siddon (T.E.), *1649*
- environmental control, noise (traffic), Ahrlin (U.), Rylander (R.), *1816*
- environmental control, noise abatement, Hede (A.J.), *1817*
- acoustics, noise abatement, Tudose (C.), Culea (D.), (et al.), *1819*
- sound fields, Oelkers (C.I.), *1823*
- acoustic measurements, acoustics (psychological), hearing, Indlin (Yu.A.), *2204*
- electric power, motors, noise abatement, Yang (S.J.), *2937, book*
- turbojet engines, Zhvalov (V.P.), Zhukov (E.N.), (et al.), *2943*
- acoustics, aerodynamic excitation, nozzles, Knott (P.R.), Blozy (J.T.), (et al.), *2944*
- machinery, simulation, spectra, Sasaki (K.), Sato (T.), (et al.), *2957*
- attenuation, ear muffs, noise abatement, nonlinear waves, shock waves, Osmundsen (E.), Gjaevenes (K.), *2958*
- acoustics (psychological), human body, Kryter (K.D.), Poza (F.), *3072*
- jet engines, noise abatement, turbofan engines, Fujii (S.), Nishiwaki (H.), (et al.), *3951*
- machinery, noise abatement, Koss (L.L.), *3952*
- acoustics, arrays, Earwicker (M.J.), *3958*
- acoustics, underwater acoustics, Wolcin (J.J.), *3961*
- acoustics, spectral analysis, Robertson (G.H.), *3965*
- arrays, underwater acoustics, Wagstaff (R.A.), *3966*
- coherent structure, noise abatement, power plants, Ying (S.P.), Dennison (E.E.), *3978*
- seismic waves, spectral analysis, Kats (S.A.), Ptetsov (S.N.), *4034*
- dynamic testing, internal combustion engines, measurements (dynamic), Tschoke (H.), *4741*
- axial fans, sound generation, Fukano (T.), Kodama (Y.), (et al.), *4765*
- fans, jet engines, Sofrin (T.G.), Mathews (D.C.), *4773*
- barriers, noise abatement, Medwin (H.), *4799*
- jet engines, noise abatement, supersonic flow, Clauss (J.S.) Jr., Wright (B.R.), (et al.), *4805*
- jet engines, noise abatement, trailing edge, wall jets, Joshi (M.C.), Yu (J.C.), *4806*
- boundary layer, stability, wings, Mangiarotty (R.A.), *4808*
- rotors, turbines, turbulence, Trunzo (R.), Lakshminarayana (B.), (et al.), *4809*
- power generation, two phase flow, water hammer, Papadakis (C.) eds., Scarton (H.), *5476, book*
- axial pumps, cavitation, reynolds number (high), vibration (flow induced), Vladaianu (D.), Marinescu (V.), *5501*
- diesel engines, modeling, Crocker (M.J.), Hamilton (J.F.), *5651*
- ocean, underwater acoustics, Wagstaff (R.A.), *5740*
- acoustic measurements, shallow water, underwater acoustics, Walker (A.W.), *5750*
- airplanes, atmosphere, nonlinear waves, sound propagation, Morfey (C.L.), Howell (G.P.), *5766*
- ducts, modes, sound propagation, Kerschen (E.J.), Johnston (J.P.), *5777*
- blades, centrifugal fans, noise measurements, Leist (H.), *5780*
- noise measurements, rainfall, vegetation, wind, Miller (L.N.), *5791*
- attenuation, noise measurements, springs, Meltzer (G.), Melzig-Thiel (R.), *6895*
- modes, shells (cylindrical), Dowell (E.H.), *6925*
- jets, sound generation, Schaffar (M.), Hancy (J.P.), *7934*
- machinery, noise abatement, Koopmann (G.H.), Benner (H.), *8868*
- cavitation inception, pumps, scale effects, Mcnulty (P.J.), Pearsall (I.S.), *10530*
- combustion (turbulent), flames (turbulent), noise (combustion), turbulent flow, Legendre (R.), *10705*
- noise abatement, piston driven flow, positive displacement pumps, sound generation, Lechner (E.), Stich (B.), *10721*
- sound generation, vortex tubes, vortices, Legendre (R.), *10794*
- edge effects, plates, sound generation, Amiet (R.K.), *10804*
- finite element techniques, machinery, radiation, Thompson (B.S.), *11943*
- helicopters, rotors, Dahan (C.), Gratieux (E.), *11994*

noise (aerodynamic), noise abatement, propellers, Succi (G.P.), *904*
- coherent structure, compressible flow, experimental results, jets, turbulence, Armstrong (R.R.) Jr., *1580*
- boundary layer (turbulent), sound generation, trailing edge, Howe (M.S.), *2941*
- aerodynamic excitation, eddies, jets, shear flow, turbulence, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- noise measurements, trailing edge, Brooks (T.F.), Hodgson (T.H.), *4768*
- propellers, Tanna (H.K.), Burrin (R.H.), (et al.), *4771*
- fans, flow obstructions, Woodward (R.P.), Glaser (F.W.), *5782*
- boundary layer (turbulent), oscillatory flow, turbulent flow, Antonov (A.N.), *6640*
- attenuation, barriers, diffraction, heat exchangers (crossflow), vortex shedding, Howe (M.S.), *6931*
- aerodynamic interference, axial fans, turbofan engines, wakes, Shaw (L.M.), Glaser (F.W.), *7894*
- sound fields, trailing edge, turbulent flow, Howe (M.S.), *7937*
- feedback, orifices, sound generation, Czarnecki (S.), Czechowicz (M.), (et al.), *7938*
- aerodynamic interference, blades, helicopters, vortex lines, Widnall (S.E.), Wolf (T.L.), *8648*
- analogies, sound propagation, Lighthill (J.), *8863*
- airplanes, noise abatement, supersonic flow, O'Keefe (J.V.), Mangiarotty (R.A.), (et al.), *8867*
- hull propeller interaction, hulls, sound generation, Plunt (J.), Mcqueen (D.), *9011*

noise (random), cauchy problem, galerkin method, hyperbolic equations, kolmogorov equation, Girya (T.V.), *42*
- estimation, identification, sampling, Semesenko (M.P.), *163*
- dynamic response, noise, random excitation, Kiureghian (A.D.), *517*
- dynamic response, excitation, random excitation, Gasparini (D.A.), Debchaudhury (A.), *518*
- blood flow, experimental methods, flow measurement, Cathignol (D.J.), Fourcade (C.), (et al.), *1043*
- functional equations, stochastic processes, volterra series, Kenefic (R.), Nuttall (A.), (et al.), *2026*
- classification, detection, estimation, signal detection, Zilbershteyn (A.M.), Natkovich (Yu.S.), *2103*
- convergence, mathematical methods, stochastics, Korostelev (A.P.), *6091*
- measurements (dynamic), structural response, transfer functions, Aubourg (M.), Guesdon (M.), *6321*
- airplane structures, turbojet engines, Magliozzi (B.), *10803*
- linear systems, linear theory, stability theory, stochastic systems, Prussing (J.E.), *11057*

noise (traffic), airplanes, noise measurements, Taylor (S.M.), Hall (F.L.), (et al.), *913*
- digital simulation, noise abatement, sound generation, Jones (R.R.K.), Hothersall (D.C.), (et al.), *1812*
- acoustic measurements, airplanes, sampling, Schomer (P.D.), De Vor (R.E.), *1814*
- air pollution, correlation, noise abatement, Makarewicz (R.), Green (A.E.S.), *1815*
- environmental control, noise, Ahrlin (U.), Rylander (R.), *1816*
- acoustic measurements, noise abatement, sound propagation, Jones (H.W.), Stredulinsky (D.C.), (et al.), *1822*
- airplanes, noise abatement, simulation, supersonic flow, Grantham (W.D.), Smith (P.M.), (et al.), *2960*
- noise abatement, noise measurements, Augusztinovicz (F.), Buna (B.), *3953*

noise abatement, noise (aerodynamic), propellers, Succi (G.P.), *904*
- fans, sound generation, Fukano (T.), Kodama (Y.), (et al.), *905*
- acoustic measurements, sandwich construction, Jones (R.E.), *911*
- adaptive systems, attenuation, dipoles, Eghtesadi (K.), Leventhall (H.G.), *912*
- mining, noise, noise measurements, Utley (W.A.), *914*
- absorption, attenuation, barriers, Czarnecki (S.), *916*
- absorption, acoustics, anechoic chambers, vegetation, Martens (M.J.M.), *917*
- sound generation, sound propagation, vibration, Andrzejewski (M.), Cempel (C.), *1805*
- acoustics, attenuation, sound propagation, Attenborough (K.), *1811*
- digital simulation, noise (traffic), sound generation, Jones (R.R.K.), Hothersall (D.C.), (et al.), *1812*
- air pollution, correlation, noise (traffic), Makarewicz (R.), Green (A.E.S.), *1815*
- environmental control, noise, Hede (A.J.), *1817*
- acoustic measurements, machinery, sound propagation, Schirmer (W.), *1818*
- acoustics, noise, Tudose (C.), Culea (D.), (et al.), *1819*
- attenuation, ducts, lagging, Smith (T.), Rae (J.M.), (et al.), *1820*
- vibration isolation, Purcell (W.E.), *1821*
- acoustic measurements, noise (traffic), sound propagation, Jones (H.W.), Stredulinsky (D.C.), (et al.), *1822*
- electric power, motors, noise, Yang (S.J.), *2937, book*
- impact, sound generation, Richards (E.J.), *2956*
- attenuation, ear muffs, noise, nonlinear waves, shock waves, Osmundsen (E.), Gjaevenes (K.), *2958*
- airplanes, noise (traffic), simulation, supersonic flow, Grantham (W.D.), Smith (P.M.), (et al.), *2960*
- jet engines, noise, turbofan engines, Fujii (S.), Nishiwaki (H.), (et al.), *3951*
- machinery, noise, Koss (L.L.), *3952*
- noise (traffic), noise measurements, Augusztinovicz (F.), Buna (B.), *3953*
- coherent structure, noise, power plants, Ying (S.P.), Dennison (E.E.), *3978*
- aerodynamic interference, airplanes, propellers, Muller (J.), Rouha (L.), *4680*
- jet engines, sound propagation, wings, Wang (M.E.), *4770*
- ducts, end effects, orifices, sound fields, Pollack (M.L.), *4777*
- absorption, acoustic properties, cavities, resonance, Velizhanina (K.A.), Oborotov (V.A.), *4783*
- barriers, noise, Medwin (H.), *4799*
- absorption, geometrical properties, reverberation, Bartel (T.W.), *4800*

- jet engines, noise, supersonic flow, Clauss (J.S.) Jr., Wright (B.R.), (et al.), *4805*
- jet engines, noise, trailing edge, wall jets, Joshi (M.C.), Yu (J.C.), *4806*
- absorption, damping, statistical theory, Maidanik (G.), *4807*
- crankshafts, diesel engines, vibration (torsional), Ochiai (K.), Nakano (M.), *5652*
- energy conservation, fuels, gas turbines, jet engines, Gal-Or (B.) ed., *7805, book*
- centrifugal fans, resonance, Koopmann (G.H.), Neise (W.), *8866*
- airplanes, noise (aerodynamic), supersonic flow, O'Keefe (J.V.), Mangiarotty (R.A.), (et al.), *8867*
- machinery, noise, Koopmann (G.H.), Benner (H.), *8868*
- airplane structures, airplanes, Revell (J.D.), Balena (F.J.), (et al.), *9850*
- airplanes, jet engines, Parthasarathy (S.P.), Cuffel (R.F.), (et al.), *9852*
- noise, piston driven flow, positive displacement pumps, sound generation, Lechner (E.), Stich (B.), *10721*
- acoustics (architectural), sound propagation, Heckl (M.), *10788*
- flow irregularities, jets, sound generation, Shivashankara (B.N.), Bhat (W.V.), *10795*
- centrifugal fans, fans, Neise (W.), *10801*
- centrifugal fans, fans, Neise (W.), Barsikow (B.), *10802*
- acoustic measurements, airplane structures, Barton (C.K.), Mixson (J.S.), *10805*
- acoustics (architectural), barriers, Rosenhouse (G.), Bar-Ilan (M.), *11932*
- attenuation, ducts, exhaust gases, Panicker (V.B.), Munjal (M.L.), *11939*
- attenuation, ducts, exhaust gases, flow reversal, Panicker (V.B.), Munjal (M.L.), *11940*
- acoustic properties, networks, refraction, strips, Amram (M.), Stern (R.), *11969*
- flight tests, jet engines, Fitzsimmons (R.D.), Mckinnon (R.A.), (et al.), *11993*
- acoustics, energy methods, Jessel (M.J.M.), *11995*
- acoustics, attenuation, ducts, energy methods, Gaudefroy (A.), *11996*
- acoustics, energy methods, finite element techniques, perforated bodies, Ross (D.F.), *11997*

noise measurements, airplanes, noise (traffic), Taylor (S.M.), Hall (F.L.), (et al.), *913*
- mining, noise, noise abatement, Utley (W.A.), *914*
- noise (traffic), noise abatement, Augusztinovicz (F.), Buna (B.), *3963*
- Lang (W.W.), *3973*
- noise (aerodynamic), trailing edge, Brooks (T.F.), Hodgson (T.H.), *4768*
- blades, centrifugal fans, noise, Leist (H.), *5780*
- noise, rainfall, vegetation, wind, Miller (L.N.), *5791*
- attenuation, noise, springs, Meltzer (G.), Melzig-Thiel (R.), *6895*
- cavitation, models, propellers (marine), vortices, Latorre (R.), *8518*
- acoustics, flaw detection, machinery, Chaturvedi (G.K.), Thomas (D.W.), *10374*

Noisser (R.), frequency domain techniques, pole placement, stability margin, stability theory, state space techniques, *9177*

Noldus (E.), see Derese (I.), *5040*
- see Derese (I.), *9160*

Nolte (K.G.), fluid injection, fracture, pressure, rocks, Smith (M.B.), *6398*

Nomura (S.-I.), dust, explosions, flame propagation, thermal diffusion, Tanaka (T.), *6839*

Nomura (Y.), boundary layer, corners, three dimensional flow, transition, Kotake (M.), *1542*

non newtonian flow, constitutive equations, extensional flow, rheology, Huilgol (R.R.), *546*
- boundary layer (thermal), unsteady flow, Gorla (R.S.R.), *547*
- boundary layer, cylindrical bodies, incompressible flow, separated flow, Shvets (Yu.I.), Vishnevskii (V.K.), *603*
- laminar flow, poiseuille flow, Basovich (I.B.), Bernadiner (M.G.), (et al.), *613*
- flow enhancement, pressure gradient, pulsatile flow, shear thinning, Phan-Thien (N.), *618*
- laminar flow, pipe flow, yield condition, Froishteter (G.B.), Vinogradov (G.V.), *619*
- heat transfer, power law fluids, stagnation point, transient effects, Gorla (R.S.R.), *759*
- power law fluids, separation, thermal diffusion, Tubin (A.A.), Sorokin (Yu.S.), *822*
- bearings (hydrostatic), film thickness, lubrication (hydrostatic), oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1013*
- bearings (hydrostatic), film thickness, lubrication (hydrostatic), thermal effects, El-Kayar (A.), Salem (E.A.), (et al.), *1014*
- bearings (hydrostatic), film thickness, lubrication (hydrostatic), oil films, El-Kayar (A.), Salem (E.A.), (et al.), *1015*
- bearings (journal), bearings (magnetic), ferrofluids, magneto fluid dynamics, Wierzcholski (K.), *1026*
- rotating bodies, simple fluids, spherical bodies, viscoelastic fluids, Fosdick (R.L.), Kao (B.G.), *1484*
- pipe flow, pressure gradient, vibration, Phan-Thien (N.), *1569*
- hydrodynamic stability, pipe flow, shear-rate dependent, viscosity, Akbay (U.), *1560*
- bearings (journal), polymers, turbulence, Fukayama (H.), Tanaka (M.), (et al.), *1938*
- constitutive equations, materials possessing memory, shear flow, viscoelastic fluids, Menezes (E.V.), *2575*
- pipe flow, turbulent flow, Quader (A.K.M.A.), *2805*
- extrusion, heating, viscous effects, Dubovik (A.V.), *3588*
- plates (parallel), pressure gradient, second order fluids, shear flow, Rajagopal (K.R.), Huilgol (R.R.), *3590*
- drag reduction, surfactants, suspensions, Povkh (I.L.), Serdyuk (A.I.), (et al.), *3595*
- porous media, power law fluids, Odeh (A.S.), Yang (H.T.), *4026*
- continuum mechanics, hydrodynamic stability, thermodynamics (nonequilibrium), Fosdick (R.L.), Rajagopal (K.R.), *4128*
- creeping flow, drag, porous surfaces, power law fluids, Kawase (Y.), Ulbrecht (J.J.), *4567*
- developing flow, inlet flow, laminar flow, pipe flow, Al-Nassri (S.A.), Unny (T.), *4626*
- inlet flow, laminar flow, power law fluids, Gupta (R.C.), *5441*
- bearings (porous metal), bearings (thrust), lubrication (hydrodynamic), temperature, Gorla (R.S.R.), *5962*
- bearings (slider), couple stresses, friction, lubrication (hydrodynamic), Ramanaiah (G.), Sarkar (P.), *5986*
- stresses (normal), thin films, Hariharan (S.), *6573*
- constitutive equations, viscoelastic fluids, Niggemann (M.), *6574*
- extrusion, jets, plastic flow, Kalthia (N.L.), *6576*
- jets, suspensions, Entov (V.M.), Kordonskii (V.I.), (et al.), *6586*
- experimental methods, viscometry, Ozturk (Y.), Williams (R.W.), *6591*
- impulse, plates, rivlin erickson fluid, viscoelastic fluids, Teipel (I.), *6644*
- magnetic field, porous surfaces, suction, Abdel-Gaid (M.A.), Khider (M.A.), (et al.), *6645*
- drag reduction, polymers, transition, Tandon (P.N.), Kulshreshtha (A.K.), *6652*
- blood flow, couple stresses, diffusion, Soundalgekar (V.M.), Chaturani (P.), *6655*
- jets, poiseuille flow, Naghdi (P.M.), *6665*
- brinkman number, convection (forced), pipe flow, Dunwoody (N.T.), Hamill (T.A.), *6789*
- bearings (journal), finite element methods, friction (solid fluid), lubrication (hydrodynamic), Tayal (S.P.), Sinhasan (R.), (et al.), *7093*
- jets, lubricants (liquid), polymers, squeeze films, Oliver (D.R.), Shahidullah (M.), *7103*
- bubble dynamics, transition, Kawase (Y.), Ulbrecht (J.J.), *7964*
- porous media, power law fluids, transient effects, Ikoku (C.U.), Ramey (H.J.) Jr., *7977*
- finite element methods, galerkin method, lubrication (hydrodynamic), navier stokes equation, Tayal (S.P.), Sinhasan (R.), (et al.), *8062*
- closed conduit flow, cylindrical bodies, Kazakia (J.Y.), Rivlin (R.S.), *8485*
- constitutive equations, extension, viscous flow, Powell (R.L.), Schwarz (W.H.), *8486*
- entrance region, film flow, laminar flow, Yang (T.M.T.), Yarbrough (D.W.), *8579*
- heat transfer, micropolar media, pipe flow, Shirkot (K.S.), Thakur (D.S.), *8580*
- fluid injection, magneto fluid dynamics, pressure gradient, stream function, Cobble (M.H.), *8820*
- liquid gas mixture, two phase flow, viscosity, Lewis (D.H.) Jr., Ryason (P.R.), *8899*
- porous media, power law fluids, transient effects, Ikoku (C.U.), Ramey (H.J.) Jr., *8926*
- bearings (roller), couple stresses, lubrication (elastohydrodynamic), rolling contact, Sinha (P.), Singh (C.), *9033*
- inertia, rotating disks, second order fluids, Rajagopal (K.R.), *9681*
- channel flow, convection, variable fluid properties, Benderskaya (S.L.), Khusid (B.M.), (et al.), *9583*
- convection (forced), laminar flow, unsteady flow, wedges, Gorla (R.S.R.), *9706*
- convection (forced), external flow, internal flow, laminar flow, turbulent flow, viscoelastic fluids, Shenoy (A.V.), Mashelkar (R.A.), *9707*
- channel flow, heat transfer, power law fluids, shear stress, viscoelastic fluids, Shulman (Z.P.), Khusid (B.M.), (et al.), *9708*
- casting, channel flow, film flow, plates (parallel), polymers, squeeze films, Kazankov (Yu.V.), Pervushin (V.E.), *9709*
- bubble dynamics, creeping flow, spherical bodies, viscoelasticity (dynamic), Tiefenbruck (G.), Leal (L.G.), *10412*
- channel flow, ducts (curved), power law fluids, screw machinery, slip flow, Pervadchuk (V.P.), Yankov (V.I.), (et al.), *10442*
- heat transfer, laminar flow, nusselt number, pipe flow, power law fluids, rheology, Joshi (S.D.), Bergles (A.E.), *10582*
- bearings (journal), lubrication (hydrodynamic), squeeze films, Singh (C.), Sinha (P.), *10690*
- pipe flow, power law fluids, unsteady flow, velocity profiles, Balmer (R.T.), Fiorina (M.A.), *11497*
- duct flow, polar fluids, Sawada (T.), Tanahashi (T.), *11503*
- friction factor, materials possessing memory, pipe flow, thixotropic media, Kemblowski (Z.), Petera (J.), *11504*
- channel flow, dispersion, mass transfer, solutions (material), Soundalgekar (V.M.), Mohiuddin (M.), *11505*
- cavities, channel flow, viscoelastic fluids, Burde (G.I.), Ilyasov (E.P.), (et al.), *11510*
- dilatancy, magneto fluid dynamics, shear waves, theory, Pavlov (K.B.), *11829*
- drag, mass transfer, two phase flow, Kawase (Y.), Ulbrecht (J.J.), *12022*

non newtonian suspensions, coagulation, colloids, emulsions, hydrodynamic stability, particle size, Reddy (S.R.), Fogler (H.S.), *3592*

Nonaka (T.), cavities, elastoviscoplasticity, excavation, tunnels, *8199*

noncircular pipes, approximations (higher order), ducts (curved), elliptical cross-section, pipe flow, Srivastava (R.S.), *611*
- laminar flow, pipe flow, velocity profiles, Vasilescu (A.), Andrei (V.I.), *612*
- friction factor, hydraulic diameter, turbulent flow, Bandopadhayay (P.C.), Ambrose (C.W.), *614*
- elliptical bodies, laminar flow, moving surfaces, viscous flow, Lal (K.), Chorlton (F.), *1568*
- incompressible flow, laminar flow, tubes, Lal (K.), *2601*
- poiseuille flow, variable fluid properties, viscosity, viscosity (temperature dependent), Mikolas (M.), Bardocz (L.), *2648*
- ducts (constant area), entrance region, laminar flow, three dimensional flow, Del Giudice (S.), Strada (M.), (et al.), *3659*
- duct flow, fluid injection, visualization, Alimpiyev (V.I.), Kalinina (S.V.), (et al.), *3671*
- aerodynamic performance, nozzles, ventilation, Yetter (J.A.), Leavitt (L.D.), *3680*
- entrance region, numerical methods, turbulent flow, Gessner (F.B.), Emery (A.F.), *4623*
- contraction, laminar flow, numerical analysis, separation, steps, Dennis (S.C.R.), Smith (F.T.), *6649*
- dust, particle fluid flow, unsteady flow, viscous flow, Dixit (L.A.), *6653*
- computing techniques, heat transfer, laminar flow, pipe flow, swirl flow, Masliyah (J.H.), Nandakumar (K.), *7715*
- oldroyd fluid, pressure gradient, viscoelastic fluids, Rukmangadachari (E.), *7722*
- experimental results, moving surfaces, turbulent flow, El Telbany (M.M.M.), Reynolds (A.J.), *8570*
- dust, laminar flow, particle fluid flow, unsteady flow, Gupta (M.), *8575*
- secondary flow, turbulence model, turbulent flow, Speziale (C.G.), *9578*
- sudden expansion, transonic flow, unsteady flow, Anderson (J.S.), Meier (G.E.A.), *11493*
- channel flow, viscoplasticity, Jakovenko (A.), *11507*

nonconservative systems, dynamic stability, follower forces, Bailey (C.D.), Haines (J.L.), *355*
- existence theorems, periodic orbits, vibration, Pivovarov (I.), *1996*
- follower forces, pfluger rod, rods, Leipholz (H.H.E.), *2291*
- elastic bodies, finite element techniques, nonlinear analysis, Argyris (J.H.), Symeonidis (S.), *4197*
- compression, follower forces, plates, rods, Leipholz (H.H.E.), *5170*
- beams (cantilever), beams (variable cross section), structural stability, Kar (R.C.), *5176*
- asymptotic behavior, dynamics, matched asymptotic expansions, oscillations, relaxation, van der pol equation, Grasman (J.), *8106*
- buckling, follower forces, plates (rectangular), simply supported structures, Leipholz (H.H.E.), Waddington (D.), *9289*
- airfoil theory, potential flow, transonic flow, Baker (T.J.), *9545*

nondestructive tests, bonded joints, sensitivity, thermal effects, Vavilov (V.), *496*
- elastic waves, electromagnetic loading, flaw detection, ultrasonics, Remezov (V.B.), Shkarlet (Yu.M.), *499*
- composite materials, materials, physical properties, Van Suchtelen (J.), *1211*
- acoustic emission, crack growth, pressure vessels, rupture, Ohtsuka (N.), Nakano (M.), (et al.), *1398*
- response, transducers (ultrasonic), transient, ultrasonics, Low (G.C.), *1417*
- cracks, flaw detection, magnetic field, Edwards (C.), Palmer (S.B.), *1418*
- measurements, microstructures, neutron, transmission, Palacios (J.), Schwahn (D.), (et al.), *1420*
- adhesives, algorithms, bonded joints, ultrasonics, Rose (J.L.), Thomas (G.H.), *1479*
- flaw detection, microprocessors, ultrasonics, welded joints, Rose (J.L.), Nestleroth (J.B.), (et al.), *2481*
- acoustic emission, aluminum alloys, deformation, Green (G.), Clark (G.), *2482*
- flexibility, fluoroscopy, inspection, x ray techniques, Lee-Prampton (J.B.), *2502*
- electroslag welding, surfaces, welding, Ries (H.), Brezina (P.), (et al.), *2571*
- concrete, frequencies, impact, tests, Alexander (A.M.), *3496*
- defects, lasers, layered media, residual stresses, ultrasonics, Berger (H.) eds., Linzer (M.), *3505, book*
- cracks, flaw detection, pressure vessels, radiography, welded joints, x ray techniques, Ruescher (E.H.), Graber (H.C.), *3507*
- defects, delamination, heat transfer, plates, thermography, Vavilov (V.P.), *3509*
- transducers, Prudnikov (A.S.), Chernyshev (K.V.), *3511*
- buckling, buried structures, pipes, underground, Valsangkar (A.J.), Britto (A.M.), (et al.), *3567*
- acoustic emission, composite materials, laminates, material testing, Prakash (R.), *4360*
- concrete, radio waves, waves, Laine (E.F.), Dines (K.A.), (et al.), *5262*
- edge cracks, j-integral, m integral, King (R.B.), Herrmann (G.), *5294*
- cracks, defects, ultrasonics, De Billy (M.), Cohen-Tenoudji (F.), (et al.), *5314*
- dynamic response, fracture toughness, mathematical methods, ultrasonics, Fu (L.S.), *5315*
- flaw detection, inspection, ultrasonics, Grebennik (V.S.), Taits (M.Z.), *5336*
- control, error, inspection, manufacturing, Malaichuk (V.P.), *5337*
- deformation, finite element methods, flaw detection, holography, inhomogeneities, interferometry, Wachutka (H.), Kordisch (H.), (et al.), *5339*
- acoustic waves, fatigue, fracture mechanics, life expectancy, Tittmann (B.R.), Buck (O.), *6417*
- aluminum alloys, crack initiation, fatigue, life expectancy, microcracks, Buck (O.), Morris (W.L.), (et al.), *6419*
- acoustic emission, dislocations, iron, strain, Bassim (M.N.), Veillette (M.), *6463*
- acoustic measurements, ferrites, polycrystalline materials, ultrasonics, void fraction, Guseva (E.K.), Kovarskaya (E.Z.), (et al.), *6481*
- piezoelectric devices, transducers, ultrasonics, Panin (V.I.), *6483*
- inspection, laminates, layered media, thermography, Rapoport (D.A.), *6484*
- half space, piezoelectric devices, transducers, ultrasonics, Kasatkin (B.A.), Pavin (N.Ya.), *6485*
- cracks, diffraction, metals, surfaces, ultrasonics, Parvatov (G.N.), Popov (A.A.), *6486*
- acoustic measurements, defects, surface flaws, Polesskaya (L.M.), Grichuk (V.V.), (et al.), *6487*
- defects, flaw detection, transducers, Lange (Yu.V.), *6488*
- reflection, surface flaws, ultrasonics, welded joints, Perevalov (S.P.), Raikhman (A.Z.), *6489*
- crack propagation, cracks, directivity pattern, fracture, Maslov (L.A.), Arkhinov (V.I.), *6495*
- ceramics, crack initiation, defects, stochastic systems, Evans (A.G.), Meyer (M.E.), (et al.), *7470*
- cracks, diffraction, fatigue, ultrasonics, Golan (S.), Adler (L.), (et al.), *7513*
- acoustic emission, aluminum alloys, fatigue, low cycle fatigue, tension, Baram (J.), Rosen (M.), *7559*
- laminates, testing equipment, transducers (ultrasonic), ultrasonics, Crostack (H.A.), Deutsch (V.), (et al.), *7560*
- flaw detection, glass fibers, laminates, liquid crystals (cholesteric), thermography, Williams (J.H.), Mansouri (S.H.), (et al.), *7574*
- coatings, eddy currents, radiography, thickness, thin films, Goring (W.H.), *7577*
- delamination, flaw detection, inclusions, thermography, Williams (J.H.) Jr., Mansouri (S.H.), (et al.), *7579*
- flaw detection, harmonic analysis, transducers (ultrasonic), Pokrovskii (A.D.), *7581*
- acoustic measurements, flaw detection, j-integral, microstructures, residual stresses, stress intensity factor, Kino (G.S.), Barnett (D.M.), (et al.), *7586*
- crack tip geometry, j-integral, strain measurement, stresses, ultrasonics, King (R.B.), Herrmann (G.), (et al.), *8425*
- stresses, surfaces, transducers, ultrasonics, Thompson (R.B.), *8426*
- acoustic measurements, echos, flaw detection, plates, Golubev (A.S.), Verevkin (V.M.), (et al.), *8435*
- composite materials, cracks, damage, damping capacity, Pye (C.J.), Adams (R.D.), *9254*
- digital simulation, microprocessors, synthesis, ultrasonics, Hanstead (P.D.), *9423*
- acoustic emission, generation, propagation, Kolerus (J.), *9424*
- crack growth, diffraction, fatigue, ultrasonics, Sigmond (R.S.), Lien (E.), *10282*
- cracks, electrical instruments, Dover (W.D.), Collins (R.), *10283*
- flaws, fracture mechanics, multiple cracks, Chang (R.), *10285*
- material testing, stress intensity factor, vibrators, Pye (C.J.), Adams (R.D.), *10310*
- acoustoelasticity, orthotropic materials, plane stress, ultrasonics, Okada (K.), *10315*
- acoustic measurements, acoustoelasticity, deformation (plastic), residual stresses, Johnson (G.C.), *10316*
- acoustic emission, computing techniques, flaw detection, newton method, Vasilev (A.M.), Maslov (B.Ya.), *10317*
- measurements, strain measurement, structures, surfaces, Chekin (O.N.), *10340*
- field tests, rocks, ultrasonics, Mckenzie (C.K.), Stacey (G.P.), (et al.), *11181*
- data analysis, surveys, ultrasonics, Fu (L.S.), *79999*

nonequilibrium effects, condensation, water, Davydov (L.M.), Pirumov (U.G.), *810*
- shock waves, two component flow, Zaslonko (I.S.), Mozzhukhin (E.V.), (et al.), *1734*
- adiabatic processes, magneto plasma dynamics, theory, variational methods, Pletnev (V.D.), Skuridin (G.A.), *2897*
- compressible flow, discontinuities, thermodynamics, Sharma (V.D.), Singh (R.S.), *7780*
- energy conversion, filamentary structures, inhomogeneities, magneto plasma dynamics, Petit (J.-P.), Billiotta (M.), *7899*
- energy conversion, magneto plasma dynamics, perturbations, three dimensional flow, Artemov (V.I.), Sinkevich (O.A.), *7900*

nonequilibrium flow, compressible flow, dissociation, Sharma (V.D.), *2619*
- boundary layer, chemically reactive flow, ignition, plates, vaporization, Ahluwalia (R.K.), Chung (P.M.), *3866*
- chemical reactions, compressible flow, jets, numerical methods, supersonic flow, Kireev (V.I.), Pirumov (U.G.), *5418*
- mathematical models, shock waves, shock waves (attached), Sharma (V.D.), *5419*

- infiltration, porous media, Kosterin (A.V.), *5831*
- choked flow, steam, Konorski (A.), Nahlik (S.), *6984*
- blunt bodies, heat transfer, supersonic flow, Golovachov (Yu.P.), *9552*
- duct flow, supersonic flow, Ermolin (N.E.), Fomin (V.M.), *9555*
- heat transfer, real gas effects, stagnation point, Mori (Y.), Himeno (N.), (et al.), *10605*
- chemically reactive flow, compressible flow, similarity methods, Kolesnichenko (E.G.), *11422*
- acoustic waves, compressible flow, multiphase flow, numerical methods, rarefied flow, shock waves, Cook (T.L.), Demuth (R.B.), (et al.), *11426*

nonhomogeneous media, generators, hall effect, magneto fluid dynamics, nonlinear analysis, Kuo (S.), Cheo (B.), (et al.), *852*

- bubble dynamics, noise, sound generation, viscosity, Mccomb (W.D.), Ayyash (S.), *889*
- conduction (heat), finite element techniques, thermoelasticity, Lisitsyn (B.M.), Bulyga (K.G.), *921*
- metals, viscoelastic fluids, void growth, Taya (M.), Seidel (E.D.), *1195*
- heat transfer, thermal diffusion, variable thermal properties, Dulnev (G.N.), Sigalov (A.V.), *1697*
- acoustics, ducts, modes, waveguides, Felsen (L.B.), *1804*
- thermoelasticity (steady), variational methods, Tanaka (M.), Tanaka (K.), *1831*
- averaging, mixture theories, multiphase media, Nikolaevskii (V.N.), *1972*
- composite materials, effective elastic moduli, inclusions, micromechanics, Cleary (M.P.), Chen (I-W.), (et al.), *2224*
- indentation, slip line methods, work hardening, Bhasin (Y.P.), Oxley (P.L.B.), (et al.), *2234*
- sound propagation, waveguides, Canevet (G.), *3948*
- constitutive equations, elastic bodies, mixture theories, multiphase media, Khoroshun (L.P.), *4131*
- conservation laws, equations of motion, mixture theories, Kril (S.I.), *4135*
- diffusion, inclusions, metals, Trzesowski (A.), *4138*
- anisotropic media, piezoelectrics, Muller (L.), *4337*
- cylindrical bodies, elasticity (nonhomogeneous), torsion, Chakravorty (J.G.), *4340*
- anisotropic media, plates (annular), rotating disks, thermal stresses, Misra (J.C.), Achari (R.M.), *4815*
- anisotropic media, elasticity (nonhomogeneous), Jin (F.-S.), *5095*
- composite materials, couple stresses, elasticity (nonhomogeneous), elasticity (nonlocal), Chigarev (A.V.), *5096*
- diffusion, particles, Dolgov (A.S.), Ostroushko (V.N.), *5424*
- currents, sound propagation, underwater acoustics, Newhall (B.K.), Jacobson (M.J.), (et al.), *5728*
- acoustic waves, sound propagation, Clark (J.A.), *5757*
- acoustic waves, sound propagation, Chivers (R.C.), *5769*
- elastic behavior, inclusions, infinite medium, stress concentration, Andreikiv (A.E.), Stadnik (M.M.), (et al.), *6164*
- elasticity (nonhomogeneous), laminates, stress concentration, Plevako (V.P.), *6170*
- elastic waves, elasticity (three dimensional), Hudson (J.A.), *6323*
- harmonic waves, love waves, Bukchin (B.G.), Levshin (A.L.), *6342*
- approximation theory, statistical continuum mechanics, Babkin (G.I.), Klyatskin (V.I.), (et al.), *6345*
- elastic waves, statistical continuum mechanics, Babkin (G.I.), Klyatskin (V.I.), (et al.), *6346*
- acoustic waves, scattering, Lefebvre (J.), Frohly (J.), (et al.), *6349*
- elastic waves, scattering, Sato (H.), Matsumura (S.), *6351*
- scattering, waves, Krylov (V.V.), *6900*
- acoustic waves, sound propagation, Chivers (R.C.), *6922*
- attenuation, free boundary, surface waves, Lapin (A.D.), *7422*
- anisotropic media, elastic bodies, love waves, Chander (S.), Gogna (M.L.), *7423*
- composite materials, inclusions, thermal fatigue, Malygin (A.F.), Yankovskii (Yu.V.), *7954*
- free boundary, nonlinear theory, porous media, Popa (V.), *7976*
- anisotropic media, phase changes, strain energy, Tsakalakos (T.), *8091*
- fracture mechanics, thermoelasticity (transient), thermoviscoelasticity, Atkinson (C.), Smelser (R.E.), *8881*
- semi infinite media, thermal stresses, thermoelasticity (steady), Aderogba (K.), *8887*
- half space, propagation, sh waves, Kielczynski (P.), *10230*
- ocean, sound propagation, underwater acoustics, Emery (W.J.), Reid (T.J.), (et al.), *10783*
- gravity waves (internal), radial waves, singularities, wavemaking resistance, Gorodtsov (V.A.), *11380*
- drift waves, magnetic field, plasma, stability theory, Shivamoggi (B.K.), *11839*
- acoustics, burgers equation, sound propagation, Parker (D.F.), *11921*
- acoustic waves, arrays, propagation, Komissarova (N.N.), *11924*

nonhomogeneous soils, buildings, clay, damage, swell, Slavin (M.E.), *1321*

- modeling, statistical theory, Hewitt (J.S.), Dexter (A.R.), *1323*
- foundations, slabs, Malikova (T.A.), *3407*
- field tests, swell, Kate (J.M.), Katti (R.K.), *6376*

Nonishi (T.), see Terauchi (Y.), *9035*

nonlinear analysis, cracks, mathematical methods, random excitation, stochastic systems, Wedig (W.), *360*

- shells (cylindrical), vibration (parametric), Bogdanovich (A.E.), Feldmane (E.G.), *377*
- frames, reinforced concrete, Hsu (C.-T.T.), Mirza (M.S.), (et al.), *523*
- boundary integral methods, free boundary, pressure distribution, two dimensional flow, Schwartz (L.W.), *566*
- boundary layer, rotating fluids, spin-up, Smith (S.H.), *580*
- generators, hall effect, magneto fluid dynamics, nonhomogeneous media, Kuo (S.), Cheo (B.), (et al.), *852*
- differential equations (partial), dirichlet problem, functional analyis, Thews (K.), *1093*
- capillary waves, evolution equations, gravity waves, plasma, soliton solutions, Ma (Y.-C.), *1094*
- aerodynamics, cables, dynamic analysis, towing cables, Karlsen (L.K.), *1215*
- cables, flexible walls, numerical analysis, offshore structures, pipes, Peyrot (A.H.), *1216*
- beams (curved), Noor (A.K.), Peters (J.M.), *1225*
- buildings, inelasticity, seismic loading, structural response, Cheng (F.Y.), *1449*
- boundary value problems, power law fluids, variational methods, Anderson (N.), Arthurs (A.M.), *1533*
- fluid-structure interaction, underwater acoustics, Jackson (J.E.) Jr., Cost (T.L.), *1606*
- controllability, dynamic analysis, observability, Baillieul (J.), *1993*
- burgers equation, evolution equations, korteweg de vries equation, Fokas (A.S.), *2002*
- algorithms, iterative methods, Kolyada (Yu.V.), Sigorskii (V.P.), *2040*
- computing techniques, large scale systems, Mochimaru (Y.), Tomita (Y.), *2041*
- computing techniques, finite element techniques, newton method, Mansfield (L.), *2064*
- dynamic analysis, perturbation methods, Zhermolenko (V.N.), *2317*
- composite structures, reinforced concrete, ultimate strength, Lachance (L.), Hays (C.O.), *2518*
- portal frames, postbuckling behavior, Simitses (G.J.), Giri (J.), (et al.), *2534*
- dynamic analysis, piping systems, Prachuktam (S.), Bezler (P.), (et al.), *2548*
- models, solidification, Wollkind (D.J.), Notestine (R.D.), *2846*
- dynamic analysis, vibration (self excited), Yaroshevskii (V.A.), *3090*
- filters, probability, stochastic systems, Hempel (P.R.), *3106*
- computing techniques, dynamic analysis, modal analysis, structures, Noor (A.K.), *3138*
- cables, dynamic analysis, offshore structures, Peyrot (A.H.), *3283*
- finite element methods (hybrid), frames, structural stability, Karamanlidis (D.), *3334*
- collision models, random excitation, vibration (random), Fujita (T.), Hattori (S.), *3346*
- cable stayed bridges, structural analysis, Morabito (G.), Labini (F.S.), *3546*
- boundary layer, falling films, film flow, surface waves, Esmail (M.N.), *3709*
- drift, floating structures, wave loads, Pinkster (J.A.), *3714, book*
- aerodynamic loads, gust loads, tails, Stapleford (R.L.), Dimarco (R.J.), *3912*
- finite element methods (hybrid), global approach, rayleigh ritz method, Noor (A.K.), Peters (J.M.), *4196*
- elastic bodies, finite element techniques, nonconservative systems, Argyris (J.H.), Symeonidis (S.), *4197*
- beams (curved), Rosen (A.), Abramovich (H.), *4364*
- caustics, currents, gravity waves, Chin (W.C.), *4656*
- biomathematics, diagnostics, electroretinogram, eyes, Koblasz (A.J.), *4923*
- boltzmann equation, carleman equation, initial value problems, kinetic theory, Kaper (H.G.), Leaf (G.K.), *4972*
- existence theorems, functional analyis, integro differential equations, D'Ambrosio (U.), Krivocheine (L.E.), (et al.), *4981*
- gradient techniques, newton method, nonlinear programming, optimization, Tanabe (K.), *4996*
- elasticity (nonlinear), nonlinear methods, Grigolyuk (E.I.), Shalashilin (V.I.), *5082*
- concrete, plastic behavior, shells (cylindrical), Chen (W.F.), Suzuki (H.), (et al.), *5116*
- beams, large displacement, Bufler (H.), *5152*
- plates (nonlinear), shells (nonlinear), structural stability, Wada (H.), Taki (Y.), (et al.), *5162*
- dynamic properties, vibration (random), wave interactions, Gurbatov (S.N.), *5193*
- dynamic analysis, modal analysis, substructuring, Bathe (K.-J.), Gracewski (S.), *5228*
- boundary layer, boundary value problems, difference equations, stagnation point, Balu (R.), *5436*
- hydrodynamic stability, wind-wave interaction, Fabrikant (A.L.), *5474*
- containers (partially filled), oscillations, pitching, sloshing, Nakayama (T.), Washizu (K.), *5483*
- failure, finite element techniques, nonlinear materials, rotors, turbines, Nyasen (C.), *6118*
- dynamic analysis, vibration (self excited), Brommundt (E.), *6276*
- plates (rectangular), vibration (forced), Putnick (L.J.), Matkowsky (B.J.), (et al.), *6293*
- gravity waves (finite depth), korteweg de vries equation, sloping bottom, Lugovtsov (A.A.), *6695*

- currents, gravity waves (finite depth), sloping bottom, Christoffersen (J.B.), Jonsson (I.G.), *6697*
- equations of state, mathematical models, Ahrendts (J.), Baehr (H.D.), *6744*
- boundary value problems, diffusion, mathematical models, porous media, Alikakos (N.D.), Rostamian (R.), *6831*
- asymptotic behavior, diffusion, phase plane, travelling waves, Fife (P.C.), Mcleod (J.B.), *7167*
- evolution equations, linear equations, navier stokes equation, Teman (R.), *7170*
- geometric nonlinearities, minimization, newton method, structural analysis, Kamat (M.P.), Watson (L.T.), (et al.), *7188*
- geometric nonlinearities, iterative methods, structural analysis, Webster (R.L.), *7198*
- creep, finite element techniques, shear, stiffness matrix, Nguyen Dang Hung, *7218*
- finite element techniques, heat transfer, newton method, Hogge (M.A.), *7225*
- buckling, dynamic stability, shells (cylindrical), Brendel (B.), Ramm (E.), *7360*
- dynamic analysis, vibration (nonlinear), Arnold (T.W.), Case (W.), *7366*
- limit cycles, oscillators, quenching, vibration (nonlinear), Singh (Y.P.), *7369*
- dynamic analysis, vibration (nonlinear), vibration (self excited), Pivovarov (I.), *7371*
- dynamic response, elastoviscoplasticity, laminates, work hardening, Aboudi (J.), Benveniste (Y.), *7407*
- bifurcation, burgers equation, stability theory, Olmstead (W.E.), Davis (S.H.), *7666*
- boundary layer, computing techniques, differential equations (ordinary), differential equations (partial), Shih (T.M.), Huang (H.J.), *7712*
- pipe flow, rivlin-ericksen fluid, viscoelastic fluids, Erdogan (E.), *7721*
- gravity waves (internal), rossby waves, wave interactions, Ripa (P.), *7761*
- film flow, solitary waves, surface waves, Tsvelodub (O.Yu.), *7762*
- drag coefficient, offshore structures, virtual mass, wave loads, Debnath (L.), Rahman (M.), *7767*
- convection, diffusion, modal analysis, rayleigh number, Riahi (N.), *7841*
- conduction (heat), finite element techniques, numerical methods, Schreyer (H.L.), *7857*
- ocean waves, rolling motion, ship motion, Haddara (M.R.), *8038*
- dynamic analysis, hamiltonian equations, Vujanovic (B.), *8095*
- harmonic analysis, interaction, resonance, wave interactions, Verheest (F.), *8114*
- fredholm equations, integro differential equations, radiation, Ueno (S.), *8120*
- finite element techniques, mindlin plates, Hughes (T.J.R.), Tezduyar (T.E.), *8144*
- mathematical methods, vibration (nonlinear), Gottlieb (H.P.W.), *8280*
- bifurcation, stability theory, vibration (self excited), Berezovskaia (F.S.), Khibnik (A.I.), *8282*
- boussinesq equation, convection, diffusion, Knobloch (E.), Proctor (M.R.E.), *8531*
- articulated surfaces, currents, fluid-structure interaction, offshore structures, Jain (R.K.), Kirk (C.L.), *8627*
- heat transfer, mass transfer, porous media, Thomas (H.R.), Morgan (K.), (et al.), *8783*
- collapse, finite element techniques, icebreakers, ship structures, Hakala (M.K.), *9005*
- asymptotic behavior, boundary conditions, hyperbolic equations, lyapunov's functions, Radzikowski (J.), Sadkowski (W.), *9104*
- arches, domes, imperfections, Wolde-Tinsae (A.M.), Huddleston (J.V.), *9267*
- crack opening displacement, elasticity (nonlinear), finite amplitude, Knowles (J.K.), *9405*
- filaments, motion, vortex flow, vortex lines, Kida (S.), *9522*
- containers (partially filled), pendulum analogy, shells (spherical), sloshing, Sayar (B.A.), Baumgarten (J.R.), *9632*
- finite difference methods, magneto plasma dynamics, mathematical models, two dimensional flow, Schnack (D.), Killeen (J.), *9791*
- hyperbolic equations, nonlinear waves, sine gordon equation, solitary waves, Olsen (O.H.), Samuelsen (M.R.), *10018*
- burgers equation, group theory, korteweg de vries equation, Zakharov (N.S.), Korobeinikov (V.P.), *10021*
- beams (flexural), large displacement, springs, Watson (L.T.), Wang (C.Y.), *10143*
- buckling, dynamic response, snap-through, structural analysis, Kamat (M.P.), Hayduk (R.J.), *10362*
- resonance, scattering, three wave resonance, wave interactions, Kaup (D.J.), *10482*
- differential equations (ordinary), diffusion, magneto fluid dynamics, reaction kinetics, Bishop (A.), Campbell (D.), (et al.), *10931*
- gravity waves, shear flow, stratified flow, wave trains, Liu (A.K.), *11562*
- gravity waves (internal), resonance, wave interactions, Liu (A.K.), Kubota (T.), (et al.), *11566*
- dispersion relation, gravity waves (surface), spectra, Crawford (D.R.), Lake (B.M.), *11574*
- gravity waves, swell, wave generation, wave interactions, Foda (M.A.), Mei (C.C.), *11577*
- finite amplitude, gravity waves (breaking), Longuet-Higgins (M.S.), *11581*
- beaches, gravity waves (breaking), Kirkgoz (M.S.), *11591*
- hydrodynamic stability, rossby waves, solitary waves, Malanotte Rizzoli (P.), Hendershott (M.C.), *11617*
- bottom irregularities, rossby waves, solitary waves, Malanotte Rizzoli (P.), *11618*
- ocean waves, spectra, wave loads, Sharma (J.N.), Dean (R.G.), *11663*
- approximations (higher order), containers (partially filled), sloshing, Lukovskii (I.A.), *11679*
- containers (partially filled), reservoirs, sloshing, variational methods, Limarchenko (O.S.), *11683*

nonlinear characteristics, resonance, transmissions, Hortel (M.), Schmidt (G.), *388*

- magneto fluid dynamics, rotating fluids, spherical bodies, vessels, Kiriushin (V.V.), *858*
- discontinuities, integro differential equations, mathematical methods, volterra equations, Aizicovici (S.), *1096*
- backlund transformation, conduction (unsteady), group theory, transformation, Munier (A.), Burgan (J.R.), (et al.), *2004*
- acoustic waves, alfven number, magneto fluid dynamics, shock waves, Lustman (L.), Geffen (N.), *2892*
- elasticity, finite element techniques, finite strain, Malkus (D.S.), Fuller (E.R.) Jr., *4200*
- dispersion relation, modes, plasma, waves, Franklin (R.N.), Edgley (P.D.), (et al.), *4750*
- gradient techniques, multivariable systems, optimization, scale effects, Bruet (B.), *4944*
- membranes, mesh generation, plates, shells, Jones (R.E.), Vos (R.G.), *5027*
- elastica, finite element techniques, mathematical methods, stability theory, stiffness matrix, Fried (I.), *5034*
- dynamic analysis, rotating shafts, vibration (nonlinear), Yamamoto (T.), Ishida (Y.), (et al.), *5227*
- convection, electro fluid dynamics, inhomogeneities, stability theory, Zhakin (A.I.), *5674*
- acoustic streaming, acoustics, hydrodynamics, Gusev (V.E.), Rudenko (O.V.), *6915*
- ocean, shock waves, sound propagation, underwater acoustics, Fridman (V.E.), *6916*
- acoustics, bubble dynamics, Gasenko (V.G.), Nakoryakov (V.E.), (et al.), *6917*
- acoustic waves, gases, impedance, thermal effects, Artamonov (K.I.), Vorobev (A.P.), *6921*
- bending, cellular structures, grillages, structural analysis, ultimate strength, Shanmugam (N.E.), Evans (H.R.), *8263*
- dynamic response, friction, vibration isolation, Dragani (R.), Sarra (M.), *8325*
- density, plasma (toroidal), tokamak, waveguides, Krapchev (V.B.), Theilhaber (K.S.), (et al.), *8829*
- diffraction, nonlinear waves, Bagdoev (A.G.), *9348*
- creep rupture, damage (cumulative), Bui-Quoc (T.), Biron (A.), *9392*
- acoustics, ducts, resonance, Rott (N.), *9845*
- geothermal reservoirs, two phase flow, wells, Sorey (M.L.), Grant (M.A.), (et al.), *9903*
- experimental methods, impact, plates (circular), Dmitrieva (Zh.N.), Efimova (T.A.), (et al.), *10243*
- dynamic behavior, heat shields, space shuttle, Housner (J.M.), Edighoffer (H.H.), (et al.), *11128*
- dispersion relation, ionic flow, oscillations, plasma, relativity, Chian (A.C.-L.), *11834*
- sound flow interaction, turbulent flow, Lvov (V.S.), Mikhailov (A.V.), *11965*
- numerical methods, sound propagation, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *11990*
- convection (forced), large displacement, porous media, saturation, Rudraiah (N.), Srimani (P.K.), *12069*

nonlinear materials, composite materials, laminates, numerical methods, stress strain relationships, Ditcher (A.K.), Rhodes (F.E.), (et al.), *280*

- springs, thermoelasticity (transient), viscoelastic materials, Senchenkov (I.K.), Gumenyuk (B.P.), *927*
- constitutive equations, metals, stress strain relationships, Margetson (J.), *1199*
- biomaterials, constitutive equations, tissues, viscoelastic materials, Decraemer (W.F.), Maes (M.A.), (et al.), *1951*
- adhesives, bonded joints, viscoelastic materials, Weitsman (Y.), *2227*
- cyclic loading, elastoplasticity, statically indeterminate structures, structural analysis, Erofeev (V.I.), Kondeikin (P.I.), *2242*
- absorption, conduction (heat), thermal waves, Granik (I.S.), Martinson (L.K.), *3814*
- creep, fuel elements, nuclear reactors, Chan (D.P.), Jackson (R.J.), *4346*
- creep, layered media, Sumbatian (M.A.), *4347*
- failure, finite element techniques, nonlinear analysis, rotors, turbines, Nyssen (C.), *6118*
- large displacement, shells (thin), Parisch (H.), *6219*
- aluminum alloys, buckling (nonlinear), collapse, nonlinear theory, plates, Little (G.H.), *6250*
- constitutive equations, creep, fracture, Barenblatt (G.I.), Botvina (L.R.), *7137*
- porous media, viscoelastic materials, wedges, Kolokolchikov (V.V.), *8194*
- beams (flexural), beams (thin section), Szuladzinski (G.), *8233*

- finite element methods (hybrid), fracture mechanics, three dimensional formulation, Atluri (S.N.), Nakagaki (M.), (et al.), *8420*
- finite element techniques, stiffness matrix, Traven (F.), *9145*
- fracture, plastic behavior, Dougill (J.W.), Rida (M.A.M.), *9411*
- beams (cantilever), large displacement, Lewis (G.), Monasa (F.), *10141*
- convection, magneto fluid dynamics, prandtl number, Riahi (N.), *10584*
- conduction (heat), mathematical models, transient effects, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *10591*

nonlinear mechanics, damping, differential equations (ordinary), Caristi (G.), Invernizzi (S.), *24*

- bibliography, bifurcation, dynamics, mathematical methods, Holmes (P.J.) ed., *1072, book*
- differential equations (ordinary), lyapunov's functions, stability theory, Martinyuk (A.A.), *1081*
- biodynamics, damping, oscillations, Bojadziev (G.N.), *1092*
- asymptotic behavior, computing techniques, fluid mechanics, perturbation methods, Glowinski (R.) eds., Lions (J.E.), *1111, book*
- finite element techniques, shock waves, time dependence, wave equations, Cella (A.), Lucchesi (M.), (et al.), *1130*
- cyclic loading, thermoviscoelasticity, viscoelasticity (dynamic), Gumenyuk (B.P.), Karnaukhov (V.G.), *1188*
- automatic control, control, linear systems, Chernousko (F.L.), Akulenko (L.D.), (et al.), *2115, book*
- dynamic properties, vibration (nonlinear), Hagedorn (P.), *2314, book*
- dynamic response, rotating shafts, vibration (forced), Yamamoto (T.), Ishida (Y.), (et al.), *2341*
- asymptotic methods, differential equations (partial), orbit mechanics, perturbation methods, Kevorkian (J.), Cole (J.D.), *3111, book*
- dynamic stability, mathematical methods, splines, Jain (M.K.), *4149*
- asymptotic methods, differential equations (ordinary), limit cycles, oscillators, van der pol equation, Grasman (J.), *4152*
- asymptotic methods, stochastic systems, surveys, Vladimirov (V.S.), Mitropolsky (Yu.A.), (et al.), *4158*
- dynamic response, random excitation, vibration (random), Kimura (K.), Sakata (M.), *4405*
- lyapunov's functions, oscillations, periodic orbits, poincare method, Proskuryakov (A.P.), *4945, book*
- asymptotic behavior, asymptotic methods, averaging, boundary value problems, Akulenko (L.D.), *4948*
- airy function, asymptotic behavior, special functions, Miles (J.W.), *4951*
- cell-to-cell mapping, computer programming, dynamics, probability theory, Hsu (C.S.), *4984*
- asymptotic methods, averaging, oscillations, Khodzhaev (K.Sh.), Shatalov (S.D.), *4990*
- free boundary, infiltration, porous media, variational methods, Quarteroni (A.), Visintin (A.), *5835*
- computing techniques, continuation methods, finite element techniques, mesh generation, structural analysis, Rheinboldt (W.C.), *6089*
- design (optimum), fourier transform, laplace transform, mechanisms, Sandler (B.Z.), *6565*
- hydraulic machinery, mathematical models, Nepraz (F.), *9099*
- conservation laws, hydrodynamics, hyperbolic equations, shock waves, Cheng (K.-S.), *9102*

nonlinear methods, computing techniques, iterative methods, large scale systems, newton method, Geradin (M.), Idelsohn (S.), (et al.), *64*

- boundary value problems, coordinate systems, mathematical methods, numerical analysis, Murray (J.C.), *1071*
- iterative methods, mathematical methods, Krawczyk (R.), *1120*
- existence theorems, hyperbolic equations, Morosanu (G.), *2012*
- computing techniques, differential equations (partial), iterative methods, newton method, Carey (G.F.), Krishnan (R.), *2036*
- integration, numerical analysis, parabolic equations, Adam (Y.), *2049*
- estimation, filters, nonlinear systems, Kalachev (M.G.), Nikonov (V.G.), *3161*
- control, design, deterministic control, feedback, nonlinear systems, stability theory, Leitmann (G.), *3174*
- functional analyis, optimal control, Barbu (V.), Da Prato (G.), *3187*
- elasticity (nonlinear), nonlinear analysis, Grigolyuk (E.I.), Shalashilin (V.I.), *5082*
- control, linear systems, lyapunov's functions, observers, system uncertainty, Leitmann (G.), *6129*
- estimation, stochastics, Ivanov (A.V.), Kozlov (O.M.), *10055*

nonlinear programming, computing techniques, geometric programming, surveys, Ecker (J.G.), *53*

- algorithms, design, Sandgren (E.), Ragsdell (K.M.), *58*
- design (optimum), portal frames, roofs, Crawford (A.B.), Jenkins (W.M.), *503*
- computing techniques, convex programming, Oelschlagel (D.), Susse (H.), *1108*
- bifurcation, duality, functional equations, variational methods, Sewell (M.J.), *2027*
- convergence, optimization, penalty function, Fujimoto (H.), Fujii (S.), (et al.), *2033*
- linear programming, mathematical programming, optimization, plant location, Uzdemir (A.P.), *2109*
- control, engines, fuel economy, Rao (H.S.), Cohen (A.I.), (et al.), *2122*
- computer aided manufacturing, decision theory, Keefer (D.L.), Kirkwood (C.W.), *2199*
- algorithms, nonlinear systems, optimal control, vehicles, Van Zanten (A.T.), Krauter (A.I.), *3221*
- earth pressure, finite element methods, soil mechanics, Basudhar (P.K.), Valsangkar (A.J.), (et al.), *3403*
- algorithms, design, Boychuk (L.M.), *4303*
- structural optimization, Bhavikatti (S.S.), Ramakrishnan (C.V.), *4525*
- algorithms, computing techniques, optimization, Pappas (M.), *4994*
- gradient techniques, newton method, nonlinear analysis, optimization, Tanabe (K.), *4996*
- algorithms, optimization, relaxation methods, Alekseychik (M.I.), Kalyuzhnyy (G.V.), *6142*
- constraints, design (optimum), work hardening, Mazzarella (C.), Polizzotto (C.), *6513*
- computing techniques, dynamic programming, linear programming, optimization, Rao (S.S.), *7177, book*
- computer aided design, mathematical programming, optimization, reinforced concrete, Bond (D.), *9442*
- mathematical models, optimization, shells (cylindrical), stress analysis, stresses, Michael (W.), Siddall (J.N.), *10090*
- algorithms, optimal control, Grachev (I.I.), Evtushenko (Yu.G.), *10091*
- design (optimum), Fox (D.B.), Liebman (J.S.), *10346*
- design (optimum), earthquake resistant structures, Bhatti (M.A.), Pister (K.S.), *12070*

nonlinear structures, beams, dynamic response, impact, transient loading, Meredith (D.), Morman (K.N.) Jr., (et al.), *514*

- differential equations (ordinary), energy methods, integration, structural analysis, Kamat (M.P.), Hayduk (R.J.), *1181*
- impulsive loading, vibration (nonlinear), Anderson (J.C.), Masri (S.F.), *1260*
- dynamic stability, structural stability, vibration (torsional), Antonelli (R.G.), Meyer (K.J.), (et al.), *3377*
- elasticity (nonlinear), structural analysis, Szuladzinski (G.), *4343*
- beams (curved), vibration (free), Reddy (J.N.), Singh (I.R.), *4413*
- deformation (finite), large displacement, structural analysis, Giambanco (F.), *6159*
- postbuckling theory, structural stability, viscous buckling, Kroplin (B.-H.), *6237*
- finite element techniques, postbuckling behavior, Wellford (L.C.) Jr., Dib (G.M.), *6240*
- computing techniques, iterative methods, relaxation methods, structural analysis, Wellford (L.C.), Sen (H.), *8131*
- finite element techniques, shells (nonlinear), Hughes (T.J.R.), Liu (W.K.), *9141*
- cable supported structures, curved surfaces, finite element techniques, Jayaraman (H.B.), Knudson (W.C.), *9144*
- elastic waves, rods, similarity methods, Seshadri (R.), Singh (M.C.), *10227*

nonlinear systems, computer aided manufacturing, state space techniques, Vasileva (L.G.), Lagunov (V.N.), *102*

- dynamic analysis, hysteresis, sensitivity, structural response, structures, Ray (D.), Pister (K.S.), (et al.), *106*
- control, design, van der pol plant, Horowitz (I.), Shur (D.), *116*
- controllability, perturbation theory, Dacka (C.), *117*
- identification, linearization, time varying systems, Haber (R.), Kmetty (P.), (et al.), *118*
- describing function, harmonic balance, nonlinear theory, oscillations, Obabkov (V.K.), *120*
- dynamic analysis, statistical theory, Potseluyev (A.V.), Topilskiy (S.V.), *122*
- graph theory, large scale systems, stability theory, Vidyasagar (M.), *123*
- discrete systems, filters, Shapiro (E.I.), *144*
- control, observers, Kozeyev (V.A.), *161*
- dynamic effects, kalman filters, Yun (C.-B.), Shinozuka (M.), *513*
- particle fluid flow, thermal diffusion, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *816*
- differential equations (ordinary), linear theory, mathematical methods, Rama Mohana Rao (M.), *1073, book*
- decoupling, transformation, Schrapel (H.D.), *1079*
- cauchy problem, parabolic equations, wave equations, Menzala (G.P.), *1090*
- observers, process control, Wallman (P.H.), *1164*
- structural analysis, vibration (forced), Plakhtienko (N.P.), Lysak (N.V.), *1261*
- dynamic analysis, random loading, vibration, Gopalsamy (K.), *1264*
- random excitation, vibration (nonlinear), Riganti (R.), *1268*
- differential equations (partial), eigenvalues, inverse problems, scattering, Gerdzhikov (V.S.), Ivanov (M.I.), (et al.), *2007*
- multivariable systems, pole placement, time varying systems, Sommer (R.), *2085*
- dynamic programming, rotating bodies, time optimal systems, Akulenko (L.D.), *2089*
- estimation, kalman filters, quasilinearization, stochastic processes, Wagdi (M.N.), *2098*
- suboptimal control, time delay systems, Gopalakrishnan Nair (G.), *2132*
- optimal control, synthesis, Venets (V.I.), Dudnikov (E.E.), (et al.), *2156*
- earthquake effects, vibration (random), Fujita (T.), Hattori (S.I.), *2320*
- algorithms, discrete systems, identification, realization, Tam (T.-J.), Nonoyama (S.), *3150*
- design, discrete systems, lur'e plants, tracking, Grujic (I.T.), Porter (B.), *3159*

- estimation, identification, wiener-hammerstein model, Fakhouri (S.Y.), *3160*
- estimation, filters, nonlinear methods, Kalachev (M.G.), Nikonov (V.G.), *3161*
- control, generalized linearization, synthesis, Petrov (B.N.), Vasilyev (V.I.), (et al.), *3162*
- degree of nonlinearity, estimation, hammerstein type, nonlinear theory, Varlaki (P.), Raybman (N.S.), *3163*
- algorithms, multivariable systems, stability theory, stochastic systems, Shibata (H.), Mayeda (H.), (et al.), *3171*
- nonlinear theory, stability theory, Liberzon (M.P.), *3172*
- control, design, deterministic control, feedback, nonlinear methods, stability theory, Leitmann (G.), *3174*
- optimal control, oscillations, periodic movements, van der pol's solution, Izrailovich (M.Ya.), Morozova (N.I.), *3188*
- algorithms, machinery, optimization, sequential machines, Baibatshaev (M.Sh.), Popkov (Yu.S.), *3189*
- distributed parameters, maximum principle, Petrovacki (D.), *3194*
- adaptive systems, algorithms, identification, Kopysov (O.Yu.), Prokopov (B.I.), *3210*
- algorithms, nonlinear programming, optimal control, vehicles, Van Zanten (A.T.), Krauter (A.I.), *3221*
- boundary value problems, conduction (heat), radiant interchange, Tao (L.N.), *3915*
- aeroelasticity, blunt bodies, models, oscillators, Dowell (E.H.), *3908*
- differential equations (ordinary), impulse, time delay systems, Martynyuk (D.I.), Tsyganovskii (N.S.), *4154*
- control, large scale systems, synthesis, Vukobratovic (M.), Stokic (D.), *4242*
- frequency domain techniques, harmonic balance, harmonic linearization, oscillations, Pismennyy (I.L.), *4243*
- estimation, identification, Varlaki (P.), Raibman (N.S.), *4265*
- optimal control, optimization, Seisov (Iu.B.), *4286*
- algorithms, estimation, observability, Krasovskii (A.A.), *4300*
- estimation, linear systems, stochastic systems, Siluyanova (I.D.), *4306*
- algorithms, optimization, process control, Kelmans (G.K.), Poznyak (A.S.), (et al.), *4324*
- evolution equations, existence theorems, Pavel (N.H.), *4949*
- algorithms, newton method, Mah (R.S.H.), Lin (T.D.), *5007*
- computing techniques, finite element techniques, integration, optimization, Schmid (H.J.), *5008*
- earthquake engineering, Udwadia (F.E.), Kuo (C.-P.), *5898*
- differential equations (partial), monopoles, soliton theory, volterra equations, Leznov (A.N.), Saveliev (M.V.), (et al.), *6063*
- conduction (unsteady), variational methods, Voros (G.M.), *6079*
- iterative methods, linear equations, Wellford (L.C.) Jr., Vahdani (B.), *6108*
- finite element methods (hybrid), heat transfer, time dependence, Chung (K.S.), *6121*
- control, discontinuities, lyapunov's functions, nonlinear theory, stability theory, Stalford (H.), *6131*
- controllability, identification, probability theory, subjective variance functions, Varlaky (P.), Raibman (N.S.), *6137*
- biocontrol, dynamic analysis, electroencephalography, mathematical models, nervous system, nonlinear theory, Freeman (W.J.), *6149*
- cracks, elastic behavior, linear systems, penalty function, plates, Yagawa (G.), Aizawa (T.), (et al.), *6457*
- cylindrical bodies, liquid metals, magneto fluid dynamics, pumps, Fireteanu (V.), *6865*
- differential equations (ordinary), initial value problems, laplace transform, Brenig (L.), Fairen (V.), *7159*
- describing function, feedback, nonlinear theory, oscillations, Lambert (L.), Dittrich (F.), *7237*
- dynamic analysis, engines, vibration (parametric), vibration (torsional), Dittrich (G.), Krumm (H.), *7404*
- control, diffusion, estimation, Banon (G.), Nguyen (H.T.), *8122*
- control, feedback, second order analysis, sensitivity, Herbert (R.J.), *8162*
- discrete systems, sensitivity, time delay systems, Kukhtenkov (L.P.), Ruban (A.I.), *8167*
- oscillations, suppression, Mcdonough (J.M.), *9153*
- control, decoupling, design, linear systems, multivariable systems, synthesis, Mercier (O.), *9165*
- multivariable systems, stability theory, Herz (B.), *9167*
- adaptive systems, filters, nonlinear theory, Linzenkirchner (E.), *9193*
- differential equations (ordinary), stability theory, Vorotnikov (V.I.), *10016*
- adaptive systems, digital control, microprocessors, observers, Sinha (N.K.), Law (S.S.Y.), (et al.), *10081*
- control, decoupling, design, large scale systems, manipulators, Vukobratovic (M.K.), Stokic (D.M.), *11049*
- control, decoupling, design, digital control, feedback, Singh (S.N.), *11050*
- distributed parameters, identification, walsh functions, Sinha (M.S.P.), Rajamani (V.S.), (et al.), *11058*
- algorithms, dynamic programming, filters, image processing, signal processing, Scharf (L.L.), Elliott (H.), *11064*
- algorithms, estimation, identification, modeling, nonlinear theory, stochastic systems, volterra series, Fakhouri (S.Y.), *11080*
- dynamic response, impulsive loading, Tumanov (Yu.A.), Lavrov (V.Yu.), (et al.), *11332*

nonlinear theory, boilers, digital simulation, dynamic analysis, mathematical models, Roder (H.W.), Rosel (G.S.), *74*
- conduction (unsteady), finite element techniques, moving surfaces, Padovan (J.), *98*
- describing function, harmonic balance, nonlinear systems, oscillations, Obabkov (V.K.), *120*
- beams (cantilever), large displacement, Lau (J.H.), *298*
- hydrodynamic stability, stability theory, Guiraud (J.P.), *640*
- continuum mechanics, elasticity, variational methods, Edelen (D.G.B.), *1102*
- bending, rods, Panayotounakos (D.E.), Theocaris (P.S.), *1222*
- shells (nonlinear), Pietraszkiewicz (W.), *1235*
- dynamic response, vibration (parametric), vibration (self excited), Tondl (A.), *1265*
- propagation, shock waves, Rogers (P.H.), Weiner (A.M.), *1614*
- galerkin method, hartmann flow, magneto fluid dynamics, stability theory, two dimensional flow, Lifshits (A.M.), Shtern (V.N.), *1771*
- averaging, integro differential equations, viscoelasticity, Turbe (N.), *2015*
- avoidance, differential games, synthesis, Gusyatnikov (N.B.), *2130*
- convection (benard), insulating materials (thermal), rayleigh benard instability, Chapman (C.J.), Proctor (M.R.E.), *2607*
- eddies, spectra, turbulence (isotropic), turbulence (structure), vortex rings, Tung (T.C.), Adrian (R.J.), *2687*
- free boundary, laminar flow, modeling, n body problems, turbulent flow, Greenspan (D.), *2720*
- differential equations (ordinary), magneto fluid dynamics, rotating disks, viscoelastic fluids, Bhatnagar (R.K.), *2887*
- differential equations (ordinary), mathematical methods, Nagle (R.K.), Singkofer (K.), *3096*
- lyapunov's functions, stability theory, Cook (P.A.), *3148*
- degree of nonlinearity, estimation, hammerstein type, nonlinear systems, Varlaki (P.), Raybman (N.S.), *3163*
- nonlinear systems, stability theory, Liberzon (M.P.), *3172*
- beams (thin section), Meredith (D.), Witmer (E.A.), *3293*
- flames (laminar), mathematical models, Matkowsky (B.J.), Putnick (L.J.), (et al.), *3859*
- modes, plasma (toroidal), stability theory, tokamak, Biskamp (D.), *3896*
- difference equations, parabolic equations, Schechter (E.), *4186*
- axisymmetric loading, membranes, Weinitschke (H.J.), *4371*
- large displacement, shells (nonlinear), Galimov (K.Z.), *4376*
- hydrodynamic stability, poiseuille flow, stability curve, Struminskii (V.V.), Skobelev (B.Yu.), *4642*
- bifurcation, eigenvalue problems, topological techniques, Alexander (J.C.), Antman (S.S.), *4946*
- boundary value problems, froude number, hulls, ship resistance, wavemaking resistance, Maruo (H.), *5969*
- bond graphs, control, simulation, Karnopp (D.), *6122*
- control, discontinuities, lyapunov's functions, nonlinear systems, stability theory, Stalford (H.), *6131*
- optimal control, sampled data systems, Miller (B.M.), *6143*
- biocontrol, dynamic analysis, electroencephalography, mathematical models, nervous system, nonlinear systems, Freeman (W.J.), *6149*
- deformation (finite), shells (thin), solid mechanics, Mollmann (H.), *6216, book*
- elastoplasticity, large displacement, plates (stiffened), Webb (S.E.), Dowling (P.J.), *6227*
- edge effects, large displacement, plates (annular), Lebrun (M.), Bayada (G.), (et al.), *6231*
- elastoplasticity, finite element techniques, plates (nonlinear), Gobetti (A.), *6234*
- aluminum alloys, buckling (nonlinear), collapse, nonlinear materials, plates, Little (G.H.), *6250*
- hydrodynamic stability, multiple scales, poiseuille flow, Weinstein (M.), *6678*
- libration theory, stability theory, Mckenzie (R.), Szebehely (V.), *6879*
- describing function, feedback, nonlinear systems, oscillations, Lambert (L.), Dittrich (F.), *7237*
- plates (circular), quasilinearization, Kayuk (Ya.F.), Khizhnyak (V.K.), *7345*
- dynamic response, elasticity (nonlinear), existence theorems, uniqueness, Vilke (V.G.), *7424*
- gravity waves (surface), hydrodynamic stability, three dimensional flow, Crawford (D.R.), Lake (B.M.), (et al.), *7746*
- free boundary, nonhomogeneous media, porous media, Popa (V.), *7976*
- floating structures, linear theory, mooring, wave interactions, Natvig (B.J.), Pendered (J.W.), *8049*
- jets, liquids, Kiselev (O.M.), Kotlyar (L.M.), *8594, book*
- convection, diffusion, hydrodynamic stability, perturbation methods, Neu (J.C.), *8602*
- computing techniques, finite element techniques, Banaszek (J.), Staniszewski (B.), *9151*
- adaptive systems, filters, nonlinear systems, Linzenkirchner (E.), *9193*
- numerical methods, soil consolidation, Siriwardane (H.J.), Desai (C.S.), *9356*
- acoustic waves, plasma, stability theory, wave energy, Khiet (T.), Abdel-Gawad (H.), *9803*
- granular media, gravitational stabilization, soils, Shahinpoor (M.), *10249*
- annular flow, cylindrical bodies, rossby waves, rotating cylinders, Davey (M.K.), *10410*

- energy conservation, magneto fluid dynamics, navier stokes equation, uniqueness, Bershadskii (A.G.), *10747*
- convection, immiscible fluids, porous media, Gagneux (G.), *10835*
- damping, rolling motion, ship motion, Cardo (A.), Francescutto (A.), (et al.), *10877*
- discrete systems, estimation, kalman filters, Kalaba (R.), Tesfatsion (L.), *11067*
- algorithms, estimation, identification, modeling, nonlinear systems, stochastic systems, volterra series, Fakhouri (S.Y.), *11080*
- flow fields, force, plates, singularities, walls, Sozou (C.), Pickering (W.M.), *11388*
- hydrodynamic stability, oscillations, thin films, Hasegawa (E.), *11538*
- diffusion, finite element methods, two phase flow, Robinson (P.C.), Rae (J.), (et al.), *12053*

nonlinear waves, one dimensional waves, shock waves, wave equations, Lardner (R.W.), *36*

- ocean waves, stratified waves, wave interactions, Petrov (V.V.), *663*
- cylindrical bodies, diffraction, flow irregularities, gravity waves, Miloh (T.), *667*
- experimental results, gravity waves, gravity waves (cnoidal), wave generation, Chakrabarti (S.K.), *678*
- acoustic waves, biomedical frequencies, ultrasonics, Muir (T.G.), Carstensen (E.L.), *890*
- acoustic waves, biomedical frequencies, ultrasonics, Carstensen (E.L.), Law (W.K.), (et al.), *891*
- ocean bed, sedimentation, sound propagation, underwater acoustics, Hovem (J.M.), *892*
- viscoelastic waves, viscoelasticity (dynamic), Engelbrecht (J.), *1055*
- gravity waves, stability theory, thermal waves, three dimensional formulation, Shrira (V.I.), *1083*
- bottom irregularities, gravity waves (stratified), steepness, Sidorchuk (V.N.), *1592*
- experimental results, gravity waves (breaking), sloping bottom, Flick (R.E.), Guza (R.T.), (et al.), *1611*
- acoustics, ducts, gases, Kraiko (A.N.), Ni (A.L.), *1803*
- bottom irregularities, existence theorems, gravity waves (surface), Potapkin (V.S.), *2703*
- acoustic waves, shock waves, Webster (D.A.), Blackstock (D.T.), *2704*
- boundary layer, tubes, Keller (J.J.), *2722*
- electro fluid dynamics, ion generators, liquid metals, theory, Gabovich (M.D.), Poritskii (V.Ya.), *2889*
- acoustic waves, sound generation, vibration, Ginsberg (J.H.), *2938*
- acoustic waves, sound generation, vibration, Ginsberg (J.H.), *2940*
- acoustic waves, scattering, sound fields, viscous effects, Woodsum (H.C.), Westervelt (P.J.), *2945*
- acoustic waves, arrays, focusing, Tjotta (J.N.), Tjotta (S.), *2950*
- attenuation, ear muffs, noise, noise abatement, shock waves, Osmundsen (E.), Gjaevenes (K.), *2958*
- approximation methods, layered media, Engin (H.), Askar (A.), (et al.), *3393*
- acoustic waves, pipes, reflection, Nakamura (T.), Nakamura (A.), (et al.), *3942*
- acceleration waves, elasticity (nonlinear), Lustman (L.), *4441*
- far field radiation, sound generation, sound propagation, Fenlon (F.H.), Mckendree (F.S.), *4785*
- gravity waves (internal), gravity waves (shallow water), liquid liquid interface, Helal (M.A.), Molines (J.M.), *5471*
- earth, magneto plasma dynamics, plasma, shock waves, Chang (T.T.S.), *5682*
- acoustics, gaussian beams, sound propagation, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *5734*
- acoustic waves, gaussian beams, interference, radiation, Fenlon (F.H.), *5736*
- airplanes, atmosphere, noise, sound propagation, Morfey (C.L.), Howell (G.P.), *5766*
- interface phenomena, plates, sound fields, vibration, Ginsberg (J.H.), *5781*
- dissipation, elastodynamics, Gulyaev (V.I.), *6336*
- finite element techniques, harbors, shallow water, tsunami, Lepelletier (T.G.), *6609*
- chemical reactions, deflagration, kinetic theory, transport phenomena, Abouseif (G.E.), Toong (T.Y.), *6708*
- acoustic waves, sound propagation, Tokuoka (T.), *6903*
- cauchy problem, wave equations, Menzala (G.P.), Strauss (W.A.), *7171*
- higher order theories, rockets, solid propellants, Culick (F.E.C.), *7425*
- gravity waves (breaking), surface tension, surveys, Schwartz (L.W.), Fenton (J.D.), *7759*
- embankments, finite difference methods, reflection, wave interactions, Nasser (M.S.), *8511*
- self excitation, stability theory, van der pol equations, wave equations, Lardner (R.W.), Nicklason (G.), *9103*
- laplace transform, pade approximation, singular perturbations, Venkatarangan (S.N.), Narendran (G.), *9109*
- diffraction, nonlinear characteristics, Bagdoev (A.G.), *9348*
- gravity waves, schrodinger equation, wave interactions, Malik (S.K.), Singh (M.), *9621*
- boussinesq equation, differential equations (partial), korteweg de vries equation, scattering, solitary waves, Ablowitz (M.J.), Segur (H.), *10017*
- hyperbolic equations, nonlinear analysis, sine gordon equation, solitary waves, Olsen (O.H.), Samuelsen (M.R.), *10018*
- dispersion, elastic bodies, one dimensional waves, Tokuoka (T.), *10232*
- cylindrical bodies, diffraction, offshore structures, shallow water, Rahman (M.), Chakravartty (I.C.), *10393*
- acoustic waves, acoustics, burgers equation, sound propagation, Enflo (B.O.), *10784*
- deformation (finite), plates (rectangular), waveguides, Sugimoto (N.), Majima (Y.), *11156*
- estuaries, shallow water, tidal waves, two dimensional flow, Debnath (L.), Chatterjee (A.K.), *11359*
- gravity waves (finite depth), gravity waves (solitary), unsteady flow, wave interactions, Fenton (J.D.), Rienecker (M.M.), *11560*
- entrainment, film flow, turbulent flow, two phase flow, Demekhin (E.A.), *11565*
- shock waves, sonic booms, sound propagation, supersonic flow, Weber (M.E.), Donn (W.L.), *11916*
- acoustics, gas solid interface, shock waves, Babaev (A.E.), *11919*
- acoustics, dispersion, eigenvalue problems, Banerjee (P.P.), Korpel (A.), *11936*
- cylindrical waves, sound propagation, spherical waves, Scott (J.F.), *12004*
- sound, wave interactions, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *12007*

nonmetals, filament winding, solid propellants, wirewound vessels, Lamalle (J.), Cabanel (D.), *9465*

Nonnenmacher (T.F.), boltzmann equation, constitutive equations, mathematical models, thermodynamic functions, thermodynamics (nonequilibrium), *6746*

Nonoyama (S.), see Tam (T.-J.), *3150*

nonuniform flow, boundary layer, shock tubes, Cunningham (A.J.), Ogram (G.L.), (et al.), *715*

- green function, heat addition, slabs, Dudukovic (M.P.), *1699*
- aerodynamic loads, lifting bodies, wakes, Gluck (D.), *2737*
- boilers, design, steam, superheater, Chebulaev (V.V.), Lokshin (V.A.), *3881*
- axisymmetric flow, magneto fluid dynamics, turbulent flow, velocity profiles, Gelfgat (Yu.M.), Gorbunov (L.A.), *5673*
- duct flow, liquid metals, magneto fluid dynamics, thermoelectric phenomena, Shercliff (J.A.), *8812*
- equilibrium, generators, hall effect, magneto fluid dynamics, Rosenbaum (M.), Shamma (S.E.), (et al.), *8830*

Noor (A.K.), beams (curved), nonlinear analysis, Peters (J.M.), *1225*

- computing techniques, dynamic analysis, modal analysis, nonlinear analysis, structures, *3138*
- finite element methods (hybrid), global approach, nonlinear analysis, rayleigh ritz method, Peters (J.M.), *4196*

Noordergraaf (A.), see Melbin (J.), *8073*

Norbury (J.F.), see Motallebi (F.), *7736*

Nordin (C.F.) Jr., dispersion, fickian model, models, rivers, Troutman (B.M.), *10673*

Nordsve (N.T.), buckling (torsional), collapse, plates (stiffened), thin walled structures, Moan (T.), *6261*

Norkin (V.I.), generalized functions, gradient techniques, mathematical methods, *52*

Normand (C.), cellular flow, closed conduit flow, convection (free), *6781*

Normandin-Berne (M.), see Curtet (R.), *10458*

norms, backward heat problem, conduction (heat), existence theorems, mathematical methods, Biollay (Y.), *39*

- convergence, estimation, galerkin method, parabolic equations, Thomee (V.), *7199*

Norose (S.), see Sasada (T.), *1009*

Norris (A.N.), see Achenback (J.D.), *1305*

Norsk (P.), see Bonde-Petersen (F.), *229*

North (G.R.), climatology, heat transfer (atmospheric), Coakley (J.A.), *1908*

Northover (J.P.), ceramics, creep, glass, high temperature, mechanical properties, Groves (G.W.), *4520*

- ceramics, fracture, glass, high temperature, notch tests, Groves (G.W.), *6440*

Norton (D.J.), see Macha (J.M.), *8910*

Norton (M.P.), see Bull (M.K.), *1807*

Norton (S.J.), acoustic waves, reflection, scattering, *3946*

- see Higgins (F.P.), *3977*

Norum (D.I.), see Jame (Y.-W.), *9900*

Norum (T.D.), jet engines, shock waves, sound generation, supersonic flow, Seiner (J.M.), *11956*

Norwood (F.R.), see Forrestal (M.J.), *406*

Nosenko (N.I.), ellipsoids, reflection, shock waves, spherical bodies, Sysoev (N.N.), (et al.), *681*

Nosik (V.I.), gases, heat transfer, mixtures, plates (parallel), *11445*

Nosseir (N.S.), see Ho (C.-M.), *2677*

notch sensitivity, crack tip geometry, finite element methods (hybrid), fracture, singularities, Lin (K.Y.), Tong (P.), *2071*

- crack initiation, fatigue, fracture mechanics, stress intensity factor, Livesey (V.B.), Knott (J.F.), *2408*
- combined loading, fatigue, material testing, stress concentration, Kurajian (G.M.), Na (T.Y.), *2433*
- composite materials, finite element techniques, fracture criteria, Backlund (J.), *2454*
- composite materials, finite element techniques, shear loading, stress analysis, Herakovich (C.T.), Bergner (H.W.) Jr., *2455*

- low cycle fatigue, steel, Maruyama (T.), Maruyama (S.), (et al.), *3446*
- elastoplasticity, stress concentration, Molski (K.), Glinka (G.), *5300*
- caustics, stress intensity factor, Prassianakis (J.N.), Theocaris (P.S.), *8393*

notch tests, fractographic tests, high temperature, low cycle fatigue, steel, triaxial loading, Marloff (R.H.), Johnson (R.L.), *2411*
- failure, plastic behavior, steel, Margetson (J.), *2444*
- charpy tests, fractography, fracture energy, fracture toughness, Oldfield (W.), *2498*
- charpy tests, crack opening displacement, crack resistance, indentation, Belik (A.V.), Dolzhenkov (F.E.), (et al.), *3502*
- fracture mechanics, fracture toughness, De Roo (P.), Marandet (B.), *4491*
- crack growth, crack initiation, creep, fatigue, prediction, Olkin (S.I.), *5331*
- bending, combined loading, fatigue, torsion, Matake (T.), Imai (Y.), *6418*
- ceramics, fracture, glass, high temperature, Northover (J.P.), Groves (G.W.), *6440*
- aluminum alloys, crack growth, crack resistance, fracture toughness, Munz (D.), *6478*
- brittle materials, failure, fracture toughness, stress intensity factor, Shih (T.T.), *7519*
- fracture, polymers, torsion, yield condition, Truss (R.W.), Duckett (R.A.), (et al.), *7564*
- brittle materials, crack propagation, fracture toughness, stress intensity factor, Munz (D.), Bubsey (R.T.), (et al.), *7571*
- bars, imperfections, tension, ultimate strength, Miastkowski (J.), Skrocki (H.), *8437*
- calibration, fracture toughness, specimen design, stress intensity factor, Bubsey (R.T.), Munz (D.), (et al.), *9430*

Notestine (R.D.), see Wollkind (D.J.), *2846*

Nouh (A.), human engineering, prosthetic devices, respiratory system, *6029*

Nova (R.), anisotropic media, compression, failure, rocks, *425*
- anisotropic media, clay, shear strength, *3396*

Novak (M.), see Aboul-Ella (F.), *386*
- see Hindy (A.), *1882*
- see Hindy (A.), *8967*
- see Nogami (T.), *10258*

Novak (P.), see Pyle (R.), *1563*

Novarini (J.C.), see Medwin (H.), *5744*

Novick (A.S.), combustion products, combustors, gas turbines, hybrid fuels, Troth (D.L.), (et al.), *10712*
- combustors, design, gas turbines, jets, Arvin (J.R.), (et al.), *11513*

Novikov (F.Ya.), earth pressure, frozen ground, retaining walls, slopes, soil mechanics, *420*

Novikov (I.A.), conduction (heat), inverse problems, mathematical models, *8730*

Novikov (N.V.), experimental results, low temperature, steel, work hardening, Gorodyskii (N.I.), *5118*
- dynamic testing, mechanical properties, plasticity, steel, strain, tension, Ulyanenko (A.P.), (et al.), *6475*
- brittle materials, carbides, crack resistance, fracture toughness, variable loading, *7570*
- cooling, helium, liquid vapor mixture, regulator problem, temperature, valves, Gorodyskii (N.I.), (et al.), *7575*

Novikov (S.A.), see Bolshakov (A.P.), *3585*
- see Golubev (V.K.), *5291*
- see Batkov (Yu.V.), *6366*
- see Tsoi (P.A.), *8890*

Novikov (V.A.), see Gupalo (I.P), *7720*
- see Gupalo (I.P.), *11500*

Novikov (V.S.), coagulation, drops, evaporation, mathematical models, transport mechanisms, *10646*

Novikov (V.V.), buckling (nonlinear), shells (nonlinear), vibration (nonlinear), *5198*

Novikova (I.B.), see Kortikov (N.N.), *2608*

Novitskii (E.Z.), crystals, dynamic properties, piezoelectrics, shock, single crystals, Korotchenko (M.V.), (et al.), *2499*

Novogrudskii (L.S.), low temperature, thermal measurements, Gorodyskii (N.I.), (et al.), *5530*

Nowack (H.), see Schulte (K.), *1407*

Nowacki (W.K.), see Guelin (P.), *6337*
- see Guelin (P.), *8345*

Nowak (M.), see Filipkowski (S.), *3904*

Nowak (Z.), laminar flow, pipe flow, power law fluids, pressure drop, thermal effects, Gryglaszewski (P.), (et al.), *3803*
- see Gryglaszewski (P.), *3804*

Nowinski (J.L.), functional analyis, history, survey, *2009*
- elasticity (three dimensional), functional analysis, hilbert space, mathematical methods, variational methods, *10013*

Noyce (J.R.), combustors, emissions, gas turbines, mixing, Sheppard (C.G.W.), (et al.), *5640*

Noye (J.) ed., boundary integral methods, computing techniques, differential equations (partial), finite difference methods, galerkin method, iterative methods, surveys, *7180, book*

Nozaki (A.), see Daiguji (H.), *7730*

Nozhnitskii (Yu.A.), see Karimbaev (T.D.), *6093*

nozzles, compressible flow, condensation (dropwise), prandtl-meyer flow, Frank (W.), *586*
- jets, molecular beams, supersonic flow, Abraham (O.), Binn (J.H.), (et al.), *623*
- compressible flow, particle fluid flow, rockets, Chang (I.-S.), *624*
- coagulation, two phase flow, Rychkov (A.D.), *627*
- fluid injection, rockets, thrust, Lazarev (G.P.), Shaikhutdinov (Z.G.), (et al.), *847*
- cellular flow, experimental results, jets, underexpanded jets, Borisov (Yu.Ya.), Podolskii (S.L.), *1569*
- compressible flow, numerical methods, shock waves, transonic flow, Wadia (A.R.), Payne (F.R.), *2615*
- boundary layer, chemically reactive flow, frozen flow, lasers (gasdynamic), supersonic flow, Bassina (I.A.), Dorot (V.L.), (et al.), *2639*
- axisymmetric flow, numerical analysis, supersonic flow, Ishii (R.), *2652*
- aerodynamic performance, discharge coefficients, discharges, flow measurement, Ito (H.), Watanabe (Y.), (et al.), *2656*
- arrays, measurements, Marsters (G.F.), *2666*
- axisymmetric flow, contraction, wind tunnels, Tulapurkara (E.G.), *2768*
- boundary layer (thermal), boundary layer (turbulent), turbulence (free-stream), turbulent flow, Bauer (K.), Straub (J.), (et al.), *2787*
- acoustics, aerodynamic excitation, noise, Knott (P.R.), Blozy (J.T.), (et al.), *2944*
- expansion, gases, rarefied flow, Nanbu (K.), Watanabe (Y.), *3646*
- aerodynamic performance, noncircular pipes, ventilation, Yetter (J.A.), Leavitt (L.D.), *3680*
- calibration, pressure measurement, swirl flow, velocity measurement, Murakami (M.), Kito (O.), *3755*
- aerodynamic performance, propulsion, swept wings, Capone (F.J.), *3885*
- charged particles, fog, jets, precipitation, survey, Frost (W.), Collins (F.G.), (et al.), *3893*
- thermal stresses, thermoelasticity (transient), Makarov (A.M.), Kuranov (B.A.), (et al.), *3994*
- compressible flow, jets, mathematical models, plumes, Kraiko (A.N.), Shelomovskii (V.V.), *4591*
- approximations (higher order), throats, transonic flow, Dutton (J.C.), Addy (A.L.), *4624*
- aerodynamic performance, cascades, drag, optimization, relaxation drag, slender bodies, Schilling (H.), *4625*
- analysis, bubble dynamics, liquid gas mixture, Siryi (V.S.), Prikhodko (N.A.), *4627*
- cascades, contamination, deposition, gas turbines, inlets, Nealy (D.A.), Timmerman (W.H.), (et al.), *4744*
- swirl flow, thrust, Carpenter (P.W.), *5446*
- experimental results, particle fluid flow, transonic flow, Myshanov (A.I.), Shorokov (N.N.), *5447*
- axial turbines, cascades, holography, interferometry, Bryanston-Cross (P.J.), Lang (T.), (et al.), *5505*
- geometrical properties, reversers, thrust, Tsybizov (Yu.I.), Salmanova (N.G.), *5669*
- approximations (higher order), irrotational flow, supersonic flow, Ishii (R.), *6681*
- calibration, supersonic flow, wind tunnels, Weinert (W.), *6743*
- propulsion, rockets, space vehicles, supersonic flow, Ellis (R.A.), Hammond (R.N.), (et al.), *6851*
- atomization, swirl, Som (S.K.), Mukherjee (S.G.), *6986*
- experimental methods, fluidized beds, Cebulla (D.), *7015*
- compressible flow, drag, jets, numerical methods, supersonic flow, Mikhail (A.G.), Hankey (W.L.), (et al.), *7688*
- pressure distribution, supersonic flow, unsteady flow, Melnikov (D.A.), Tutushkin (A.S.), *7727*
- aerosols, experimental results, jets, Hagele (J.), *7728*
- choked flow, compressible flow, flow measurement, saint venants equation, Mollenbruck (W.), *7814*
- aerodynamic interference, rockets, side forces, space vehicles, staging, Sadunas (J.A.), French (E.P.), (et al.), *7893*
- nozzles (underexpanded), pressure distribution, viscid inviscid flow, Volchkov (E.P.), Kozmenko (V.K.), (et al.), *8587*
- free jets, interaction, surfaces, Lengrand (J.-C.), Allegre (J.), (et al.), *8596*
- acoustic waves, compressible flow, ducts (variable area), transmission, Miles (J.H.), *8862*
- cracks, flaws, fracture mechanics, pressure vessels, reactor structures, Atluri (S.N.), Kathiresan (K.), *9463*
- cascades, developing flow, velocity profiles, Cherepenin (N.D.), *9579*
- plumes, two dimensional flow, Chu (C.-W.), Der (J.) Jr., (et al.), *10454*
- bubble dynamics, bubbly flow, compressional waves, subsonic flow, supersonic flow, Nakagawa (H.), Mori (Y.), (et al.), *10491*
- compressible flow, fluid injection, supersonic flow, Zelentsov (V.V.), Nesterov (A.A.), (et al.), *11400*
- compressible flow, lasers (gasdynamic), mixing, supersonic flow, Efimov (B.G.), Zaklyaziminskii (L.A.), *11403*
- annular flow, exit, gravity, jets, Tuck (E.O.), *11484*
- gas-trips, laser doppler velocimeters, mixing, supersonic flow, velocity profiles, Cenkner (A.A.) Jr., *11511*
- pulsejets, relaxation, supersonic flow, Belavin (V.A.), Golub (V.V.), (et al.), *11515*

- drops, shock tubes, two phase flow, Borisov (A.A.), Gelfand (B.E.), (et al.), *12024*
- bubbly flow, pressure distribution, Thang (N.T.), Davis (M.R.), *12029*

nuclear fuels, cladding, thermoelasticity (transient), Ma (B.M.), *8878*
- cladding, creep, nuclear radiation, Wilson (H.W.), Hsieh (H.J.), (et al.), *8883*
- fuel elements, heat transfer, hydraulics, numerical methods, Araki (T.), Takeda (T.), (et al.), *11802*

nuclear fusion, laser plasma interaction, materials properties, power generation, thermal loading, Jaeger (T.A.) eds., Boley (B.A.), *1781, book*
- implosion, laser plasma interaction, shells (spherical), turbulence (transport), Lykov (V.A.), Murashkina (V.A.), (et al.), *1782*
- boltzmann equation, neutrons, scattering, statistical mechanics, transport, Inonu (E.), Tezcan (C.), *2778*
- diagnostics, plasma, radiation properties, tokamak, Koopman (D.W.), Mcilrath (T.J.), (et al.), *2898*
- compressional waves, cylindrical waves, explosions, plasma, Kaliski (S.), *2902*
- containment, diagnostics, inertia, measurements (dynamic), Campbell (E.M.), Lane (S.M.), (et al.), *5684*
- design criteria, laser plasma interaction, reactor structures, thermonuclear energy, Basov (N.G.), Krokhin (O.N.), (et al.), *5686*
- absorption, experimental results, implosion, laser plasma interaction, thermonuclear energy, Bekiarian (A.), Decroisette (M.), *5688*
- beam plasma interactions, design, helium, injectors, Blum (A.S.), Barr (W.L.), (et al.), *6868*
- containment, plasma (toroidal), thermonuclear energy, tokamak, Bromberg (L.), Cohn (D.R.), (et al.), *8831*

nuclear power, control, optimal control, Haugset (K.), Leikkonen (I.), *170*
- cooling, ocean, pumps, Huang (B.J.), *1912*
- control, design, power generation, Frogner (B.), Rao (H.S.), *2176*
- critical heat flux, nuclear reactors, safety, thermal loading, Hochreiter (L.E.) eds., Sozzi (G.L.), *4693, book*
- heat transfer, nuclear reactors, safety, Jones (O.C.) Jr. ed., *6810*
- isotopes, space vehicles, steam power plants, Raab (B.), *6854*
- generators, mathematical models, steam, steam power plants, transient effects, Van Tuyle (G.J.), Lee (J.C.), *8759*
- nuclear reactors, seismic loading, Kana (D.D.), *10727*

nuclear radiation, boltzmann equation, conductivity, neutrons, radiant interchange, transport, Mennig (J.), Ozisik (M.N.), (et al.), *776*
- missile structures, x ray techniques, Cost (T.L.), *2977*
- elastoplasticity, fracture mechanics, nuclear reactors, pressure vessels, radiation effects, Khan (M.A.), Shoji (T.), (et al.), *5370*
- damage (cumulative), low cycle fatigue, micromechanics, De Vries (M.I.), Tjoa (G.L.), (et al.), *7501*
- steel, strain, tension, Kiselevskii (V.N.), Kharitonov (D.F.), (et al.), *7553*
- cladding, creep, nuclear fuels, Wilson (H.W.), Hsieh (H.J.), (et al.), *8883*

nuclear reactors, dynamic response, vibration (flow induced), Wambsganss (M.W.), Mulcahy (T.M.), *383*
- containment, reliability, structure, testing equipment, vessels, Weymouth (L.J.), *488*
- cladding, rewetting, Sawan (M.E.), Temraz (H.M.), *730*
- critical heat flux, nucleate boiling, pool boiling, Theofanous (T.G.), *738*
- composite vessels, conduction (heat), conductivity, prestressed concrete, Bangash (Y.), *774*
- computer programming, heat transfer (combined modes), slug flow, tube bundles, Yeung (M.R.), Wolf (L.), *789*
- probability theory, seismic loading, soil structure interaction, Jaeger (T.A.) eds., Boley (B.A.), *1325, book*
- finite element techniques, fluid-structure interaction, numerical methods, Mcmaster (W.H.), Gong (E.Y.), (et al.), *1605*
- convection (forced), heat transfer, recirculation, Cho (S.M.), Kane (R.S.), *1687*
- cooling, heat exchangers, thermal instability, Proshutinskii (A.P.), Lobachev (A.G.), *1713*
- cooling, rewetting, transition boiling, Kim (A.K.), Lee (Y.), *1714*
- crack propagation, fatigue, fracture, Ermi (A.M.), Bauer (R.E.), (et al.), *2406*
- design, helium, power plants, turbomachinery, Mcdonald (C.F.), Smith (M.J.), *2750*
- convection (free), cooling, heat transfer, Agrawal (A.K.) eds., Guppy (J.G.), *2797, book*
- dynamics, modeling, transient effects, Khatib-Rahbar (M.), Cady (K.B.), *2873*
- bridges (suspension), buildings (tall), heat exchangers, hydraulic machinery, hydraulic structures, ship structures, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- ratchetting, shells (cylindrical), thermal effects, thermoplasticity, Goodman (A.M.), *2970*
- critical flow, two phase flow, Wallis (G.B.), *2990*
- forming, materials properties, pressure vessels, structural materials, welding, Nichols (R.W.) ed., *3564, book*
- fluid-structure interaction, mechanics, pressure vessels, vibration (forced), Jaeger (T.A.) eds., Boley (B.A.), *3565, book*
- boiling, condensation, multiphase flow, safety, Veziroglu (T.N.) ed., *3794, book*
- fuel elements, safety, thermal effects, Minashin (V.E.), Gorelov (I.N.), (et al.), *3886*
- creep, fuel elements, nonlinear materials, Chan (D.P.), Jackson (R.J.), *4346*
- critical heat flux, nuclear power, safety, thermal loading, Hochreiter (L.E.) eds., Sozzi (G.L.), *4693, book*
- elastoplasticity, fracture mechanics, nuclear radiation, pressure vessels, radiation effects, Khan (M.A.), Shoji (T.), (et al.), *5370*
- fuel elements, mathematical models, melting, Chen (W.L.), Ishii (M.), (et al.), *5589*
- cylindrical bodies, impact, Bignon (P.G.), Riera (J.D.), *6363*
- creep, deformation, ductility, testing equipment, tests, Kruglov (A.S.), Fazkullin (V.A.), (et al.), *6498*
- modeling, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *6548, book*
- boiling, compressional waves, hydrodynamic stability, sodium, thermal instability, Galati (A.), *6770*
- heat transfer, nuclear power, safety, Jones (O.C.) Jr. ed., *6810*
- closed conduit flow, convection (free), thermal instability, Zvirin (Y.), Jeuck (P.R.) III, (et al.), *6811*
- anelasticity, high temperature, structural design, Corum (J.M.), *8196*
- cavitation, containment, cooling, damage, Jones (A.V.), *8517*
- annuli, flooding, liquid vapor mixture, two phase flow, Richter (H.J.), *8576*
- critical flow, critical heat flux, two phase flow, Levy (S.), Abdollahian (D.), *8692*
- jets, pipe flow, tube bundles, Krebs (L.), Bremhorst (K.), (et al.), *8725*
- cladding, conformal mapping, fuel elements, heat transfer, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *8729*
- fluid-structure interaction, heat transfer (combined modes), thermal effects, tube bundles, Bennett (J.G.), Ju (F.), *8747*
- modeling, seismic loading, Benda (B.J.), Johnson (J.J.), (et al.), *8965*
- film flow, heat transfer, integral methods, laminar flow, tubes, Rogers (J.T.), *10565*
- nuclear power, seismic loading, Kana (D.D.), *10727*
- finite element techniques, fluid-structure interaction, reactor core, thermal effects, Bennett (J.G.), Ju (F.D.), *11658*
- containers (partially filled), containment, flexible walls, toroids, Lu (S.C.H.), Mccauley (E.W.), (et al.), *11674*

nucleate boiling, critical heat flux, nuclear reactors, pool boiling, Theofanous (T.G.), *738*
- empirical methods, freon, heat transfer, Nishikawa (K.), Fujita (Y.), (et al.), *739*
- critical heat flux, nucleation, surface effect, surface flaws, Messina (A.D.), Park (E.L.) Jr., *740*
- boiling, convection (forced), critical heat flux, critical region, Katto (Y.), *746*
- biomechanics, critical heat flux, cryogenics, film boiling, heat transfer, Belyakov (V.P.), Budrik (V.V.), *750*
- boiling, heat transfer, liquid nitrogen, pool boiling, Trepp (C.), V. Hoffmann (T.), *1670*
- boiling, transition boiling, tube bundles, Gavrilin (A.I.), *1672*
- boiling, experimental methods, resistance thermometers, thin films, Oker (E.), Merte (H.) Jr., *1692*
- boiling, coatings, polymers, surface effect, thin films, Hinrichs (T.), Hennecke (E.), (et al.), *2792*
- approximations, boiling, convection (forced), heat transfer, Guglielmini (G.), Nannei (E.), (et al.), *2793*
- boiling, drops, water, Maa (J.R.), Tunc (C.Y.), *3791*
- convection (forced), emissivity, heat transfer, Stephan (K.), Auracher (H.), *4700*
- film boiling, pool boiling, thermal instability, transition boiling, Zhukov (S.A.), Bareiko (V.V.), (et al.), *6772*
- contamination, pool boiling, Joudi (K.A.), James (D.D.), *7828*
- boiling, heat transfer, refrigerant-oil mixtures, refrigeration, Chongrungreong (S.), Sauer (H.J.) Jr., *7831*
- boiling, critical heat flux, roughness, surface effect, Avksentyuk (B.P.), *8690*
- boiling, bubble dynamics, film boiling, heat transfer, Shekriladza (I.G.), *8691*
- ablation, finite difference methods, heat transfer, space vehicles, Sutton (G.W.), *8771*
- channel flow, conduction, convection (forced), heat transfer (combined modes), thermal instability, Humbert (M.), Martin (M.), *9685*

nucleation, critical heat flux, nucleate boiling, surface effect, surface flaws, Messina (A.D.), Park (E.L.) Jr., *740*
- boiling, bubble dynamics, emulsions, visualization, Mori (Y.H.), Sano (H.), (et al.), *1693*
- bubble dynamics, liquid liquid systems, Avedisian (C.T.), Glassman (I.), *1862*
- heat transfer, Springer (G.S.), *2844*
- elastoplasticity, forming, necking, Chu (C.C.), Needleman (A.), *4471*
- ductile fracture, void growth, Le Roy (G.), Embury (J.D.), (et al.), *4497*
- thermal explosions, vaporization, Henry (R.E.), Fauske (H.K.), *5547*
- boiling, high pressure, hydrocarbons, water, Avedisian (C.T.), Glassman (I.), *6771*
- swell, void growth, Clement (C.F.), Wood (M.H.), *7503*
- alloys, crack propagation, metallurgy, stress corrosion, Chu (W.-Y.), Hsiao (C.-M.), (et al.), *9394*
- acoustic emission, crack propagation, kinetics, Kuranov (V.N.), Ivanov (V.I.), (et al.), *9412*
- condensation, steam, two dimensional flow, Bakhtar (F.), Mohammadi Tochai (M.T.), *9781*
- bubble dynamics, immiscible fluids, two phase flow, Han (J.-C.), Yang (W.-J.), *9883*
- fracture mechanics, griffith cracks, micromechanics, Bamiro (O.A.), Provan (J.W.), *10299*

Nudenberg (R.D.), see Pardoen (G.C.), *5168*

Nuh (S.), see Dungar (R.), *9355*

Nuhrenberg (J.), see Lortz (D.), *6860*

Nulk (R.A.), design, guidance systems, lasers, Pastrick (H.L.), (et al.), *2163*

numerical control, computer aided manufacturing, positioning accuracy, robotics, tools, Farkas (J.), El-Sonbaty (I.), *2166*

- machinery, turning, Kudinov (V.K.), Taranenko (V.A.), (et al.), *2190*
- machinery, turning, Yampolskiy (L.S.), Trotsenko (V.V.), (et al.), *2191*
- algorithms, computer aided manufacturing, optimal control, sampled data systems, tools, Schlueter (R.A.), Retford (E.T.), (et al.), *2194*
- cutting (three dimensional), mathematical models, optimization, Davis (R.P.), Wysk (R.A.), (et al.), *3220*
- cutting, machinery, optimization, Cirp Annals 1981, *4468, book*
- control, design, drilling, hydraulic machinery, Glaser (D.J.), Nachtigal (C.L.), *5148*
- computer aided manufacturing, operations research, optimization, Hitomi (K.), Ohashi (K.), *7250*

numerical methods, collocation, convergence, singular integral equations, Tsamasphyros (G.), Theocaris (P.S.), *45*

- differential equations (ordinary), differential equations (partial), mesh generation, time dependence, Lee (N.N.), Meyers (R.E.), *59*
- differential equations (ordinary), equations of motion, iterative methods, micropolar media, Anwar (M.), Guram (G.S.), *61*
- digital simulation, mathematical models, regenerators, Khandwawala (A.I.), Chawla (O.P.), *72*
- convection, fluid mechanics, galerkin method, surveys, Hughes (T.J.R.) ed., *95, book*
- elastoplasticity, finite element techniques, yield criteria, Tracey (D.M.), Freese (C.E.), *278*
- composite materials, laminates, nonlinear materials, stress strain relationships, Ditcher (A.K.), Rhodes (F.E.), (et al.), *280*
- corners, elastic behavior, singular integral equations, stress intensity factor, Theocaris (P.S.), Ioakimidis (N.I.), *478*
- compressible flow, lasers (gasdynamic), phase shifts, Roberts (S.A.), Lamberton (H.M.), *588*
- laminar flow, oscillatory flow, wavy walls, Matsunaga (N.), Kaneko (A.), (et al.), *602*
- aerodynamics, boundary layer (three dimensional), turbulence, wings, Humphreys (D.A.), *646*
- inviscid fluid, transonic flow, unsteady flow, Lerat (A.), Sides (J.), *697*
- thermal diffusion, transient effects, Yuen (W.W.), Wong (L.W.), *771*
- boundary layer, magneto fluid dynamics, plates (perforated), thermal effects, Drymonitou (M.A.), Geroyannis (V.S.), (et al.), *856*
- electron beams, modes, plasma, turbulence (mechanisms), Kirk (J.), Weiland (J.), *865*
- convergence, kepler equation, newton method, orbit mechanics, Broucke (R.), *880*
- infiltration, moving surfaces, Koussis (A.D.), Chow (S.-L.), *953*
- excavation, mining, stress analysis, tunnels, Diering (J.A.C.), *1335*
- bends, rivers, secondary flow, shallow water, Kalkwijk (J.P.T.), De Vriend (H.J.), *1494*
- flow obstructions, stratified flow, two dimensional flow, Granberg (I.G.), *1519*
- porous walls, transonic flow, wind tunnels, Karlsson (K.R.), Sedin (Y.C.-J.), *1520*
- compressible flow, inviscid fluid, unsteady flow, Zannetti (L.), Colasurdo (G.), *1524*
- airfoils, compressible flow, transonic flow, Niyogi (P.), Dutta (S.), *1525*
- aerodynamics, compressible flow, reynolds number (high), survey, Le Balleur (J.C.), Peyret (R.), (et al.), *1527*
- diffusers, plane flow, stalling, Bardina (J.), Lyrio (A.), (et al.), *1567*
- explosions (underwater), fluid-structure interaction, stability (numerical), submerged bodies, Neishlos (H.), Israeli (M.), (et al.), *1604*
- finite element techniques, fluid-structure interaction, nuclear reactors, Mcmaster (W.H.), Gong (E.Y.), (et al.), *1605*
- finite element techniques, fluid-structure interaction, lumped systems, Bathe (K.-J.), Sonnad (V.), *1608*
- computer programming, conduction (heat), transforms, Campo (A.), *1702*
- chemically reactive flow, equilibrium, internal combustion engines, Ramshaw (J.D.), Cloutman (L.D.), *1756*
- deformation, inverse problems, thermoelasticity, Nikitenko (N.I.), *1833*
- algorithms, optimization, Kibardin (V.M.), *2121*
- boundary elements, elasticity (linear), Bhattacharyya (P.K.), Symm (G.T.), *2225*
- approximation theory, vibration, Malsch (H.), *2324*
- dynamic response, plates, Nikiforovskii (V.S.), Tetenov (E.V.), (et al.), *2377*
- compressible flow, lifting line theory, lifting surfaces, swept wings, transonic flow, Cheng (H.K.), Meng (S.Y.), (et al.), *2612*
- compressible flow, nozzles, shock waves, transonic flow, Wadia (A.R.), Payne (F.R.), *2615*
- compressible flow, differential equations (partial), transonic flow, Neuberger (J.W.), *2616*
- aerodynamics, compressible flow, inlet flow, supersonic flow, Knight (D.D.), *2623*
- compressible flow, grids, two dimensional flow, viscous effects, Kovenya (V.M.), Yanenko (N.N.), *2625*
- turbulence (isotropic), turbulence model, two dimensional flow, Siggia (E.D.), Aref (H.), *2698*
- fluid-structure interaction, impact, shells (cylindrical), Belytschko (T.), Mullen (R.), *2711*
- aerodynamic performance, aerodynamics, subsonic flow, wings, An (J.-G.), *2747*
- cellular flow, channel flow, convection (free), thermodynamics (nonequilibrium), Luijkx (J.M.), Platten (J.K.), *2800*
- magneto plasma dynamics, polar fluids, shock waves, similarity methods, Pushkar (E.A.), *2890*
- free boundary, porous media, Alt (H.W.), *3002*
- dams, seepage, Crank (J.), Ozis (T.), *3003*
- air pollution, dispersion, galerkin method, Pepper (D.W.), Kern (C.D.), (et al.), *3028*
- atmospheric circulation, Ludwig (F.L.), Byrd (G.), *3031*
- buckling, shear loading, shells (anisotropic), Cohen (G.A.), *3336*
- modal analysis, vibration (forced), Saunders (L.R.), Collings (A.G.), *3380*
- aerodynamics, airfoils, compressible flow, transonic flow, Haldar (K.), *3637*
- compressible flow, jets, supersonic flow, Akimov (G.A.), Sobkolov (B.N.), *3639*
- ocean bed, pipelines, wave loads, Efthymiou (M.), Narayanan (R.), *3718*
- airfoil theory, potential flow, transonic flow, Fort (J.), Kozel (K.), *3726*
- conduction (heat), heat addition, series expansion, Beck (J.V.), *3816*
- conduction (heat), variable thermal properties, Taran (M.D.), Favorskii (A.P.), *3824*
- codes, solar collectors, solar energy, solar radiation, Mustacchi (C.), Cena (V.), (et al.), *3830*
- chemical kinetics, chemically reactive flow, combustion, elliptic equations, Greenberg (J.B.), Presser (C.), *3874*
- chemical kinetics, combustion, quenching, Dendy (J.E.) Jr., Wendroff (B.), *3875*
- liquid solid interface, reflection, ultrasonics, Ngoc (T.D.K.), Mayer (W.G.), *3944*
- fracture, permeability, Bawden (W.F.), Curran (J.H.), (et al.), *4028*
- algorithms, digital simulation, linear systems, matrix methods, simulation, state space techniques, transition matrices, Litz (L.), *4206*
- algorithms, distributed parameters, initial value problems, optimal control, parabolic equations, Winther (R.), *4207*
- algorithms, gauss method, inequalities, least squares, optimization, penalty function, Bellagamba (L.), *4208*
- algorithms, boundary value problems, multiple shooting algorithm, singular control, solar energy, Oberle (H.J.), *4304*
- iterative methods, snap-through, Crisfield (M.A.), *4401*
- plates (parallel), squeeze films, viscous flow, Aziz (A.), Na (T.Y.), *4581*
- exhaust gases, jets, plumes, shock waves, supersonic flow, Dash (S.M.), Thorpe (R.D.), *4590*
- entrance region, noncircular pipes, turbulent flow, Gessner (F.B.), Emery (A.F.), *4623*
- turbulence (geophysical), wind-wave interaction, Chalikov (D.V.), *4657*
- channel flow, gravity waves (surface), unsteady flow, Edenhofer (J.), Schmitz (G.), *4666*
- combustion, combustors, modeling, Mcdonald (H.), *4736*
- algorithms, constraints, optimal control, regulator problem, Kalaba (R.), Spingarn (K.), *5054*
- algorithms, optimal control, sensitivity, Evers (A.H.), *5058*
- algorithms, iterative methods, optimization, Adamenko (G.M.), *5059*
- algorithms, gliding trajectory, optimal control, oscillations, trajectory optimization, Williamson (W.E.) Jr., *5061*
- bending, finite difference methods, plates, Atkatsh (R.S.), Baron (M.L.), (et al.), *5226*
- elliptical bodies, oscillations, unsteady flow, vortex rings, Dhanak (M.R.), De Bernardinis (B.), *5398*
- finite difference methods, navier stokes equation, spectral analysis, Roy (P.), *5410*
- cylindrical bodies, missiles, shock waves, supersonic flow, three dimensional flow, turbulent flow, Hung (C.M.), Chaussee (D.S.), *5413*
- bodies of revolution, compressible flow, hypersonic flow, viscid inviscid flow, Polyanskii (A.F.), Skurin (L.I.), (et al.), *5416*
- chemical reactions, compressible flow, jets, nonequilibrium flow, supersonic flow, Kireev (V.I.), Pirumov (U.G.), *5418*
- boundary conditions, compressible flow, transonic flow, unsteady flow, Kwak (D.), *5421*
- compressible flow, navier stokes equation, reynolds number (high), Davydov (Yu.M.), *5422*
- boundary layer (turbulent), reynolds number, turbulence model, Biringen (S.), Reynolds (W.C.), *5465*
- eigenvalue problems, fluid-structure interaction, Muller (W.C.), *5479*
- algorithms, calibration, hot wire, Huffman (G.D.), *5506*
- conduction (heat), heat addition, heat transfer, Dean (D.J.), *5579*
- conduction (heat), inverse problems, Blackwell (B.F.), *5580*
- boundary value problems, conduction (heat), gradient techniques, inverse problems, Artyukhin (E.A.), Rumyantsev (S.V.), *5581*
- sloping bottom, sound propagation, underwater acoustics, wave equations, Lee (D.), Papadakis (J.S.), *5788*

- meteorology (physical), weather forecasting, Matsumura (T.), Ookochi (Y.), *5956*
- algorithms, mathematical programming, optimal control, Sheela (B.V.), Ramamoorthy (P.), *6140*
- viscoelastic materials, volterra equations, Cameron (R.F.), Mckee (S.), *6176*
- structural response, vibration (free), Gupta (K.K.), *6317*
- dynamic analysis, structural analysis, Brusa (L.), Nigro (L.), *6318*
- elastic waves, transient effects, Gamby (D.), Lamy (R.), *6357*
- colloids, liquid solid interface, surfactants, Gur (Y.), Ravina (I.), Babchin (A.J.), *6585*
- compressible flow, Moskalkov (M.N.), *6633*
- cascades, transonic flow, unsteady flow, Gnesin (V.I.), *6663*
- hydrodynamic stability, poiseuille flow, Takeuchi (D.I.), Jankowski (D.F.), *6677*
- finite element methods, gravity waves (shallow water), Williams (R.T.), Zienkiewicz (O.C.), *6707*
- casting, solidification, Pratt (T.K.), Landis (F.), (et al.), *6801*
- chemically reactive flow, combustion, flames (laminar), mathematical models, Oran (E.S.), Boris (J.P.), *6833*
- arcs, energy transport, plasma, turbulence (transport), Galeev (Z.M.), Ziganshin (R.R.), (et al.), *6866*
- groundwater, similarity methods, Ramm (D.), Chazan (D.), *7005*
- atmosphere, planetary atmospheres, radiation, Karp (A.H.), *7065*
- algorithms, iterative methods, market equilibrium, operations research, optimization, Ahn (B.H.), *7227*
- algorithms, linear systems, optimal control, suboptimal control, Kein (V.M.), Parikov (A.N.), (et al.), *7243*
- multivariable systems, simulation, Arays (Ye.A.), Dmitriyev (V.M.), *7255*
- contact problems, contact stresses, elastic bodies, Paul (B.), Hashemi (J.), *7268*
- blunt bodies, compressible flow, real gas effects, supersonic flow, Antonets (A.V.), Marinin (V.P.), *7687*
- compressible flow, drag, jets, nozzles, supersonic flow, Mikhail (A.G.), Hankey (W.L.), (et al.), *7688*
- compressible flow, hypersonic flow, streamlines, three dimensional flow, viscous effects, Kim (M.D.), Thareja (R.R.), (et al.), *7691*
- compressible flow, shock waves, stability (numerical), supersonic flow, Ivanov (M.J.), Kraiko (A.N.), *7692*
- compressible flow, diffusers, duct flow, swirl flow, Deckker (B.E.L.), Jeffries (C.), (et al.), *7693*
- conduction (heat), conductivity, inverse problems, mathematical models, Chen (Y.M.), Liu (J.Q.), *7855*
- conduction (heat), finite element techniques, nonlinear analysis, Schreyer (H.L.), *7857*
- acoustic waves, airplane structures, jet engines, scattering, Bayliss (A.), *7942*
- porous surfaces, seepage, Karadi (G.M.), De Miguel (E.), (et al.), *7982*
- dams, seepage, Botezatu (N.C.), *7983*
- beams (timoshenko), finite element techniques, Tessler (A.), Dong (S.B.), *8236*
- compressible flow, jets, mixing, Lukerchenko (N.N.), *8545*
- compressible flow, shock waves, transonic flow, Niyogi (P.), Das (T.K.), *8548*
- aerodynamics, compressible flow, transonic flow, Belotserkovski (O.M.), *8549*
- compressible flow, supersonic flow, transonic flow, Ukeguchi (N.), Sakata (H.), (et al.), *8551*
- networks, piping systems, Wood (D.J.), Rayes (A.G.), *8583*
- couette flow, hydrodynamic stability, oscillations, Carmi (S.), Tustaniwskyj (J.I.), *8606*
- airfoil theory, integral methods, transonic flow, Sachdev (P.L.), *8652*
- mathematical models, stefan problem, Lozano (C.J.), Reemtsen (R.), *8740*
- combustion, convection (free), spherical bodies, Potter (J.M.), Riley (N.), *8793*
- chemically reactive flow, porous media, Chin (R.C.Y.), Braun (R.L.), *8941*
- aquifers, drainage, Rolfes (L.), *8949*
- bearings (journal), cavitation, lubrication (hydrodynamic), reynolds equation, Meyer (G.H.), *9045*
- algorithms, boundary value problems, optimal control, Travassos (R.), Kaufman (H.), *9185*
- deformable bodies, Shilkrut (D.), *9275*
- nonlinear theory, soil consolidation, Siriwardane (H.J.), Desai (C.S.), *9356*
- slopes, soils, stability, Baker (R.), *9362*
- conformal mapping, gear teeth, stress intensity factor, Cardou (A.), Tordion (G.V.), *9472*
- ellipsoids, navier stokes equation, vortex rings, Durst (F.), Schonung (B.), *9524*
- boundary conditions, navier stokes equation, stability (numerical), stokes flow, vorticity, Quartapelle (L.), Valz-Gris (F.), *9527*
- fins, missiles, shock layer, supersonic flow, Wardlaw (A.B.) Jr., Solomon (J.M.), *9551*
- compressible flow, inviscid fluid, shock waves, transonic flow, Rizzi (A.) eds., Viviand (H.), *9556, book*
- compressible flow, navier stokes equation, unsteady flow, Kuo-Pen-Yu, *9558*
- blades, cascades, finite volume method, time domain techniques, Younis (M.E.), Camarero (R.), *9588*
- turbulence, turbulent flow, Zuber (I.), *9615*
- compressional waves, hydraulic machinery, water hammer, Lecerf (J.P.), *9624*
- cavitation, fluid-structure interaction, underwater structures, Dimaggio (F.L.), Sandler (I.S.), (et al.), *9628*
- airfoils, supersonic flow, two dimensional flow, Lewis (T.S.), Sirovich (L.), *9647*
- blades, helicopters, pressure distribution, transonic flow, unsteady flow, Chattot (J.-J.), Philippe (J.-J.), *9666*
- heat addition, magneto fluid dynamics, plates, similarity methods, Soundalgekar (V.M.), Takhar (H.S.), (et al.), *9784*
- insulation, magneto fluid dynamics, panels (flat), shear flow, Sastry (S.R.N.), *9789*
- geophysics, magnetic field, Slutskin (M.A.), Tsirel (V.S.), *9916*
- earth pressure, soil structure interaction, Gioda (G.), Jurina (L.), *9918*
- postbuckling theory, structural analysis, structural stability, Papadrakakis (M.), *10166*
- collapse, panels (stiffened), plastic behavior, Vasarhelyi (A.), *10174*
- collapse, finite element techniques, plasticity, Marti (J.), Cundall (P.), *10183*
- design (ultimate strength), plates, shells (axisymmetric), strength, Dzygadlo (Z.), Olejnik (A.), *10350*
- crossflow, cylindrical bodies, navier stokes equation, viscous flow, vorticity, Kravchenko (V.I.), *10413*
- compressible flow, one dimensional flow, Abrashin (V.N.), *10418*
- airfoils, compressible flow, conformal mapping, transonic flow, Constantinescu (V.N.), Bucur (S.C.), *10419*
- airfoils, compressible flow, subsonic flow, Carey (G.F.), Pan (T.T.), *10420*
- aerodynamics, compressible flow, supersonic flow, three dimensional flow, Voskresenskii (G.P.), Chushkin (P.I.), *10421*
- gravity waves (shallow water), rotating bodies, spherical bodies, Gilliland (R.L.), *10484*
- aerodynamic performance, airplanes, jet flaps, Akentev (V.G.), Gulyaev (V.V.), *10513*
- three dimensional flow, turbomachinery, Kremenetskii (M.D.), Leonteva (N.V.), (et al.), *10534*
- convection, finite element techniques, Donea (J.), Giuliani (S.), *10588*
- dynamic response, heat exchangers (crossflow), mathematical models, weighted residual methods, Terasaka (H.), Kanoh (H.), (et al.), *10618*
- coding, computer aided design, condensers, optimization, Johnson (C.M.), Vanderplaats (G.N.), (et al.), *10625*
- energy storage, packed beds, variable thermal properties, Gross (R.J.), Hickox (C.E.), (et al.), *10635*
- fluid injection, fluid mechanics, heat transfer, rotating disks, suction, Agarwal (R.S.), Bhargava (R.), *10685*
- algorithms, three dimensional flow, transport, Pepper (D.W.), Baker (A.J.), *10693*
- annular flow, magneto fluid dynamics, pipe flow, porous walls, Verma (P.D.S.), Singh (M.), *10732*
- channel flow, end effects, magneto fluid dynamics, walled structures, Sarma (P.R.L.), Mittal (M.L.), (et al.), *10752*
- one dimensional flow, two phase flow, void fraction, Van Der Welle (R.), *10828*
- hybrid simulation, soil structure interaction, Gupta (S.), Penzien (J.), (et al.), *10848*
- algorithms, lyapunov's functions, matrix methods, riccati equation, Balzer (L.A.), *11042*
- damping, distributed parameters, modal control, Meirovitch (L.), Baruh (H.), *11061*
- algorithms, mathematical programming, optimization, Russak (I.B.), *11074*
- algorithms, mathematical programming, optimization, quadratic programming, Coope (I.D.), Fletcher (R.), *11081*
- algorithms, dynamic programming, multiobjective methods, Chankong (V.), Haimes (Y.Y.), (et al.), *11083*
- algorithms, computer aided design, optimal control, Raggett (G.F.), *11099*
- elastoplasticity, impact, viscoelasticity (dynamic), Mikkola (M.J.), Tuomala (M.), (et al.), *11175*
- optimization, reinforced bodies, stiffened structures, Kartvelishvili (V.M.), Mironov (A.A.), (et al.), *11325*
- discrete systems, dynamic analysis, newmark's method, structural analysis, Wood (W.L.), Bossak (M.), (et al.), *11331*
- euler equations, inviscid fluid, spherical bodies, vortex lines, Dhanak (M.R.), *11361*
- annular flow, reynolds number (high), rotating bodies, spherical bodies, Nakabayashi (K.), Nishida (H.), (et al.), *11375*
- kelvin-helmholtz instability, shear flow, vorticity, Shoucri (M.M.), *11391*
- airfoils, compressible flow, separated flow, transonic flow, viscous flow, wakes, Le Balleur (J.C.), *11395*
- aerodynamics, boundary value problems, compressible flow, Zhu (Y.L.), Chen (B.M.), *11398*
- cauchy problem, compressible flow, unsteady flow, Kateikin (A.S.), Mikhailov (V.V.), *11412*
- compressible flow, radiating flow, unsteady flow, Volchinskaya (M.I.), Chetverushkin (B.N.), *11413*
- compressible flow, hurled bodies, Romanov (G.S.), Urban (V.V.), *11414*
- compressible flow, pipe flow, unsteady flow, Ainola (L.Ya.), Lamp (Yu.Yu.), (et al.), *11417*
- compressible flow, gravity, one dimensional flow, Kosovichev (A.G.), Popov (Yu.P.), *11418*
- compressible flow, one dimensional flow, thermal expansion, two phase flow, Amit (R.), Porsching (T.A.), *11421*
- combustion, compressible flow, subsonic flow, Kansa (E.J.), *11423*

- compressible flow, shock waves, Zhmakin (A.I.), Fursenko (A.A.), *11425*
- acoustic waves, compressible flow, multiphase flow, nonequilibrium flow, rarefied flow, shock waves, Cook (T.L.), Demuth (R.B.), (et al.), *11426*
- compressible flow, finite difference methods, Kuzmin (A.V.), Makarov (V.L.), (et al.), *11427*
- compressible flow, plane flow, transonic flow, Kozel (K.), Polasek (J.), (et al.), *11430*
- compressible flow, dissociation, finite difference methods, shock waves, Charakhchyan (A.A.), *11431*
- compressible flow, navier stokes equation, viscous flow, Davis (R.T.), Rubin (S.G.), *11432*
- bottom irregularities, gravity waves (surface), rays, refraction, Selezov (I.T.), Sorokina (V.V.), *11589*
- pipe flow, unsteady flow, water hammer, Wylie (E.B.), Streeter (V.L.), *11598*
- characteristic methods, cylindrical bodies, fluid-structure interaction, Takeuchi (K.), Spencer (A.C.), *11625*
- ducts (variable area), oscillatory flow, piping systems, Belik (N.P.), Chirva (L.G.), *11629*
- gravity waves (surface), integral methods, Salmon (J.R.), Liu (P.L.-F.), (et al.), *11698*
- boundary layer, convection, diffusion, Kanarachos (A.), *11764*
- fuel elements, heat transfer, hydraulics, nuclear fuels, Araki (T.), Takeda (T.), (et al.), *11802*
- isothermal processes, kinetic theory, plasma, waves, Musher (S.L.), *11836*
- acoustics, scattering, screens, De Smedt (R.), *11987*
- nonlinear characteristics, sound propagation, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *11990*
- sound generation, transducers, Sayhi (M.N.), Ousset (Y.), (et al.), *12006*
- interfaces, porous media, two phase flow, Glimm (J.), Marchesin (D.), (et al.), *12026*

Numrich (S.K.), see Dragonette (L.R.), *4801*
- cylindrical bodies, scattering, submerged bodies, underwater acoustics, Varadan (V.V.), (et al.), *11900*

Nunn (R.H.), cavities, dynamic analysis, gyrodynamics, spherical bodies, spinning bodies, Bloomer (J.W.) II, *8098*
- see Marto (P.J.) eds., *8761, book*

Nunziato (J.W.), see Cowin (S.C.), *1304*
- see Passman (S.L.), *4132*
- continuum mechanics, granular media, incompressible flow, Passman (S.L.), (et al.), *12063*

Nur (A.), see Winkler (K.W.), *10844*

Nür (A.M.), acoustic waves, permeability, porous media, Walls (J.D.), (et al.), *7969*

Nuribekov (I.A.-G.), see Kozhevnikov (S.N.), *512*

Nurmi (P.), see Holopainen (E.), *3030*

Nurminskii (E.A.), see Zadorozhnyi (V.F.), *107*

Nusayr (A.-M.), acoustic waves, half space, reflection, sound propagation, *4781*

nusselt number, buoyant flow, convection (free), heat transfer, turbulent flow, Thomas (L.C.), Wood (M.L.), *754*
- conduction (heat), heat exchangers, heat transfer, rotating fluids, Ramdas (V.), Uhl (V.W.), (et al.), *790*
- boussinesq equation, convection (free), unsteady flow, vortices, Oertel (H.), Kessler (R.), *1513*
- convection, entrance region, interferometry, secondary flow, Yousef (W.W.), Tarasuk (J.D.), *1668*
- convection, heat transfer, integral methods, laminar flow, Hwang (U.P.), *1677*
- boundary layer (thermal), convection (free), perturbation methods, porous walls, Cheng (P.), Chang (I.-D.), *1680*
- cellular flow, closed conduit flow, convection (free), Iyican (L.), Witte (L.C.), (et al.), *1682*
- boundary layer (thermal), heat transfer (combined modes), laminar flow, plane flow, Gosse (J.), *1710*
- annular flow, heat transfer, thermosyphons, Seki (N.), Fukusako (S.), (et al.), *1718*
- hot wire, thermal measurements, thermocouples, Paranthoen (P.), Lecordier (J.C.), (et al.), *2782*
- annular flow, convection (free), laminar flow, El-Shaarawi (M.A.I.), Sarhan (A.), *2790*
- channel flow, convection, solar collectors, Mouton (H.), Couanon (J.C.), (et al.), *2808*
- approximation methods, conduction (heat), heat transfer, Churchill (S.W.), Cheng (S.M.), *2819*
- convection (free), plates (vertical), turbulent flow, Ruckenstein (E.), Felske (J.D.), *3796*
- film flow, heat transfer, velocity profiles, Sobin (V.M.), *5536*
- convection (free), cylindrical bodies, laminar flow, Farouk (B.), Guceri (S.I.), *5565*
- convection, solar collectors, solar energy, Malhotra (A.), Garg (H.P.), (et al.), *6821*
- film boiling, galilei number, hydrodynamic stability, reynolds analogy, Klimenko (V.V.), *7829*
- channel flow, granular media, heat transfer, peclet number, Speit (J.K.), Brennen (C.E.), (et al.), *10570*
- duct flow, ducts (variable area), heat transfer, laminar flow, transition flow, turbulent flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- channel flow, fluid injection, heat transfer, porous walls, suction, Yeroshenko (V.M.), Zaichik (L.I.), (et al.), *10572*
- heat transfer, laminar flow, non newtonian flow, pipe flow, power law fluids, rheology, Joshi (S.D.), Bergles (A.E.), *10582*

Nuti (C.), piles, seismic loading, soils, *3410*

Nuttall (A.), see Kenefic (R.), *2026*

Nuttall (H.E.), contamination, convection (free), diffusion, fracture, porous media, Ray (A.K.), *10829*

Nuyan (S.), adaptive systems, algorithms, identification, observers, Carroll (R.L.), *4321*

Nuzman (D.W.), inequalities, multivariable systems, robustness properties, sensitivity, Sandell (N.R.) Jr., *6130*

Nwokah (O.D.I.), analytical methods, mathematical methods, matrix methods, nyquist theory, *19*
- feedback, linear systems, multivariable systems, nyquist theory, *11054*

Nye (V.A.), approximations, duct flow, elliptic equations, magneto fluid dynamics, singularities, *4747*

Nypan (L.J.), bearings (roller), high speed, roller skewing, *2568*

nyquist theory, analytical methods, mathematical methods, matrix methods, Nwokah (O.D.I.), *19*
- multivariable systems, robustness, sensitivity, stability theory, Lehtomaki (N.A.), *3151*
- frequency domain techniques, linear systems, multivariable systems, stability theory, Postlethwaite (I.), Edmunds (J.M.), (et al.), *4225*
- multivariable systems, stability theory, time delay systems, Mossaheb (S.), *8159*
- multivariable systems, pole placement, root loci, Brockett (R.W.), Byrnes (C.I.), *11041*
- feedback, linear systems, multivariable systems, Nwokah (O.D.I.), *11054*

Nyssen (C.), failure, finite element techniques, nonlinear analysis, nonlinear materials, rotors, turbines, *6118*

O

O'Brien (M.J.), see Broussard (J.R.), *2081*
O'Brien (T.K.), boron, composite materials, damage, fatigue, laminates, stiffness, Reifsnider (K.L.), *2493*
O'Brien (V.), recirculation, separated flow, stagnation point, two dimensional flow, *1547*
O'Callaghan (M.G.), freezing, integral methods, liquid solid interface, solidification, solutions (material), Cravalho (E.G.), (et al.), *3821*
O'Carroll (M.J.), critical flow, finite element techniques, spillways, variational methods, *7654*
O'Connor (B.), see Koutitas (C.), *7662*
O'Connor (S.A.), see Jones (D.P.), *1962*
O'Keefe (J.V.), airplanes, noise (aerodynamic), noise abatement, supersonic flow, Mangiarotty (R.A.), (et al.), *8867*
O'Massey (R.C.), see Allen (R.R.), *8462*
O'Neill (G.K.), design, launching, satellites, Kolm (H.H.), *2874*
O'Neill (M.E.), see Majumdar (S.R.), *3624*
O'Rourke (P.J.), see Bracco (F.V.), *4737*
O'Sullivan (C.H.), see Johnston (A.M.), *4724*
O'Sullivan (M.J.), see Zyvoloski (G.A.), *8932*
- see Irvine (H.M.), *11118*

Oana (S.), see Stan (A.D.), *7716*
Oba (T.), see Shibata (K.), *7620*
Obabkov (V.K.), describing function, harmonic balance, nonlinear systems, nonlinear theory, oscillations, *120*
Obata (F.), see Fujita (K.), *7097*
Obayashi (T.), creeping flow, rarefied gases, spherical bodies, stokes flow, Tougou (H.), *3645*
Oberkampf (W.L.), cylindrical bodies, vortex shedding, wakes, Owen (F.K.), (et al.), *4638*
Oberle (H.J.), algorithms, boundary value problems, multiple shooting algorithm, numerical methods, singular control, solar energy, *4304*
Obermeier (F.), flight, jet engines, sound generation, turbulent flow, *11959*
oblateness, mathematical methods, perturbation methods, transformation, Deprit (A.), *878*
- cavities, integro differential equations, penny shaped crack, stress analysis, stress intensity factor, Hirai (H.), Satake (M.), *1365*
- artificial satellites, averaging, hamiltonian equations, Claes (H.), *2920*
- planetary theory, potential theory, torque, two body problem, Schutz (B.E.), *3914*
- ks formulation, orbit mechanics, perturbation methods, regularization, two body problem, Sharma (R.K.), *6877*
- lunar theory, perturbation methods, planetary satellites, three body problem, Schmidt (D.S.), *6881*
- artificial satellites, orbit decay, reentry, upper atmosphere, De Lafontaine (J.), *6883*
- artificial satellites, averaging, equations of motion, transformation, Hoots (F.R.), *8842*
- artificial satellites, circumnavigation, computer algebra, computer programming, Deprit (A.), *10776*

Oborotov (V.A.), see Velizhanina (K.A.), *4783*
Obozov (V.I.), design (optimum), iterative methods, optimization, *1431*
Obraztsov (N.N.), see Penenko (V.V.), *2028*
- see Penenko (V.V.), *4055*
- see Penenko (V.V.), *4084*

observability, linear systems, linear theory, scanning observability, Martin (J.-C.E.), *114*
- beams, control, convection, distributed parameters, modal control, phase locked loops, Balas (M.J.), *203*
- controllability, dynamic analysis, nonlinear analysis, Baillieul (J.), *1993*
- controllability, large scale systems, structural analysis, Sote (W.), *2086*
- identification, stochastic systems, Distefano (J.J.) III, Cobelli (C.), *2091*
- algorithms, controllability, linear systems, time invariant systems, Paige (C.C.), *2104*
- controllability, faithful property, linear systems, state space techniques, Boretskii (I.V.), Pavlov (V.G.), *3149*
- algorithms, controllability, linear systems, model reduction, principal component analysis, Moore (B.C.), *4217*
- controllability, frequency domain techniques, graph theory, interconnected systems, multivariable systems, Fessas (P.), *4234*
- algorithms, estimation, nonlinear systems, Krasovskii (A.A.), *4300*
- controllability, frequency domain techniques, linear systems, linear theory, Olbrot (A.W.), Zak (S.H.), *10080*
- controllability, dynamic properties, identification, linear systems, structural response, Udwadia (F.E.), *11048*

observers, design, pole placement, Arbel (A.), Tse (E.), *100*
- airplanes, design, feedback, Singh (S.N.), Schy (A.A.), *121*
- control, nonlinear systems, Kozyev (V.A.), *161*
- algorithms, design, discrete systems, optimal control, Willems (J.L.), *191*
- estimation, jump conditions, linear systems, Caglayan (A.K.), *1144*
- nonlinear systems, process control, Wallman (P.H.), *1164*
- dynamic analysis, linear systems, process control, reliability analysis, Mironovskii (L.A.), *2082*
- design, large scale systems, linear systems, Arbel (A.), Tse (E.), *2084*
- identification, linear systems, Iwai (Z.), Mano (K.), (et al.), *2133*
- control, design, linear systems, multivariable systems, pole placement, process control, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- algorithms, model reduction, Polotskii (V.N.), *4213*
- linear systems, realization, Emre (E.), Silverman (L.M.), *4233*
- algorithms, linear systems, Parusnikov (N.A.), *4237*
- design, regulator problem, Baloev (A.A.), *4296*
- design, discrete systems, realization, time optimal systems, Inoue (A.), Fisher (D.G.), (et al.), *4314*
- adaptive systems, algorithms, identification, Nuyan (S.), Carroll (R.L.), *4321*
- adaptive systems, design, linear systems, Westphal (L.C.), *4323*
- bilinear systems, control, control stability, design, lyapunov's functions, Derese (I.), Noldus (E.), *5040*
- filters, interpolation, stochastic processes, Grigorev (F.N.), Kurdoya (E.A.), *5057*
- control, linear systems, lyapunov's functions, nonlinear methods, system uncertainty, Leitmann (G.), *6129*
- adaptive systems, algorithms, design, discrete systems, lyapunov's functions, Tamaki (S.), Omatu (S.), (et al.), *6132*
- state space techniques, synthesis, Schumacher (J.M.), *6133*
- control, design, discrete systems, linear systems, Tomizuka (M.), Auslander (D.M.), (et al.), *7251*
- adaptive systems, digital control, microprocessors, nonlinear systems, Sinha (N.K.), Law (S.S.Y.), (et al.), *10081*
- design, large scale systems, multivariable systems, Das Gupta (R.), Fairman (F.W.), *11046*
- distributed parameters, galerkin method, Fujii (N.), Hirai (M.), *11062*
- adaptive systems, discrete systems, identification, linear systems, Suzuki (T.), Nakamura (T.), (et al.), *11095*

ocean, finite element techniques, geometric nonlinearities, pipelines, submerged bodies, three dimensional formulation, Odorizzi (S.), Schrefler (B.A.), *93*
- modes, ocean bed, sound propagation, underwater acoustics, Thompson (I.J.), *887*
- impedance, ocean bed, refraction, sound propagation, underwater acoustics, Stickler (D.C.), Ahluwalia (D.S.), *893*
- modes, sound propagation, underwater acoustics, Tindle (C.T.), *894*
- sound propagation, stochastic processes, underwater acoustics, Watson (J.G.), Siegmann (W.L.), (et al.), *895*
- acoustic waves, diffraction, sound propagation, Esswein (R.), Flatte (S.M.), *1799*
- acoustic waves, propagation, Blodgett (M.L.), Palmer (D.R.), *1801*
- acoustics, arrays, shallow water, sound propagation, Buckingham (M.J.), *1802*
- density, eddy currents, energy, oceanography, Kozlov (V.F.), Molchanova (L.A.), (et al.), *1895*
- cooling, nuclear power, pumps, Huang (B.J.), *1912*
- atmosphere, mass transfer, meteorology (physical), moisture, Timofeev (N.A.), *3025*
- moving sources, sound propagation, underwater acoustics, Kays (J.L.), Jacobson (M.J.), (et al.), *3927*
- sound propagation, underwater acoustics, Floyd (E.R.), *3941*
- acoustic waves, caustics, sound propagation, Kinney (W.A.), Pierce (A.D.), *3943*
- geopotential height, meteorology, Bagrov (A.N.), *4096*
- energy conversion, power plants, solar energy, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *4718*
- ditching, dynamic stability, helicopters, impact, Daidola (J.C.), Graham (D.A.), (et al.), *5368*
- energy conversion, thermal effects, Dugger (G.L.), Francis (E.J.), (et al.), *5671*
- absorption, chemical reactions, underwater acoustics, Mellen (R.H.), Browning (D.G.), (et al.), *5719*
- electric effects, sound generation, wave generation, Harker (K.J.), Fraser-Smith (A.C.), *5720*
- inverse method, sound speed, stratification, underwater acoustics, Gray (S.H.), *5721*
- sound propagation, underwater acoustics, Kohler (W.E.), *5726*
- sound propagation, underwater acoustics, Spiesberger (J.L.), Spindel (R.C.), (et al.), *5729*
- noise, underwater acoustics, Wagstaff (R.A.), *5740*
- scattering, underwater acoustics, Medwin (H.), Novarini (J.C.), *5744*
- acoustic measurements, arrays, underwater acoustics, Harper (E.Y.), *5754*
- sound speed, underwater acoustics, Lovett (J.R.), *5761*
- diffraction, scattering, surface profiles, underwater acoustics, Holford (R.L.), *5785*
- energy conversion, heat exchangers, power plants, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *5954*
- dynamic analysis, dynamic response, marine risers, modal analysis, vibration (forced), Kirk (C.L.), Etok (E.U.), (et al.), *6291*
- bottom irregularities, ocean waves, propagation, Brink (K.H.), *6610*
- bottom irregularities, drag, erosion, icebergs, Lopez (R.), Charl (T.R.), (et al.), *6611*
- acoustic waves, internal waves, refraction, sound propagation, Uscinski (B.J.), *6908*

- sound propagation, underwater acoustics, Jensen (F.B.), Kuperman (W.A.), *6911*
- nonlinear characteristics, shock waves, sound propagation, underwater acoustics, Fridman (V.E.), *6916*
- earth, geoid anomalies, gravity, Mcadoo (D.C.), *8013*
- eddy diffusivity, oceanography, White (W.), Bernstein (R.), *8019*
- sound speed, underwater acoustics, Mackenzie (K.V.), *8858*
- reflection, seismic waves, Gjoystdal (H.), Ursin (B.), *8953*
- blast waves, explosions (underwater), underwater acoustics, Fridman (V.Ye.), *9643*
- energy conversion, rotating fluids, singularities, sinks, stratified flow, Whitehead (J.A.) Jr., Gershenfeld (N.), *10411*
- eigenvalues, modes, sound propagation, Williams (A.O) Jr., *10782*
- nonhomogeneous media, sound propagation, underwater acoustics, Emery (W.J.), Reid (T.J.), (et al.), *10783*
- buoyancy, stratification, turbulence (geophysical), turbulent mixing, Gibson (C.H.), *11548*
- buoyancy, stratification, turbulence (geophysical), turbulence model, Fu (L.-L.), Flierl (G.R.), *11549*
- approximations (higher order), gravity waves (surface), lakes, rotational flow, Bennett (J.R.), Schwab (D.J.), *11573*
- caustics, sound propagation, Worcester (P.F.), *11897*
- shallow water, sound fields, sound propagation, Jensen (F.B.), *11899*

ocean air interaction, boundary layer (atmospheric), drag coefficient, ocean waves, wind-wave interaction, Ariel (N.Z.), Byutner (E.K.), (et al.), *983*

- boundary layer (atmospheric), mass transfer, Fumes (G.K.), *985*
- boundary layer (atmospheric), spray flow, wind-wave interaction, Wang (C.S.), Street (R.L.), *986*
- atmospheric circulation, climatology, Gates (W.L.), *987*
- gravity waves, internal waves, ocean waves, surface waves, thermocline, turbulence, turbulence (geophysical), Phillips (O.M.), *1888, book*
- baroclinic instability, coriolis forces, currents, eddies, geostrophic flow, Mcwilliams (J.C.), Holland (W.R.), (et al.), *1890*
- surface waves, wind-wave interaction, Makin (V.K.), Chalikov (D.V.), *1902*
- atmospheric circulation, ice, oceanography, Belevich (M.Yu.), *1911*
- ice, icebergs, oceanography, oscillations, surface flow, Mcphee (M.G.), *3017*
- bottom irregularities, finite element techniques, shallow water, surge, Kawahara (M.), Nakazawa (S.), (et al.), *3023*
- currents, oceanography, Muzylev (S.V.), Felzenbaum (A.I.), *3024*
- boundary layer, cyclones, Bhattacharyya (P.), *3026*
- energy transport, tides, Lappo (S.S.), Rozhdestvenskiy (A.Ye.), *4064*
- atmospheric circulation, climatology, meteorology (physical), weather forecasting, Marchuk (G.I.), *4069*
- forecasting, meteorology (physical), weather forecasting, Ryasin (V.A.), *4071*
- currents, oceanography, turbulence (geophysical), Nihoul (J.C.J.), *4852, book*
- hydrodynamic stability, shear flow, surface waves, wind-wave interaction, Kawai (S.), *4857*
- currents, oceanography, Cane (M.A.), *4861*
- internal waves, oceanography, windwave interaction, Pelinovskiy (Y.N.), *4863*
- circulation, ekman layer, oceanography, Rattray (M.) Jr., Dworski (J.G.), *4866*
- bottom irregularities, oceanography, stratification, stratified flow, Flierl (G.R.), *4867*
- energy transport, surface waves, wind-wave interaction, Makin (V.K.), *4887*
- circulation, oceanography, vorticity, Briggs (W.L.), *5921*
- circulation, currents, heat transfer, oceanography, Bye (J.A.T.), Veronis (G.), *5922*
- ocean waves, surface waves, Kuzminskaya (G.G.), Tsareva (T.I.), *5940*
- resonance, rossby waves, tides, Ivanovskii (A.I.), Krivolutskii (A.A.), *5941*
- atmospheric circulation, Stefanick (M.), *5943*
- boundary layer (atmospheric), heat transfer (atmospheric), surface waves, Dvoryaninov (G.S.), *5950*
- boundary layer (atmospheric), heat transfer (atmospheric), mass transfer, turbulence (geophysical), Pedersen (K.), Boyum (G.), *5951*
- mixing layers, velocity measurement, velocity profiles, Weller (R.A.), *7067*
- circulation, oceanography, vorticity, Welander (P.), *8031*
- currents, ekman layer, rotating fluids, Pearce (B.R.), Cooper (C.K.), *8032*
- currents, ekman layer, mixing layers, rotating fluids, Csanady (G.T.), Shaw (P.T.), *8033*
- boundary layer (atmospheric), drag coefficient, friction coefficient, friction velocity, reynolds stresses, roughness, turbulence (geophysical), Wu (J.), *8980*
- dissipation, turbulence (geophysical), Joyce (T.M.), *8983*
- eddies, oceanography, rotating fluids, stratification, Muller (P.), Frankignoul (C.), *8996*
- boundary layer (atmospheric), friction coefficient, friction velocity, heat transfer (atmospheric), reynolds stresses, turbulence (geophysical), Smith (S.D.), *8997*
- hamilton principle, ocean waves, Goncharov (V.P.), *8999*
- currents, oceanography, rossby waves, spectra, wind-wave interaction, Willebrand (J.), Philander (S.G.H.), (et al.), *9000*
- heat transfer, oceanography, radiation, Simpson (J.J.), Dickey (T.D.), *9924*
- heat transfer, oceanography, radiation, stratification, Holloway (P.E.), *9925*
- galerkin method, oceanography, Davies (A.M.), *9927*
- internal waves, rotating fluids, stratified flow, Klinck (J.M.), Pietrafesa (L.J.), (et al.), *9938*
- climatology, clouds, heat transfer, ice, Saltzman (B.), Moritz (R.E.), *9940*
- oceanography, rotating fluids, Gent (P.R.), Semtner (A.J.) Jr., *10861*
- circulation, ekman layer, geostrophic flow, oceanography, rossby waves, Semtner (A.J.) Jr., Holland (W.R.), *10863*
- ekman layer, oceanography, thermodynamics, Schopf (P.S.), *10866*
- currents, inertial waves, oceanography, oscillations, thermocline, Pollard (R.T.), *10867*
- surface waves, wind, Liu (T.-F.), Ma (F.-S.), *10868*
- surface waves, swell, Dexter (P.E.), *10869*
- dissipation, drag coefficient, reynolds stresses, wind, Large (W.G.), Pond (S.), *10872*
- boundary layer, oceanography, Ginzburg (A.I.), *12079*
- gravity waves (surface), pressure, surface waves, turbulence (geophysical), Snyder (R.L.), Dobson (F.W.), (et al.), *12080*
- data analysis, wind-wave interaction, Talagrand (O.), *12081*

ocean bed, buried structures, pipelines, porous media, potential flow, wave loads, Macpherson (H.), *562*

- modes, ocean, sound propagation, underwater acoustics, Thompson (I.J.), *887*
- nonlinear waves, sedimentation, sound propagation, underwater acoustics, Hovem (J.M.), *892*
- impedance, ocean, refraction, sound propagation, underwater acoustics, Stickler (D.C.), Ahluwalia (D.S.), *893*
- computing techniques, seismic waves, tsunamis generation, upthrust, Lee (J.-J.), Chang (J.-J.), *974*
- displacement, explosions (underwater), seismic waves, Tanimoto (T.), Sato (R.), *1879*
- shallow water, sound fields, sound generation, Ageeva (N.S.), Krupin (V.D.), *2933*
- processing, seismic waves, Salisbury (J.I.), *3008*
- earthquake effects, hydrodynamic pressure, submerged bodies, tanks, Tung (C.C.), *3011*
- numerical methods, pipelines, wave loads, Efthymiou (M.), Narayanan (R.), *3718*
- mining, pipelines, vibration (flow induced), Rogers (A.C.), Abramson (H.N.), *4665*
- reflection, sound propagation, underwater acoustics, Harrison (C.H.), *4790*
- elasticity, modeling, viscoelasticity, Lambeck (K.), Nakiboglu (S.M.), *4844*
- ocean waves, surface waves, Dawson (T.H.), *4868*
- drilling, rocks, Ryall (P.J.C.), *5268*
- interface phenomena, reflection, refraction, sound propagation, underwater acoustics, Frisk (G.V.), Doutt (J.A.), (et al.), *5725*
- attenuation, sound propagation, underwater acoustics, Tindle (C.T.), *5735*
- reflection, underwater acoustics, Vidmar (P.J.), *5745*
- sound propagation, underwater acoustics, Cavanagh (R.C.), Renner (W.W.), *5746*
- attenuation, shallow water, underwater acoustics, Tindle (C.T.), Weston (D.E.), (et al.), *5747*
- modeling, underwater acoustics, Hamilton (E.L.), *5748*
- acoustic measurements, coherent structure, reflection, underwater acoustics, Berkson (J.M.), *5749*
- reflection, sedimentation, underwater acoustics, Vidmar (P.J.), *5752*
- attenuation, porous media, sedimentation, underwater acoustics, Hovem (J.M.), *5753*
- attenuation, sedimentation, underwater acoustics, Mitchell (S.K.), Focke (K.C.), *5755*
- acoustic waves, focusing, transducers (ultrasonic), Ohgaki (M.), Shimizu (R.), (et al.), *5756*
- reflection, underwater acoustics, Volovov (V.I.), Ivakin (A.N.), *5758*
- bottom irregularities, sound propagation, underwater acoustics, Rutherford (S.R.), Hawker (K.E.), (et al.), *5759*
- elastic foundations, pipelines, soil mechanics, stress analysis, underwater structures, winkler foundation, Hobbs (R.E.), *6551*
- acoustic measurements, bubble dynamics, saturation, sedimentation, Anderson (A.L.), Hampton (L.D.), *6899*
- sedimentation, sound propagation, underwater acoustics, Stoll (R.D.), *6905*
- modes, underwater acoustics, Macpherson (M.K.), Frisk (G.V.), *6906*
- reflection, sedimentation, shear waves, underwater acoustics, Vidmar (P.J.), *6907*
- penetration, sedimentation, underwater acoustics, Tjotta (J.N.), Tjotta (S.), *7943*
- mining, pipelines, vibration (flow induced), Chung (J.S.), Whitney (A.K.), (et al.), *8626*
- cables, torsion, underwater structures, Shashaty (A.J.), *9256*
- bottom irregularities, laser doppler velocimeters, oscillatory flow, Du Toit (C.G.), Sleath (J.F.A.), *9517*
- compressional waves, sedimentation, shear waves, wave interactions, Fryer (G.J.), *10237*
- cyclic loading, pore pressure, soils, Martin (G.R.), Lam (I.), (et al.), *10253*
- deformation, tsunamis generation, Voyt (S.S.), Lebedev (A.N.), (et al.), *10854*
- bending, drilling, drilling rods, rods, vibration, Aso (K.), Kan (K.), *11659*
- layered media, sound propagation, Weinberg (H.), *11896*
- acoustic waves, reflection, sedimentation, underwater acoustics, Stoll (R.D.), Kan (T.-K.), *11907*

- bottom irregularities, scattering, shallow water, underwater acoustics, Ivakin (A.N.), Lysanov (Yu.P.), *11912*

ocean waves, bandwidth, experimental results, finite amplitude, gravity waves, Larsen (L.H.), *661*
- nonlinear waves, stratified waves, wave interactions, Petrov (V.V.), *663*
- beaches, shallow water, Guza (R.T.), Thorton (E.B.), *977*
- boundary layer (atmospheric), drag coefficient, ocean air interaction, wind-wave interaction, Ariel (N.Z.), Byutner (E.K.), (et al.), *983*
- gravity waves (internal), gravity waves (surface), wave interactions, Dysthe (K.B.), Das (K.P.), *1589*
- asymptotic methods, flow irregularities, kelvin waves, reflection, wave generation, Haines (C.R.), *1603*
- breakwater, diffraction, refraction, shallow water, Lui (P.L.-F.), Lozano (C.J.), (et al.), *1887*
- gravity waves, internal waves, ocean air interaction, surface waves, thermocline, turbulence, turbulence (geophysical), Phillips (O.M.), *1888, book*
- hydrostatics, oceanography, tsunamis generation, Zhak (V.M.), Kulikov (E.A.), *1892*
- probability, simulation, stochastic processes, Flower (J.O.), *3108*
- breakers, probability theory, surface waves, Tayfun (M.A.), *4048*
- elastic bodies, ship dynamics, ship motion, vibration, Bishop (R.E.D.), Price (W.G.), *4105*
- beaches, coastal engineering, currents, sediment transport, Horikawa (K.), *4578*
- oceanography, surface waves, Gent (P.R.), *4858*
- oceanography, wind-wave interaction, Leblond (P.H.), Mysak (L.A.), *4860*
- circulation, finite difference methods, oceanography, surface waves, Niemeyer (G.), *4862*
- ocean bed, surface waves, Dawson (T.H.), *4868*
- optical analysis, phase velocity, Gotwols (B.L.), Irani (G.B.), *5485*
- breakers, hurricanes, surface waves, tides, Taylor (R.B.), *5917*
- ocean air interaction, surface waves, Kuzminskaya (G.G.), Tsareva (T.I.), *5940*
- impact, pitching, ship slamming, vibration, Hansen (H.-J.), *5962*
- capsizing, failure, rolling motion, ship design, ship motion, stability, Dahle (E.A.), Kjaerland (O.), *5964*
- bottom irregularities, ocean, propagation, Brink (K.H.), *6610*
- singularities, spectra, Harper (E.Y.), *6696*
- surface waves, wave height, Corson (W.D.), Resio (D.T.), *7052*
- optical instruments, optical techniques, surface waves, Luchinin (A.G.), *7054*
- data analysis, spectra, stochastic processes, surface waves, Long (R.B.), *7058*
- drag, harmonic analysis, offshore structures, Hamilton (J.), *7676*
- experimental results, pipelines, submerged bodies, wave loads, Grace (R.A.), Zee (G.T.Y.), *7769*
- gravity waves, gravity waves (surface), spectra, surface waves, wind-wave interaction, Naeser (H.), *8018*
- power generation, tides, Harrison (R.), Smith (K.G.), (et al.), *8021*
- nonlinear analysis, rolling motion, ship motion, Haddara (M.R.), *8038*
- drag, floating structures, ship motion, Chakrabarti (S.K.), *8040*
- capsizing, resonance, rolling motion, ship motion, stochastics, Blocki (W.), *8041*
- control stability, control surfaces, ship motion, surge, unsteady flow, Haddara (M.R.), *8042*
- offshore structures, probability theory, wave height, Van Heteren (J.), Bruinsma (J.), *8981*
- gravity waves (surface), oceanography, spectra, surface waves, wind-wave interaction, Komen (G.J.), *8998*
- hamilton principle, ocean air interaction, Goncharov (V.P.), *8999*
- asymptotic methods, diffraction, ships, slender bodies, wave interactions, Beck (R.F.), Troesch (A.W.), *9012*
- diffraction, energy conversion, floating bodies, Haren (P.), Mei (C.C.), *9013*
- random loading, salter duck, wave energy, wave engines, Serman (D.D.), Mei (C.C.), *9631*
- baroclinic instability, hydrodynamic stability, Mysak (L.A.), *10468*
- oceanography, pressure distribution, Mondal (S.K.), Chaudhuri (K.S.), *10873*
- dispersion, gravity waves (solitary), Boyd (J.P.), *11563*
- experimental methods, spectra, Kats (A.V.), Spevak (I.S.), *11582*
- gravity waves (internal), wave energy, wave interactions, Orlanski (I.), Cerasoli (C.P.), *11588*
- gravity waves (internal), rotational flow, stratified flow, Friedlander (S.), Siegmann (W.L.), *11619*
- gravity waves (internal), rotational flow, Bunimovich (L.A.), *11622*
- floating bodies, oscillating bodies, wave energy, wave engines, Masubuchi (M.), Shinomiya (Y.), *11638*
- nonlinear analysis, spectra, wave loads, Sharma (J.N.), Dean (R.G.), *11663*
- offshore structures, wave loads, Huntington (S.W.), Gilbert (G.), *11670*
- experimental results, gravity waves (shallow water), spectra, Thompson (E.F.), *11696*
- spectra, swell, wind-wave interaction, Joseph (P.S.), Kawai (S.), (et al.), *12073*
- flexible bodies, hulls, wave loads, Bishop (R.E.D.), Price (W.G.), (et al.), *12084*

oceanography, currents, shear flow, Smart (J.H.), *1891*
- hydrostatics, ocean waves, tsunamis generation, Zhak (V.M.), Kulikov (E.A.), *1892*
- bottom irregularities, currents, Kozlov (V.F.), Ten (E.V.), *1893*
- density, eddy currents, energy, ocean, Kozlov (V.F.), Molchanova (L.A.), (et al.), *1895*
- heat transfer (atmospheric), measurements, temperature, Kano (M.), Miyauchi (M.), (et al.), *1909*
- estimation, meteorology (physical), optimization, Penenko (V.V.), *1910*
- atmospheric circulation, ice, ocean air interaction, Belevich (M.Yu.), *1911*
- boundary conditions, meteorology (physical), Bennett (A.F.), Kloeden (P.E.), *1913*
- circulation, estuaries, finite difference methods, two dimensional flow, Wang (D.-P.), Kravitz (D.W.), *2594*
- bottom irregularities, currents, geostrophic flow, Kozlov (V.F.), Kropinova (N.A.), (et al.), *3016*
- ice, icebergs, ocean air interaction, oscillations, surface flow, Mcphee (M.G.), *3017*
- currents, ocean air interaction, Muzylev (S.V.), Felzenbaum (A.I.), *3024*
- currents, hydrodynamic stability, Hughes (R.L.), *4047*
- baroclinic instability, bottom irregularities, hydrodynamic stability, Tang (C.-M.), *4050*
- currents, eddies, meandering, upwelling, Chew (F.), *4051*
- data acquisition, meteorology, Bogatyr (B.N.), *4094*
- currents, ocean air interaction, turbulence (geophysical), Nihoul (J.C.J.), *4852, book*
- eddies, rossby waves, Henrotay (P.), *4854*
- probability theory, surface waves, wind-wave interaction, Matushevskii (G.V.), *4855*
- vortices, Mcwilliams (J.C.), Flierl (G.R.), *4856*
- ocean waves, surface waves, Gent (P.R.), *4858*
- ocean waves, wind-wave interaction, Leblond (P.H.), Mysak (L.A.), *4860*
- currents, ocean air interaction, Cane (M.A.), *4861*
- circulation, finite difference methods, ocean waves, surface waves, Niemeyer (G.), *4862*
- internal waves, ocean air interaction, wind-wave interaction, Pelinovskiy (Y.N.), *4863*
- eddies, Durney (B.), *4864*
- circulation, ekman layer, ocean air interaction, Rattray (M.) Jr., Dworski (J.G.), *4866*
- bottom irregularities, ocean air interaction, stratification, stratified flow, Flierl (G.R.), *4867*
- diffusion, stratification, stratified flow, Turner (J.S.), *4870*
- breakers, currents, gravity waves (internal), internal waves, spectra, thermocline, Eriksen (C.C.), *4871*
- barotropic models, finite element techniques, rotating fluids, Platzman (G.W.), *4872*
- currents, jets, Mcwilliams (J.C.), *4873*
- circulation, currents, eddies, Holland (W.R.), *4874*
- circulation, currents, eddies, hydrodynamic stability, Haidvogel (D.B.), Holland (W.R.), *4875*
- circulation, hydrodynamic stability, perturbation methods, Zelenko (A.A.), *4877*
- eddies, Seidov (D.G.), *4878*
- circulation, currents, heat transfer, Sarkisyan (A.S.), Rzheplinskiy (D.G.), *4879*
- euler equations, lagrange equations, particle fluid flow, tracers, Regier (L.), Stommel (H.), *4880*
- eddy viscosity, ekman layer, rossby waves, Radach (G.), *4881*
- circulation, currents, Stengel (K.C.), *4882*
- tides, Naito (I.), *4883*
- coasts, currents, Barannik (V.A.), *4884*
- circulation, currents, vorticity, Bryden (H.L.), *5918*
- baroclinic instability, hydrodynamic stability, rotating fluids, stratified flow, Killworth (P.D.), *5919*
- circulation, currents, hydrodynamic stability, Holland (W.R.), Haidvogel (D.B.), *5920*
- circulation, ocean air interaction, vorticity, Briggs (W.L.), *5921*
- circulation, currents, heat transfer, ocean air interaction, Bye (J.A.T.), Veronis (G.), *5922*
- turbulence (geophysical), turbulence (isotropic), Chigrakov (K.I.), *5923*
- mixing layers, stratified flow, turbulence (geophysical), Kundu (P.K.), *5926*
- convection, evaporation, mass transfer, Kutalo (A.A.), Chernyavskii (E.B.), *5952*
- ice, icebergs, surface flow, weather forecasting, Gebhart (B.), Audunson (T.), *5953*
- microstructures, thermocline, turbulence (geophysical), Gregg (M.C.), *7057*
- entrainment, heat transfer, mass transfer, mixing layers, thermocline, turbulence (geophysical), Shapiro (G.I.), *7059*
- circulation, heat transfer, Wunsch (C.), *7060*
- eddy diffusivity, ocean, White (W.), Bernstein (R.), *8019*
- dissipation, eddies, Harrison (D.E.), *8022*
- baroclinic instability, sloping bottom, stratification, Wright (D.G.), *8023*
- stratification, Marchuk (G.I.), Bubnov (M.A.), *8025*
- currents, cyclones, Yamagata (T.), *8027*
- circulation, ocean air interaction, vorticity, Welander (P.), *8031*
- bottom irregularities, rotating fluids, stratification, vorticity, Eliassen (A.), *8973*
- circulation, eddies, Niiler (P.P.), *8974*
- bores, breakers, coasts, density currents, Stern (M.E.), *8975*
- circulation, eddy diffusivity, vorticity, Harrison (D.E.), *8977*

- coasts, eddy viscosity, ekman layer, kelvin waves, Mofjeld (H.O.), *8978*
- anemometers, hot wire, velocity measurement, Gust (G.), *8984*
- heat transfer, mixing layers, thermal diffusion, thermocline, Posmentier (E.S.), *8993*
- eddies, ocean air interaction, rotating fluids, stratification, Muller (P.), Frankignoul (C.), *8996*
- gravity waves (surface), ocean waves, spectra, surface waves, wind-wave interaction, Komen (G.J.), *8998*
- currents, ocean air interaction, rossby waves, spectra, wind-wave interaction, Willebrand (J.), Philander (S.G.H.), (et al.), *9000*
- heat transfer, ocean air interaction, radiation, Simpson (J.J.), Dickey (T.D.), *9924*
- heat transfer, ocean air interaction, radiation, stratification, Holloway (P.E.), *9925*
- galerkin method, ocean air interaction, Davies (A.M.), *9927*
- rossby waves, Kozlov (V.F.), *10855*
- coasts, currents, hydrodynamic stability, Collings (I.L.), Grimshaw (R.), *10856*
- bottom irregularities, coriolis forces, tides, vorticity, Zimmerman (J.T.F.), *10858*
- bottom irregularities, coasts, diffraction, surface waves, Wang (D.-P.), *10859*
- circulation, eddies, vorticity, Holland (W.R.), Rhines (P.B.), *10860*
- ocean air interaction, rotating fluids, Gent (P.R.), Semtner (A.J.) Jr., *10861*
- internal waves, turbulence (geophysical), Holloway (G.), *10862*
- circulation, ekman layer, geostrophic flow, ocean air interaction, rossby waves, Semtner (A.J.) Jr., Holland (W.R.), *10863*
- ice, icebergs, two phase flow, Pai (S.I.), Das (M.M.), (et al.), *10864*
- coriolis forces, currents, Kao (T.W.), *10865*
- ekman layer, ocean air interaction, thermodynamics, Schopf (P.S.), *10866*
- currents, inertial waves, ocean air interaction, oscillations, thermocline, Pollard (R.T.), *10867*
- ocean waves, pressure distribution, Mondal (S.K.), Chaudhuri (K.S.), *10873*
- boundary layer, ocean air interaction, Ginzburg (A.I.), *12079*

Ochi (M.), see Hasegawa (T.), *2939*
- granular media, particle fluid flow, pipelines, pressure drop, Nakajima (H.), (et al.), *4619*

Ochiai (K.), crankshafts, diesel engines, noise abatement, vibration (torsional), Nakano (M.), *5652*

ocular system, eyes, man machine systems, night vision, Stone (L.W.), Sanders (M.G.), (et al.), *4329*

Oda (J.), elastic bodies, optimization, shape factors, stress analysis, Yamazaki (K.), *3519*

Oda (S.), bending, fatigue, gear teeth, strength, Shimatomi (Y.), (et al.), *2565*

Odabasi (A.Y.), green theorem, linear theory, ship resistance, wavemaking resistance, *5961*

Odaka (T.), earth, oscillations, rotating bodies, *8005*
- earth, mantle, oscillating bodies, spherical waves, *11170*

Odeh (A.S.), non newtonian flow, porous media, power law fluids, Yang (H.T.), *4026*

Oden (J.T.), see Ohtake (K.), *11113*

Odgers (J.), combustors, emissions, gas turbines, *3870*

Oding (S.S.), see Del (G.D.), *8203*

Odorizzi (S.), finite element techniques, geometric nonlinearities, ocean, pipelines, submerged bodies, three dimensional formulation, Schrefler (B.A.), *93*
- see Minozzi (D.), *8153*

Odrzywolek (E.), see Dobrucki (W.), *1341*

Odukwe (O.), boundary layer, conical flow, diffusers, entrainment, shape factors, *625*

Oelkers (C.I.), noise, sound fields, *1823*

Oelschlagel (D.), computing techniques, convex programming, nonlinear programming, Susse (H.), *1108*

Oerlemans (J.), heat transfer (atmospheric), meteorology (synoptic), *7071*

Oertel (H.), boussinesq equation, convection (free), nusselt number, unsteady flow, vortices, Kessler (R.), *1513*

Oertel (H.) Jr., see Buhler (K.), *8719*

Oesterle (E.), see Hornung (R.K.), *2522*

offshore structures, life expectancy, risk, Ostergaard (C.), Schellin (T.E.), *527*
- floating structures, Smedley (G.P.), *528*
- residual stresses, shells (cylindrical), welded joints, White (J.D.), *529*
- concrete, creep, thermal stresses, England (G.L.), *530*
- collision models, energy dissipators, ship maneuvers, Furnes (O.), Amdahl (J.), *993*
- cables, flexible walls, nonlinear analysis, numerical analysis, pipes, Peyrot (A.H.), *1216*
- joints, photoelasticity, tubes, Fessler (H.), Little (W.J.G.), *1390*
- hydrodynamic pressure, sensitivity, wave loads, Shyam Sunder (S.), Connor (J.J.), *1451*
- surveys, vibration, Rubin (S.), *1452*
- pipe laying, pipelines, sensitivity, wave loads, Rammant (J.P.), Backx (E.), *1453*
- fatigue, materials properties, steel, toughness, Wilson (A.D.), *2413*
- cyclic testing, frames, inelasticity, seismic loading, Popov (E.P.), Mahin (S.A.), (et al.), *2535*
- dynamic analysis, statics, wave loads, Sarpkaya (T.), Isaacson (M.), *2543, book*
- dynamic analysis, stress analysis, towers, Bolotin (V.V.), Chirkov (V.P.), (et al.), *2544*
- fatigue, vortex shedding, wave loads, Russo (E.P.), Loiacono (N.J.), (et al.), *2545*
- cables, dynamic analysis, nonlinear analysis, Peyrot (A.H.), *3283*
- ice mechanics, loads, probabilistic design, Wheeler (J.D.), *3524*
- dynamic response, floating structures, random loading, wave loads, Etok (E.U.), Kirk (C.L.), *3556*
- axial loading, damage, imperfections, tubes, Taby (J.), Moan (T.), (et al.), *3557*
- dynamic response, fatigue, foundations, loads, resonance, Smith (I.M.), Molenkamp (F.), *3558*
- damping, design, drag, dynamic response, fluid-structure interaction, Fish (P.R.), Dean (R.B.), (et al.), *3559*
- design, shells, Furnes (O.), Loset (O.), *4544*
- modal analysis, modes, Natke (H.G.), Schulze (H.), *4545*
- ice, loads, ship structures, Hysing (T.), *5364*
- cyclic loading, piles, Dawson (T.H.), *5365*
- geometric nonlinearities, pipes, underwater structures, wave loads, Felippa (C.A.), Chung (J.S.), *6534*
- reliability analysis, safety, wave loads, Bea (R.G.), *6535*
- damping capacity, dynamic analysis, random loading, wave loads, Vandiver (J.K.), *6536*
- safety, Leroy (A.), *6537*
- drag, random loading, wave loads, Tung (C.C.), *6538*
- concrete, gravity platforms, wave loads, Bangash (Y.), *6539*
- damping, dynamic response, inertia, Eatock Taylor (R.), Duncan (P.E.), *6540*
- design, gravity platforms, structural analysis, Smits (F.P.), *7613*
- dynamic response, frequency domain techniques, gravity platforms, stochastic processes, vibration (random), wave loads, Sigbjornsson (R.), Smith (E.K.), *7614*
- collision models, probability theory, simulation, Thoft-Christensen (P.), *7615*
- drag, harmonic analysis, ocean waves, Hamilton (J.), *7676*
- drag coefficient, nonlinear analysis, virtual mass, wave loads, Debnath (L.), Rahman (M.), *7767*
- spectral loading, stochastic processes, structural response, wave loads, Spidsoe (N.), Sigbjornsson (R.), *8460*
- data analysis, design, structural analysis, substructuring, Hatlestad (B.), Mellingen (K.), *8461*
- articulated surfaces, currents, fluid-structure interaction, nonlinear analysis, Jain (R.K.), Kirk (C.L.), *8627*
- ocean waves, probability theory, wave height, Van Heteren (J.), Bruinsma (J.), *8981*
- structural response, wave loads, Dominguez (J.), Alarcon (E.), *9459*
- cylindrical bodies, diffraction, nonlinear waves, shallow water, Rahman (M.), Chakravartty (I.C.), *10393*
- fatigue, stochastic processes, vibration (forced), wave loads, Sigbjornsson (R.), *11334*
- cables, vibration (flow induced), vortex shedding, Griffin (O.M.), Pattison (J.H.), (et al.), *11628*
- ocean waves, wave loads, Huntington (S.W.), Gilbert (G.), *11670*

Ogandzhanyants (V.G.), see Bakhitov (G.G.), *4022*

Oganesyan (S.M.), functional analyis, geophysics, iterative methods, Starostenko (V.I.), *5881*

Oganyan (G.G.), see Bagdoev (A.G.), *5488*

Ogarkov (B.L.), see Kirillov (V.A.), *5545*

Ogawa (S.), see Umemura (A.), *10709*

Ogawa (Y.), boundary layer (atmospheric), boundary layer (thermal), environmental tests, roughness, stratified flow, Diosey (P.G.), *6646*

Ogibalov (P.M.), plastic flow, unsteady flow, viscoplasticity, Mirzadzhanzade (A.Kh.), *2574, book*

Ogihara (K.), buoys, mathieu equation, oscillating bodies, surface waves, vibration (parametric), *1609*

Ogino (F.), buoyant flow, jets, plumes, thermal plumes, Takeuchi (H.), (et al.), *751*
- see Mizushina (T.), *6768*
- buoyancy, spectra, stratified flow, turbulence, Komori (S.), (et al.), *11550*

ogives, bubble dynamics, cavitation flow, laminar flow, separation, water tunnels, Arakeri (V.H.), Carroll (J.A.), (et al.), *563*
- impact, plates, Skovoroda (A.R.), *3394*
- cavitation, cryogenics, thermodynamic properties, variable area flow, venturi, Billet (M.L.), Holl (J.W.), (et al.), *10396*

Ogram (G.L.), see Cunningham (A.J.), *715*

Ogunbo (V.), annular flow, convection, entrance region, heat transfer, hydrogen bubble technique, visualization, Barrow (H.), *1690*

Oguztoreli (M.N.), biocontrol, muscles, nervous system, oscillations, Stein (R.B.), *9053*

Oh (S.H.), see Cavendish (J.C.), *4731*

Oh (S.I.), bending (elastic), bending (plastic), finite element methods, plane strain, sheet metal, Kobayashi (S.), *2399*

Ohara (H.), see Matsui (T.), *2378*

Ohashi (K.), see Hitomi (K.), *7250*

Ohashi (Y.), deformation, elastoplasticity, pressure vessels, shells (cylindrical), shells (plastic), Okouchi (T.), *312*

- experimental results, plastic behavior, shells (cylindrical), steel, Tanaka (E.), *5113*

Ohba (K.), dispersed flow, liquid vapor mixture, radiation, two phase flow, void fraction, *939*

Ohgaki (M.), acoustic waves, focusing, ocean bed, transducers (ultrasonic), Shimizu (R.), (et al.), *5756*

Ohgi (G.), see Sines (G.), *2407*

Ohki (M.), flexible walls, pipe flow, porous walls, unsteady flow, *7719*

Ohmae (N.), aluminum alloys, copper, delamination, finite element methods, friction (sliding), wear, Tsukizoe (T.), *7089*

Ohmaki (S.), elastoplasticity, soils, stress strain relationships, *7436*

Ohmori (M.), alloys, ausforming, fatigue, forming, rolling, steel, Yokokawa (S.), (et al.), *9378*

Ohring (S.), channels, finite difference methods, ships, three dimensional formulation, wave generation, *11580*

Ohsaka (K.), see Dohta (S.), *4634*

Ohsawa (H.), creep, deep drawing, drawing, forming, interface phenomena, plastics, Nishimura (H.), *8358*

Ohsawa (S.-I.), see Koyama (H.), *794*

Ohsawa (Y.), lyapunov's functions, power generation, stability theory, transient effects, transient stability, Hayashi (M.), *3170*

Ohta (H.), see Nikiforuk (P.N.), *2157*

Ohta (I.), see Yoshida (F.), *5329*

Ohta (T.), see Nakazawa (T.), *9444*

Ohtake (K.), contact problems, penalty function, plates (nonlinear), variational methods, Oden (J.T.), (et al.), *11113*

Ohtsubo (H.), see Bazant (Z.P.), *5886*

Ohtsuka (N.), acoustic emission, crack growth, nondestructive tests, pressure vessels, rupture, Nakano (M.), (et al.), *1398*

Ohwovoriole (M.S.), kinematics, linkages, mechanisms (spatial), screws, Roth (B.), *8094*

Oie (S.), boundary value problems, porous media, radiation, sound, Takeuchi (R.), *11981*

- boundary value problems, porous media, radiation, sound, Takeuchi (R.), *11982*
- boundary value problems, porous media, radiation, sound, Takeuchi (R.), *11983*

oil films, bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, El-Kayar (A.), Salem (E.A.), (et al.), *1013*

- bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, El-Kayar (A.), Salem (E.A.), (et al.), *1015*
- film thickness, gears (spur), lubricants (liquid), wear, Hirano (F.), Ichimaru (K.), (et al.), *1016*
- gears, lubrication (elastohydrodynamic), rolling contact, wear, Flamand (L.), Foucher (D.), (et al.), *1027*
- bearings (journal), lubrication (hydrodynamic), vibration, Parkins (D.W.), *1937*
- finite element methods, galerkin method, reynolds equation, seals, Dhagat (S.K.), Sinhasan (R.), (et al.), *2569*
- film thickness, gears, roughness, surfaces, Tudor (A.), *3050*
- absorption, emissions, hydrocarbons, internal combustion engines, Carrier (G.), Fendell (F.), (et al.), *7873*
- combustion, emissions, hydrocarbons, spark ignition engines, Kaiser (E.W.), Lorusso (J.A.), (et al.), *7882*
- boundary layer, pollution, Sundaram (T.R.), *8501*
- failure, friction (sliding), lubrication (elastohydrodynamic), thin films, viscosity, Begelinger (A.), De Gee (A.W.J.), *9037*
- friction (skin), interferometry, optical techniques, Tanner (L.H.), *10536*
- additives, lubricants (liquid), lubrication (boundary), polar fluids, Okabe (H.), Kanno (T.), *10893*
- bearings (conical), bearings (hydrodynamic), friction (solid fluid), lubrication (hydrodynamic), stiffness, Murthy (T.S.R.), *12094*

oil removal, reservoir engineering, simulation, Kazemi (H.), Merrill (L.S.), *2994*

- darcy flow, filtration, hydrodynamics, underground, Rasulov (M.A.), *4968*
- flood flow, petroleum, Tokareva (N.A.), Tsynkova (O.E.), *5842*
- drainage, gravity, Hagoort (J.), *5859*
- separation, two phase flow, Gladfelter (R.E.), Gupta (S.P.), *9892*
- moving media, particle fluid flow, two phase flow, Singhal (A.K.), Dranchuk (P.M.), *9893*
- flood flow, petroleum, recovery systems, Pope (G.A.), *12066*

oil shale, blast effects, experimental results, fracture mechanics, modeling, Grady (D.E.), Kipp (M.E.), (et al.), *6399*

- continuum mechanics, explosions, fracture, modeling, rock mechanics, Grady (D.E.), Kipp (M.E.), *7551*
- fracture mechanics, strain rate, Chong (K.P.), *8356*

oil wells, temperature, thermal measurements, Shiu (K.C.), Beggs (H.D.), *1720*

- pressure change, transient effects, transmission, unsteady flow, Hoberock (L.L.), Stanbery (S.R.), *2706*
- finite element techniques, pressure distribution, Bennett (C.O.), Reynolds (A.C.) Jr., (et al.), *4841*
- boreholes, explosive loading, photoelasticity (dynamic), Fourney (W.L.), Barker (D.B.), (et al.), *8408*

Ojalvo (M.), beam columns, lateral stability, *3328*

Ojika (T.), see Welsh (W.), *9122*

Okabe (H.), additives, lubricants (liquid), lubrication (boundary), oil films, polar fluids, Kanno (T.), *10893*

Okabe (M.), differentiation, interpolation, matrix inversion, singularities, Kikuchi (N.), *5022*

- crack opening displacement, finite element techniques, fracture mechanics, singularities, *5024*
- finite element techniques, fracture mechanics, singularities, *6107*
- finite element methods, finite element techniques, integration, mathematical methods, *7203*
- approximations (polynomial), finite element techniques, interpolation, mesh generation, *10065*

Okabe (S.), feeding mechanisms, frequencies, vibration, Yokoyama (Y.), *1473*

Okada (H.), see Murotsu (Y.), *8448*

Okada (K.), bridges (railroad), experimental mechanics, railroads, vibration (forced), *6311*

- acoustoelasticity, nondestructive tests, orthotropic materials, plane stress, ultrasonics, *10315*
- beams, energy dissipation, failure, reinforced concrete, Koyanagi (W.), (et al.), *10360*

Okada (M.), crossflow, darcy flow, freezing, packed beds, porous media, tubes, *10597*

Okada (T.), cavitation, coatings, corrosion fatigue, erosion, Awazu (K.), (et al.), *9023*

Okada (Y.), earthquakes, initiation, models, seismic waves, *9913*

Okamoto (H.), see Ukeguchi (N.), *825*

Okamoto (S.), acoustic waves, cylindrical bodies, vibration (flow induced), vortex shedding, Hirose (T.), (et al.), *2931*

Okamoto (Y.), see Shimomura (H.), *765*

Okamura (K.), see Yajima (S.), *5125*

Okamura (T.), centrifugal pumps, experimental methods, geometrical properties, rotors, thrust, *3743*

Okaue (M.), see Iwatsubo (T.), *11141*

Okazaki (K.), boundary layer (turbulent), combustion, discharges, magneto fluid dynamics, waves, Mori (Y.), (et al.), *857*

- see Hirano (Y.), *5211*

Okazaki (M.), see Matsumoto (Y.), *1598*

Okazaki (T.), see Ujihashi (S.), *1279*

Oker (E.), boiling, experimental methods, nucleate boiling, resistance thermometers, thin films, Merte (H.) Jr., *1692*

Oki (S.), casting, cooling, freezing, rupture, shells, stefan problem, *440*

Okimura (T.), landslides, mountains, slopes, soils, stability, *9363*

Okouchi (T.), see Ohashi (Y.), *312*

Okrouhlik (M.), dynamic behavior, finite element techniques, matrix methods, *84*

- computer programming, computing techniques, finite element techniques, propagation, wave equations, *10069*

Okuda (K.), diffusion, particles, pipelines, slurries, trajectories, two phase flow, *4011*

Okumura (A.), see Amari (M.), *3325*

- see Amari (M.), *3521*

Okumura (N.), charpy tests, crack growth, electrical analysis, steel, Venkatasubramanian (T.V.), (et al.), *5293*

Oladimeji (M.K.), biaxial loading, finite element techniques, holes, multiple cracks, stress intensity factor, *10295*

Olagunju (D.O.), see Matkowsky (B.J.), *4738*

- see Matkowsky (B.J.), *10701*

Olbrot (A.W.), see Gosiewski (A.), *4231*

- controllability, frequency domain techniques, linear systems, linear theory, observability, Zak (S.H.), *10080*

Oldfield (W.), charpy tests, fractography, fracture energy, fracture toughness, notch tests, *2498*

Oldyrev (P.P.), composite materials, fatigue, loads, material testing, *6204*

Oledzki (A.), damping, dynamic response, optimization, *3348*

Oleinik (N.V.), crack initiation, cracks, fatigue, structural design, Medvedev (S.A.), (et al.), *5280*

Oleinik (V.A.), see Makhnenko (V.I.), *5796*

Oleinikov (N.E.), see Sorokin (G.M.), *4516*

Olejnik (A.), see Dzygadlo (Z.), *10350*

Olemskoi (A.I.), crystals, elastic waves, elastodynamics, *4122*

Oler (J.W.), interfaces, jets, turbulent flow, Jenkins (P.E.), (et al.), *5452*

Olhoff (N.), anisotropic media, design (optimum), plates (circular), vibration (free), Lurie (K.A.), (et al.), *2508*

- see Cheng (K.-T.), *7589*

Oliva (P.), see Caligaris (O.), *7242*

Oliveira Faria (L.M.), boundary elements, plasticity, pressurized pipes, stress concentration, Mota Soares (C.A.), (et al.), *8215*

Oliver (D.A.), hypervelocity, interaction, magneto plasma dynamics, pulsatile flow, shock waves, Swean (T.F.) Jr., (et al.), *7898*

Oliver (D.R.), jets, lubricants (liquid), non newtonian flow, polymers, squeeze films, Shahidullah (M.), *7103*

Oliver (J.), algorithms, differentiation, interpolation, *3123*

- algorithms, computer programming, computing techniques, differentiation, *9123*

Oliver (W.A.), acoustic waves, finite element methods, waveguides, Dong (S.B.), (et al.), *5771*
Oliveto (G.), beam columns, buckling (plastic), matrix methods, *4400*
Olkin (S.I.), crack growth, crack initiation, creep, fatigue, notch tests, prediction, *5331*
Ollila (R.G.), swept wings, transportation devices, vehicles, wing-in-ground vehicles, *1617*
Ollis (M.), see Sellin (R.H.J.), *9504*
Ollos (G.), drainage, groundwater, hydraulics, wells, *7975*
Olmstead (W.E.), bifurcation, burgers equation, nonlinear analysis, stability theory, Davis (S.H.), *7666*
Olsen (O.H.), hyperbolic equations, nonlinear analysis, nonlinear waves, sine gordon equation, solitary waves, Samuelsen (M.R.), *10018*
Olsen (O.W.), see Fuchssteiner (W.), *7520*
Olshanskii (V.P.), panels (curved), shells, *2269*
- see Garmash (L.I.), *8249*

Olshanskii (V.Yu.), compressible flow, oscillatory flow, slender bodies, transonic flow, *9550*
Olshevsky (K.U.), asymptotic behavior, flexible bodies, large displacement, rods, *3288*
Olson (J.M.), cavities, convection (benard), heat addition, rayleigh benard instability, rayleigh number, Rosenberger (F.), *578*
Olson (M.D.), see Nigh (G.L.), *3369*
Olson (P.), earth, energy conversion, geophysics, magneto fluid dynamics, models, *8821*
Omar (M.A.), see Koura (M.M.), *10883*
Omatu (S.), see Tamaki (S.), *6132*
Omelchenko (K.G.), ablation, fluid mechanics, heat transfer, melting, Trenev (M.G.), *8774*
Ometsinskaya (E.B.), see Pavlovskii (V.S.), *8633*
Omodei (B.J.), axisymmetric flow, galerkin method, jets, swell, *3692*
on off systems, feedback, limit cycles, oscillations, relay systems, stability theory, Balasubramanian (R.), *8161*
one dimensional flow, aerodynamics, axial turbines, cooling, heat transfer, Sirotkin (Ya.A.), *701*
- asymptotic behavior, conduction (unsteady), parabolic equations, short-time solutions, Gavalas (G.R.), Yortsos (Y.C.), *1087*
- channel flow, finite difference methods, free boundary, open channels, unsteady flow, Maczuga (T.), *1501*
- charged particles, electro fluid dynamics, inertia, two phase flow, Vatazhin (A.B.), Grabovskii (V.I.), *1774*
- ducts, liquid gas mixture, transient, two phase flow, Hancox (W.T.), Ferch (R.L.), (et al.), *1848*
- channel flow, free boundary, stratified flow, Gardner (G.C.), *2581*
- compressible flow, one dimensional waves, shock waves, Hsiao (L.), Chang (T.), *2618*
- compressible flow, finite difference methods, viscous effects, Gadzhiev (A.D.), Pisarev (V.N.), *2624*
- asymptotic methods, combustion, flame holders, Bobrova (N.R.), Burkina (R.S.), (et al.), *2961*
- finite difference methods, shallow water, tides, Stelling (G.S.), *3612*
- diffusion, discrete systems, equations of motion, hydrodynamics, Visscher (P.B.), *3635*
- convection, diffusion, finite element techniques, Varoglu (E.), Finn (W.D.L.), *6112*
- compressible flow, mathematical models, Borzov (V.B.), Gutsunaev (T.I.), *6632*
- airfoils, flutter, oscillating bodies, transonic flow, unsteady flow, wakes, Mccroskey (W.J.), *6716*
- exhaust gases, heat transfer, spark ignition engines, thermal measurements, Alkidas (A.C.), *6848*
- compressible flow, mathematical models, navier stokes equation, viscous effects, Sakurai (A.), Kukuyu (A.), *7685*
- compressible flow, waves, Steketee (J.A.), *7779*
- ducts (variable area), sound propagation, Mani (R.), *7936*
- particle fluid flow, shock waves (normal), two phase flow, unsteady flow, Marconi (F.), Rudman (S.), (et al.), *9873*
- compressible flow, numerical methods, Abrashin (V.N.), *10418*
- existence theorems, isentropic processes, magneto plasma dynamics, theory, Sulem (C.), Sulem (P.L.), *10733*
- numerical methods, two phase flow, void fraction, Van Der Welle (R.), *10828*
- porous media, saturation, travelling waves, Nakano (Y.), *10834*
- compressible flow, gravity, numerical methods, Kosovichev (A.G.), Popov (Yu.P.), *11418*
- compressible flow, numerical methods, thermal expansion, two phase flow, Amit (R.), Porsching (T.A.), *11421*
- compressible flow, navier stokes equation, rarefied flow, Aristov (V.V.), Makhmudov (A.A.), (et al.), *11434*

one dimensional waves, nonlinear waves, shock waves, wave equations, Lardner (R.W.), *36*
- thermal waves, thermoelasticity (transient), Brun (L.), Molinari (A.), *924*
- compressible flow, one dimensional flow, shock waves, Hsiao (L.), Chang (T.), *2618*
- bessel functions, layered media, wave equations, Kard (P.), *4163*
- elasticity (nonlinear), elastodynamics, stability theory, Rivlin (R.S.), *4928*
- crystals, korteweg de vries equation, lattices, particle dynamics, Askar (A.), *7140*
- dispersion, elastic bodies, nonlinear waves, Tokuoka (T.), *10232*

Onishi (H.), see Tanaka (K.), *11151*
Onishi (Y.), see Jeffrey (D.J.), *572*
Ono (K.), bearings (foil), bearings (gas lubricated), bearings (spherical), reynolds equation, Mizukawa (M.), *1939*
- electron beams, excitation, lasers, plasma, spectral analysis, Kamimoto (G.), (et al.), *5691*

Ono (R.), diesel engines, propellers (marine), propulsion, ship design, Yoshida (O.), *1923*
Ono (S.), see Naitoh (T.), *6749*
Onu (G.), bridges, foundations, matrix methods, piles, reinforced concrete, structural response, *7607*
Onyegegbu (S.O.), convection, radiant interchange, rotating fluids, thermal instability, *8752*
Oo (U.M.), see Kambe (T.), *11963*
Ookochi (Y.), see Matsumura (T.), *5956*
Ookuma (M.), see Nagamatsu (A.), *6281*
Ooms (G.), air pollution, boundary layer (atmospheric), plumes, smoke stacks, turbulence (geophysical), Mahieu (A.P.), *8028*
Oosterbroek (M.), emulsions, inertia, oscillations, two phase flow, viscoelasticity (dynamic), Tropper (R.), (et al.), *2602*
- experimental methods, viscoelastic fluids, viscometry, Waterman (H.A.), (et al.), *6592*

Oosterloo (P.J.), dynamic behavior, mechanical systems, unloading, *7418*
Oosthuizen (P.H.), axial flow, convection, cylindrical bodies, heat transfer, Rangarajan (N.), *3779*
Opanasenko (A.N.), buoyant flow, convection (free), mixing, mixing chambers, thermal instability, unsteady flow, Selivanov (V.M.), (et al.), *8704*
open loop systems, boilers, combustors, heat exchangers, magneto plasma dynamics, Johnson (T.R.), Berry (G.F.), (et al.), *5680*
- channels, design criteria, generators, magneto plasma dynamics, Kessler (R.), *5681*

operational methods, analytical methods, time varying systems, transient effects, Sololev (L.G.), *4239*
- diffraction, flow measurement, oscillators, Yamasaki (H.), Honda (S.), *6740*

operations research, algorithms, dynamic programming, maintenance, process control, Berzilovich (Ye.Yu.), Pavlenko (M.I.), (et al.), *1149*
- mathematical programming, optimization, plant location, Uzdemir (A.P.), *1155*
- mathematical models, risk, Kottas (J.F.), Lau (H.-S.), *2118*
- algorithms, optimization, renewal reward processes, Christer (A.H.), *2168*
- railroads, Stevenson (D.G.), Georgiades (G.), *2170*
- job scheduling, linear programming, optimization, Phillips (K.), *2171*
- bridge replacement, bridges, highways, integer programming, mathematical models, GarciaDiaz (A.), Liebman (J.S.), *3192*
- algorithms, optimization, pattern recognition, sequential search, Nazarov (N.G.), Tarasenko (V.F.), *3198*
- cost uncertainty, mathematical models, optimization, Naert (P.A.), Weverbergh (M.), *3215*
- computer aided manufacturing, optimization, process control, White (C.C.) III, *3216*
- algorithms, iterative methods, market equilibrium, numerical methods, optimization, Ahn (B.H.), *7227*
- computer aided manufacturing, numerical control, optimization, Hitomi (K.), Ohashi (K.), *7250*

Opilski (A.), see Cerowski (Z.), *1298*
Oplinger (D.W.), see Lence (E.M.) eds., *286, book*
Oppenheim (A.V.), algorithms, computing techniques, fast fourier transform, hankel transform, transforms, Frisk (G.V.), (et al.), *4173*
Oppenheim (I.), see Tokuyama (M.), *2842*
- see Bedeaux (D.), *3713*

optical analysis, measurements, rivers, sediment transport, Ward (P.R.B.), Chikwanha (R.), *4574*
- ocean waves, phase velocity, Gotwols (B.L.), Irani (G.B.), *5485*
- centrifugal compressors, diffusers, entrance region, laser doppler velocimeters, rotors, Krain (H.), *6735*

optical instruments, shadowgraphic methods, two phase flow, Hewitt (G.F.), Whalley (P.B.), *948*
- film thickness, interferometry, Smolinska (B.), Wasowski (J.J.), *1396*
- interface phenomena, liquid liquid interface, measurements (dynamic), Piquemal (J.), Barrau (J.J.), *3759*
- radiant interchange, solar cells, solar concentrators, Patera (R.P.), *3832*
- deformation, towers, wind loads, Neuerburg (W.), *3906*
- emulsions, particle size, testing equipment, Lee (G.W.J.), Groves (M.J.), *7002*
- ocean waves, optical techniques, surface waves, Luchinin (A.G.), *7054*

optical techniques, Daly (K.J.), Smith (J.D.), *485*
- aerodynamics, flow measurement, liquid crystal, thermal measurements, Zharkova (G.M.), *725*
- acoustic properties, liquids, relaxation, spectroscopy, Gladkov (S.M.), Koroteev (N.I.), *919*

- bubble dynamics, liquid gas mixture, measurements, two phase flow, Kosmowski (I.), Wunderlich (B.), (et al.), *942*
- clouds, fog, holography, Smirnov (V.A.), Yaskevich (G.F.), *992*
- holography, lasers, moire methods, stress analysis, Chiang (F.P.), *1393*
- cavitation inception, holography, scattered light, Billet (M.L.), Gates (E.M.), *1638*
- analog computation, differential equations (partial), elliptic equations, parabolic equations, Cederquist (J.), Lee (S.H.), *2079*
- grids, moire methods, Murakami (K.), Murakami (Y.), (et al.), *2474*
- composite materials, moire methods, strain analysis, Chiang (F.P.), Parker (B.), (et al.), *2475*
- holography, theory, Miler (M.), *2476*
- axisymmetric flow, diagnostics, jets, Santoro (R.J.), Semerjian (H.G.), (et al.), *3762*
- refraction, schlieren methods, thermography, Kiss (L.), *3774*
- acoustic measurements, interferometry, solids, sound speed, Thanh (V.), Burov (J.), (et al.), *3970*
- acoustic measurements, transducers, Rashleigh (S.C.), *3979*
- acoustic measurements, transducers, waveguides, Carome (E.F.), Koo (K.P), *3980*
- lasers, rotors, turbomachinery, velocity measurement, Smart (A.E.), Wisler (D.C.), (et al.), *4687*
- boundary layer (thermal), convection (free), cooling, fiber optics, Kuiken (H.K.), *4695*
- displacement, metrology, strain, stress analysis, surfaces, Stetson (K.A.), *5319*
- density, moire methods, supersonic flow, visualization, Stricker (J.), Kafri (O.), *5512*
- acoustic waves, diffraction, scattering, sound fields, Saiga (N.), Suzuki (T.), *5792*
- combustion products, contamination, exhaust gases, interferometry, propellants, spectral analysis, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- colloids, dispersions, particle size, Tausk (R.J.M.), Venselaar (H.C.J.), (et al.), *7003*
- ocean waves, optical instruments, surface waves, Luchinin (A.G.), *7054*
- diagnostics, eyes, Tamarova (R.M.), *7127*
- fibers, fizeau fringes, textiles, El-Nicklawy (M.M.), Fouda (I.M.), *7308*
- fibers, fizeau fringes, textiles, ElNicklawy (M.M.), Fouda (I.M.), *7309*
- crack growth, dugdale model, films, micromechanics, polymers, Donald (A.M.), Kramer (E.J.), *7500*
- laminar flow, particle dynamics, particle fluid flow, velocity measurement, vessels, Kamiwano (M.), Motoyoshi (T.), (et al.), *7813*
- diffraction, ultrasonics, waves, Riley (W.A.) Jr., *7947*
- displacement, holography, lasers, modulated systems, waves, Gilbert (J.A.), Herrick (J.W.), *8424*
- anisotropy, birefringence, colloids, suspensions, Meeten (G.H.), *8502*
- energy storage, radiant interchange, solar collectors, Gaul (H.), Rabl (A.), *8767*
- focusing, radiant interchange, solar collectors, Bendt (P.), Gaul (H.), (et al.), *8768*
- acoustic properties, acousto-optical phenomena, materials properties, Kleszczewski (Z.), *8869*
- aerosols, electric effects, measurements, properties, Straubel (H.), *8914*
- friction (skin), interferometry, oil films, Tanner (L.H.), *10536*
- combustion, combustors, Switzer (G.L.), Goss (L.P.), (et al.), *10720*
- absorption, adhesives, bonded joints, composite materials, laminates, swelling stresses, water, Sargent (J.P.), Ashbee (K.H.G.), *11343*
- convection, diffusion, liquids, mixtures, two component flow, Ruddick (B.R.), *11755*
- sound generation, thermal effects, Lyamshev (L.M.), Sedov (L.V.), *11915*
- buoyancy, hele-shaw flows, laminar flow, particles, trajectories, Bugliarello (G.), Yanizeski (G.M.), *12016*
- concentration, particle size, velocity measurement, Stanley-Wood (N.G.), Llewellyn (G.J.), (et al.), *12058*

optimal control, compression, linear systems, singular control, Vasenin (V.A.), Samsonov (V.A.), *115*

- jump conditions, state space techniques, Utkin (V.I.), Yang (K.D.), *133*
- galerkin method, parabolic equations, Winther (R.), *168*
- control, nuclear power, Haugset (K.), Leikkonen (I.), *170*
- groundwater, pumps, Gisser (M.), Sanchez (D.A.), *172*
- discrete systems, maximum principle, sampled data systems, stochastic processes, De Koning (W.L.), *175*
- discrete systems, maximum principle, sampled data systems, Kuntsevich (V.M.), Lychak (M.M.), *176*
- distributed parameters, thermal diffusion, thermal stresses, Vigak (V.M.), Kostenko (A.V.), *177*
- controllability, distributed parameters, sensitivity, synthesis, temperature, thermal stresses, Poterasu (V.F.), *178*
- controllability, sensitivity, synthesis, Poterasu (V.F.), *179*
- adaptive systems, control, pole placement, Wellstead (P.E.), Edmunds (J.M.), (et al.), *186*
- algorithms, quasilinearization, singular control, Yeo (B.P.), *189*
- algorithms, design, discrete systems, observers, Willems (J.L.), *191*
- design, flight control, Govindaraj (K.S.), Rynaski (E.G.), *193*
- filters, optimization, tracking, Kosut (R.L.), *196*
- space vehicles, trajectories, Farrenkopf (R.L.), *197*
- constraints, linear systems, trajectory optimization, Pelczewski (W.), Walczak (S.), *199*
- large scale systems, simulation, Krasovskii (A.A.), *210*
- design, magnetic stabilization, rotor layer, Ulbrich (H.), *212*
- design, synthesis, Afimiwala (K.A.), Mayne (R.W.), *227*
- gyrodynamics, gyroscopes, space vehicles, Oz (H.), Meirovitch (L.), *881*
- digital control, time delay systems, Hammarstrom (L.G.), Gros (K.S.), *1148*
- distributed parameters, optimization, Mahapatra (G.B.), *1150*
- discrete systems, regulator problem, Warrior (J.), Viswanadham (N.), *1151*
- algorithms, time lag, Teo (K.L.), Craven (B.D.), *1158*
- plates, vibration (free), Litvinov (V.G.), *1276*
- control, inequalities, variational methods, Barbu (V.), *2029*
- linear systems, singular control, Casti (J.), *2116*
- algorithms, riccati equation, Allwright (J.C.), *2117*
- regulator problem, riccati equation, singular perturbations, Dmitriev (M.G.), *2119*
- beams, finite element methods, flexible bodies, Schaechter (D.B.), *2123*
- algorithms, discrete systems, Bakan (G.M.), Strashko (V.T.), *2124*
- structural design, Andreev (Yu.N.), Fedorenko (R.P.), (et al.), *2142*
- algorithms, gradient techniques, tracking, Rybashov (M.V.), *2151*
- algorithms, mathematical programming, regulator problem, Dzhafarov (E.M.), Iskenderov (I.A.), *2155*
- nonlinear systems, synthesis, Venets (V.I.), Dudnikov (E.E.), (et al.), *2156*
- design, flight control, flutter, Newsom (J.R.), *2180*
- gas turbines, jet engines, multivariable systems, Dehoff (R.L.), Hall (W.E.) Jr., *2186*
- design, flywheels, railroads, Sweet (L.M.), Keane (M.J.), *2189*
- algorithms, computer aided manufacturing, numerical control, sampled data systems, tools, Schlueter (R.A.), Retford (E.T.), (et al.), *2194*
- singular control, variational methods, Skorodinskii (I.T.), *3183*
- design, linear systems, Belikov (S.A.), Zak (Yu.A.), *3184*
- algorithms, design, functional analyis, linear programming, Bershchanskii (Ya.M.), Meerov (M.V.), *3185*
- functional analyis, nonlinear methods, Barbu (V.), Da Prato (G.), *3187*
- nonlinear systems, oscillations, periodic movements, van der pol's solution, Izrailovich (M.Ya.), Morozova (N.I.), *3188*
- distributed parameters, heat exchangers, heat transfer, mass transfer, process control, sliding optimization, Dubrovin (O.F.), Galchinskiy (L.Yu.), *3190*
- algorithms, stochastic systems, suboptimal control, Kolmanovskii (V.B.), *3195*
- adaptive systems, lyapunov's functions, model reference systems, stability theory, Yadykin (I.B.), *3206*
- algorithms, gradient techniques, vibration, vibration isolation, Poterasu (V-F.), Popescu (D.), *3209*
- cranes, design, oscillations, Mamalyga (V.M.), *3219*
- algorithms, nonlinear programming, nonlinear systems, vehicles, Van Zanten (A.T.), Krauter (A.I.), *3221*
- algorithms, distributed parameters, initial value problems, numerical methods, parabolic equations, Winther (R.), *4207*
- convex programming, fractional convex programming, linear systems, synthesis, Pestryakov (A.K.), *4229*
- control, distributed parameters, mobile control, Butkovskii (A.G.), Pustylnikova (E.I.), *4261*
- damping, rotating bodies, time optimal systems, Zubov (V.I.), *4271*
- algorithms, lagrange equations, Svechinskii (V.B.), *4272*
- algorithms, jump conditions, Ashchepkov (L.T.), Badam (U.), *4275*
- nonlinear systems, optimization, Seisov (Iu.B.), *4286*
- dynamic programming, synthesis, terminal control, Akulenko (L.D.), *4288*
- constraints, linear systems, synthesis, Brunovsky (P.), *4291*
- constraints, design, regulator problem, Sirazetdinov (T.K.), Smirnov (S.V.), *4292*
- linear systems, stochastic control, Kuznetsov (N.A.), Liptser (L.Sh.), (et al.), *4294*
- filters, linear systems, stochastic control, Uryupin (M.A.), *4295*
- digital control, space vehicle structures, structural response, Gran (R.), Rossi (M.), (et al.), *4297*
- bellman function, dynamic programming, linear systems, Drozdov (A.D.), *4299*
- design, differential games, unknown parameters, Kuntsevich (V.M.), Lychak (M.M.), *4301*
- servomechanisms, time optimal systems, Zaytsev (G.G.), Steklov (V.K.), *4302*
- minimization, regulator problem, synthesis, Romanenko (L.G.), *4305*
- aerospace vehicles, structural response, structures, synthesis, Vatolin (V.V.), Degtyarev (G.L.), (et al.), *4308*
- algorithms, dynamic programming, equipment replacement, Evlanov (L.G.), Trubitsin (O.N.), *4309*
- algorithms, discrete systems, Kondratev (V.V.), Savelev (V.P.), (et al.), *4310*
- algorithms, vibration (forced), vibration isolation, vibrators, vibrotransporter, Zevin (A.A.), *4311*
- distributed parameters, riccati equation, Huntley (E.), *4315*
- monte carlo analysis, stochastic control, Gorodetskiy (V.I.), Yusupov (R.M.), *4316*
- drives, hydraulic machinery, transducers, Karnopp (D.), *4554*
- optimization, singular control, switching, Powers (W.F.), *4992*

- algorithms, convergence, iterative methods, optimization, Allwright (J.C.), *4997*
- optimization, variational methods, Leitmann (G.), *5039, book*
- design, linear-quadratic optimal control, positive control, synthesis, Pachter (M.), *5048*
- boundary value problems, cauchy problem, parabolic equations, Reid (D.W.), Teo (K.L.), *5049*
- approximation methods, schwartz inequality, suboptimal control, synthesis, Akulenko (L.D.), *5050*
- algorithms, constraints, numerical methods, regulator problem, Kalaba (R.), Spingarn (K.), *5054*
- algorithms, linear systems, multivariable systems, schur form, Sima (V.), *5055*
- algorithms, large scale systems, stochastic control, Chernitser (A.V.), *5056*
- algorithms, numerical methods, sensitivity, Evers (A.H.), *5058*
- algorithms, gliding trajectory, numerical methods, oscillations, trajectory optimization, Williamson (W.E.) Jr., *5061*
- internal combustion engines, minimum fuel control, vehicles, Sweet (L.M.), *5068*
- penalty function, space shuttle, stability theory, tethered systems, Bainum (P.M.), Kumar (V.K.), *5701*
- optimization, orbit transfer, trajectory optimization, Teschner (W.), *5708*
- lift, reentry, spinning bodies, topological techniques, Platus (D.H.), *5709*
- ballistics (terminal), planetary atmospheres, planetary entry, reentry, Ivanov (N.M.), Martynov (A.I.), (et al.), *5713*
- automatic control (optimal), dynamic analysis, Burghes (D.N.), Graham (A.), *6124, book*
- discontinuities, jump conditions, maximum principle, Getz (W.M.), Martin (D.H.), *6139*
- algorithms, mathematical programming, numerical methods, Sheela (B.V.), Ramamoorthy (P.), *6140*
- nonlinear theory, sampled data systems, Miller (B.M.), *6143*
- multirate service system, optimization, queue theory, Dudin (A.N.), *6144*
- anchors, kalman filters, ship maneuvers, ships, Balchen (J.G.), Jenssen (N.A.), (et al.), *6147*
- compressible flow, cylindrical bodies, dynamic behavior, magneto fluid dynamics, Pavlov (E.G.), *6857*
- feedback, pole placement, Heymann (M.), *7230*
- bang-bang control, suboptimal control, synthesis, Gonzalez (R.), *7241*
- algorithms, linear systems, numerical methods, suboptimal control, Kein (V.M.), Parikov (A.N.), (et al.), *7243*
- adaptive systems, aerospace vehicles, synthesis, trajectories, Salmin (V.V.), *7248*
- algorithms, navigation, tracking, Reid (J.G.), Chaffin (D.E.), (et al.), *7249*
- attitude control, maneuverability, Junkins (J.L.), Turner (J.D.), *7924*
- evasion, pursuit, variational methods, Large (E.), *7926*
- guidance optimization, rockets, steering, Dvornychenko (V.N.), *7928*
- linear systems, mathematical theory, time optimal systems, Arutyunov (A.V.), *8158*
- iterative methods, large scale systems, regulator problem, time optimal systems, Samovsky (J.), *8165*
- differential inclusion, optimization, time delay systems, Pshenichnyi (B.N.), Yakovleva (A.P.), *8166*
- airplanes, design, feedback, feedforward control, interception, pursuit, Lunderstadt (R.), *8169*
- sensitivity, time optimal systems, Becker (N.), *8171*
- computing techniques, guidance optimization, Demidovich (O.B.), *8845*
- damping, space frames, space structures, space vehicle structures, stability theory, Joshi (S.M.), Groom (N.J.), *8850*
- approximations, cost control, heat equation, quadratic programming, Fletcher (R.), Harley (P.J.), *9100*
- design, frequency response, Gupta (N.K.), *9156*
- control, distributed parameters, hyperbolic equations, modal control, self-adjoint systems, Meirovitch (L.), Baruh (H.), *9170*
- modal control, oscillations, structural elements, structural response, structural stability, Masri (S.F.), Bekey (G.A.), (et al.), *9171*
- stochastic control, stochastic systems, time optimal systems, Kolmanovskii (V.B.), Maizenberg (T.L.), *9173*
- control, large scale systems, multivariable systems, power generation, Ikeda (M.), Siljak (D.D.), (et al.), *9175*
- algorithms, cybernetics, optimization, pursuit, search, trajectories, Vereshchagin (A.F.), Medvedev (V.S.), (et al.), *9184*
- algorithms, boundary value problems, numerical methods, Travassos (R.), Kaufman (H.), *9185*
- biomathematics, pharmacokinetics, Kusuoka (H.), Kodama (S.), (et al.), *9196*
- artificial satellites, dynamic programming, rigid bodies, Akulenko (L.D.), *9818*
- distributed parameters, singular perturbations, Shih (S.-C.), *10085*
- constraints, maximum principle, Gollan (B.), *10086*
- model reduction, suboptimal control, time optimal systems, Fuller (A.T.), *10088*
- algorithms, nonlinear programming, Grachev (I.I.), Evtushenko (Yu.G.), *10091*
- artificial satellites, low thrust engines, two body problem, Vasilev (V.V.), *10779*
- algorithms, approximation methods, hilbert space, linear programming, Rubio (J.E.), *11051*
- algorithms, approximation methods, asymptotic methods, Moiseev (N.N.), Chernousko (F.L.), *11066*
- constraints, maximum principle, Blatt (J.M.), *11068*
- asymptotic behavior, mathematical programming, trajectory optimization, Feinstein (C.D.), Luenberger (D.G.), *11069*
- constraints, regulator problem, Zolezzi (T.), *11070*
- modal control, regulator problem, Gibson (J.S.), *11071*
- stochastic control, stochastic systems, Kumar (P.R.), Van Schuppen (J.H.), *11072*
- adaptive systems, design, time lag, time optimal systems, Kim (B.K.), Bien (Z.), *11073*
- pursuit, stochastic processes, Yavin (Y.), Jordaan (A.M.), *11075*
- algorithms, singular perturbations, suboptimal control, Rajagopalan (P.K.), Naidu (D.S.), *11076*
- design, hovercraft, suspension systems, vehicles, Balzer (L.A.), *11078*
- adaptive systems, dynamic properties, one-armed bandit, Kumar (P.R.), Seidman (T.I.), *11091*
- algorithms, computer aided design, numerical methods, Raggett (G.F.), *11099*

optimization, inverse problems, linear equations, matrix methods, Torkamani (M.A.M.), *17*

- convolution integrals, estimation, probability theory, reliability analysis, Grigoriu (M.), Lind (N.C.), *48*
- algorithms, constraints, probability, quadratic programming, Lepp (R.), *49*
- algorithms, mathematical programming, pareto optimization, Corley (H.W.), *167*
- synthesis, time optimal systems, Brunovsky (P.), *171*
- control, lyapunov's functions, power plants, Yamashita (K.), Taniguchi (T.), *173*
- decision theory, markov processes, stochastic processes, Demin (N.S.), *182*
- filters, optimal control, tracking, Kosut (R.L.), *196*
- control, process control, rolling, rolling, Dobronravov (D.N.), Kun (L.A.), (et al.), *207*
- foundations, sampling, soils, Rats (M.V.), Pyrchenko (V.A.), *409*
- fuzzy control, grinding, stochastics, Sakai (Y.), Tanaka (Y.), (et al.), *439*
- design (optimum), series expansion, structural analysis, Kirsch (U.), *502*
- insulating materials (thermal), layered media, Mikhailov (V.V.), *793*
- inequality constraints, numerical analysis, penalty function, Davis (C.S.), *1106*
- lyapunov's functions, matrix methods, Geromel (J.C.), Bernussou (J.), *1147*
- distributed parameters, optimal control, Mahapatra (G.B.), *1150*
- algorithms, multivariable systems, Meerov (M.V.), Bershchanskiy (Ya.M.), (et al.), *1152*
- mathematical programming, operations research, plant location, Uzdemir (A.P.), *1155*
- design, graph theory, networks, piping systems, Bhaskaran (S.), Salzborn (F.J.M.), *1165*
- damping, structural design, vibration, Brotchie (J.F.), *1287*
- life expectancy, machine design, probability, tools, Sheikh (A.K.), Kendall (L.A.), (et al.), *1346*
- collapse, plates (circular), plates (simply supported), Yang (W.H.), *1423*
- design (optimum), iterative methods, Obozov (V.I.), *1431*
- design (optimum), monotonicity analysis, Papalambros (P.), Wilde (D.J.), *1474*
- ballistics (terminal), drag coefficient, recovery systems, reentry, Williamson (W.E.) Jr., *1793*
- rockets, thrust, Hermesh (R.), Katzir (S.), (et al.), *1795*
- estimation, meteorology (physical), oceanography, Penenko (V.V.), *1910*
- constraints, functional analyis, graph theory, networks, Burdyuk (V.Ya.), Reva (V.N.), *2032*
- convergence, nonlinear programming, penalty function, Fujimoto (H.), Fujii (S.), (et al.), *2033*
- queue theory, Abramov (A.Kh.), Dagkesamanskii (N.D.), *2100*
- computer memories, design, Kitovich (V.V.), Porotskii (S.M.), (et al.), *2107*
- linear programming, mathematical programming, nonlinear programming, plant location, Uzdemir (A.P.), *2109*
- algorithms, numerical methods, Kibardin (V.M.), *2121*
- differential games, pursuit, sensitivity, Abramyants (T.G.), Maslov (E.P.), (et al.), *2128*
- modes, pontryagin's extremal, sliding, Kaganovich (S.L.), *2129*
- algorithms, estimation, mathematical programming, stochastic processes, Katkovnik (V.Ya.), Kheisin (V.E.), *2138*
- algorithms, bayesian decisions, decision theory, Pashkovskii (G.S.), *2140*
- algorithms, hill climbing, Gnoenskii (L.S.), Rafaelyan (R.S.), *2143*
- design, process control, Timofeyev (B.B.), Litvinov (A.M.), (et al.), *2146*
- computer programming, computing techniques, multiprocessor systems, Bronshtein (I.I.), Geninson (B.A.), (et al.), *2150*
- algorithms, queue theory, Garger (V.I.), Ioffe (L.Sh.), *2153*
- algorithms, identification, minimax techniques, process control, Bakan (G.M.), Strashko (V.T.), *2154*
- graph theory, transport, Korchemkin (M.), *2167*
- algorithms, operations research, renewal reward processes, Christer (A.H.), *2169*
- job scheduling, linear programming, operations research, Phillips (K.), *2171*
- estimation, filters, Emelyanov (S.V.), Golembo (B.Z.), *2172*
- power generation, water, water supply systems, Ponomarenko (V.S.), Boychuk (L.M.), *2184*

- composite materials, design, Bryzgalin (G.I.), *2246*
- damping, vibration (self excited), vibration isolation, Rowbottom (M.D.), *2323*
- energy, rolling, temperature, Herendi (R.), Voith (M.), (et al.), *2395*
- structural optimization, Prager (W.), *2509*
- bridges (suspension), design (minimum weight), prestressed structures, shape factors, Sofronie (R.), *2533*
- friction, kinetics, torque, Bellomo (N.), Monaco (R.), *2556*
- aerodynamic performance, diffusers, Ryabinkov (G.M.), *2653*
- oscillating bodies, salters duck, wave loads, wave machines, Tanaka (H.), Saito-O (M.), *2713*
- artificial satellites, attitude control, Acaccia (G.M.), Cepolina Molfino (R.), *2921*
- composite materials, computing techniques, eigenvalue problems, elasticity, finite element methods, fracture, plasticity, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- computing techniques, matrix inversion, matrix methods, Den Broeder (G.), *3113*
- discrete systems, existence theorems, integer programming, scheduling problems, uniqueness, Smadici (C.), *3114*
- algorithms, machinery, nonlinear systems, sequential machines, Baibatshaev (M.Sh.), Popkov (Yu.S.), *3189*
- design, graph theory, integer programming, networks, pipelines, Grosz (M.), *3193*
- algorithms, operations research, pattern recognition, sequential search, Nazarov (N.G.), Tarasenko (V.F.), *3198*
- algorithms, computer aided design, Stoyan (Yu.G.), Sokolovskii (V.Z.), *3199*
- algorithms, distribution systems, transport, twostage optimization, Stewart (T.J.), Ittmann (H.W.), *3212*
- cost uncertainty, mathematical models, operations research, Naert (P.A.), Weverbergh (M.), *3215*
- computer aided manufacturing, operations research, process control, White (C.C.) III, *3216*
- cutting (three dimensional), mathematical models, numerical control, Davis (R.P.), Wysk (R.A.), (et al.), *3220*
- damping, dynamic response, Oledzki (A.), *3348*
- machine design, machining (electrochemical), mathematical methods, Erden (A.), Kaftanoglu (B.), *3430*
- constraints, design (optimum), displacement, elastoplasticity, Kaneko (I.), Maier (G.), *3515*
- bending elements, design (optimum), finite element techniques, plates, Haftka (R.T.), Prasad (B.), *3516*
- design (optimum), photoelasticity, Durelli (A.J.), *3517*
- design (minimum weight), frames, plates (stiffened), Bennett (J.A.), *3518*
- elastic bodies, shape factors, stress analysis, Oda (J.), Yamazaki (K.), *3519*
- tanks, variational methods, Singh (K.K.), Swamee (P.K.), *3520*
- buckling, columns, design (optimum), elastoplasticity, Amari (M.), Okumura (A.), *3521*
- composite structures, design (optimum), multicomposite structures, shape factors, Dems (K.), Mroz (Z.), *3522*
- airplane structures, design (optimum), Sliwa (S.M.), *3523*
- estimation, meteorology, Brimkulov (U.N.), Krug (G.K.), (et al.), *4081*
- algorithms, gauss method, inequalities, least squares, numerical methods, penalty function, Bellagamba (L.), *4208*
- controllability, state space techniques, Vincent (T.L.), Skowronski (J.M.), *4241*
- boundary value problems, linear systems, regulator problem, stability theory, Tsygankova (L.A.), *4253*
- markov processes, stochastic processes, stochastic systems, Neymark (Yu.I.), Preobrazhenskaya (A.M.), *4277*
- algorithms, estimation, pareto set, Merkurev (V.V.), Moldavskii (M.A.), *4281*
- algorithms, discrete programming problem, programming, Redkovskaya (M.N.), Yaremchuk (T.G.), *4283*
- pursuit, Gusiatnikov (P.B.), *4285*
- nonlinear systems, optimal control, Seisov (Iu.B.), *4286*
- linear systems, Krivenkov (Iu.P.), *4287*
- control, large scale systems, multivariable systems, Findeisen (W.), Brdys (M.), (et al.), *4289*
- adaptive systems, estimation, Tugnait (J.K.), Haddad (A.H.), *4320*
- algorithms, nonlinear systems, process control, Kelmans (G.K.), Poznyak (A.S.), (et al.), *4324*
- adaptive systems, algorithms, gradient techniques, Polyak (B.T.), Tsypkin (Ya.Z.), *4325*
- damping, dynamic analysis, vibration isolation, Thompson (A.G.), *4440*
- cutting, machinery, numerical control, Cirp Annals 1981, *4468, book*
- beam columns, bending, design (optimum), Karihaloo (B.L.), Parbery (R.D.), *4523*
- design, kinematics, mechanisms (spatial), Keler (M.), *4562*
- computer aided design, design (optimum), linkages, mechanisms (planes), Gauchel (H.-J.), *4563*
- automobiles, design, exhaust gases, internal combustion engines, Kanarachos (A.), Seifert (H.), *4564*
- aerodynamic performance, cascades, drag, nozzles, relaxation drag, slender bodies, Schilling (H.), *4625*
- airplanes, flight path, rockets, supersonic flow, wing body combinations, Large (E.), *4671*
- dynamics, equations of motion, variable mass, Apykhtin (N.G.), Iakoviev (V.F.), *4757*
- gradient techniques, multivariable systems, nonlinear characteristics, scale effects, Bruet (B.), *4944*
- optimal control, singular control, switching, Powers (W.F.), *4992*
- model reduction, transfer functions, Luus (R.), *4993*
- algorithms, computing techniques, nonlinear programming, Pappas (M.), *4994*
- gradient techniques, newton method, nonlinear analysis, nonlinear programming, Tanabe (K.), *4996*
- algorithms, convergence, iterative methods, optimal control, Allwright (J.C.), *4997*
- algorithms, cholesky algorithm, computer programming, eigenvalues, matrices, Meirovitch (L.), Baruh (H.), *5001*
- computing techniques, finite element techniques, integration, nonlinear systems, Schmid (H.J.), *5008*
- computer graphics, computing techniques, finite element techniques, mesh generation, Shephard (M.S.), Gallagher (R.H.), (et al.), *5031*
- optimal control, variational methods, Leitmann (G.), *5039, book*
- algorithms, iterative methods, numerical methods, Adamenko (G.M.), *5059*
- design (minimum weight), laminates, multilayer, tubes, Doroginin (V.V.), *5164*
- damping, vibration (torsional), Holzweibig (F.), Liebig (S.), *5231*
- damping, flutter, loads, Claudon (J.-L.), Sunakawa (M.), *5342*
- design (optimum), trusses, tubes, Felton (L.P.), Fuchs (M.B.), *5343*
- echinodome, shape factors, tanks, Ibidapo-Obe (O.), Royles (R.), (et al.), *5344*
- design (minimum weight), frames, kinematics, limit design, Brousse (P.), *5345*
- geometric nonlinearities, shells (orthotropic), shells (thin), Narusberg (V.L.), Rikards (R.B.), (et al.), *5348*
- airfoils, drag, subsonic flow, transonic flow, Zhigulev (V.N.), *5493*
- interplanetary probes, orbit correction, orbit transfer, trajectory optimization, D'Amario (L.A.), Byrnes (D.V.), (et al.), *5707*
- optimal control, orbit transfer, trajectory optimization, Teschner (W.), *5708*
- earth, gravity, gravity anomalies, Kobrunov (A.I.), *5887*
- eigenvalues, matrices, nonsymmetric matrices, stability theory, variational methods, Kalaba (R.), Spingarn (K.), (et al.), *6078*
- mathematical programming, vector methods, Moldavskiy (M.A.), *6081*
- mesh generation, random search, stochastics, Sheela (B.V.), *6099*
- lagrange multiplier, linear theory, Nagahisa (Y.), *6138*
- algorithms, nonlinear programming, relaxation methods, Alekseychik (M.I.), Kalyuzhnyy (G.V.), *6142*
- multirate service system, optimal control, queue theory, Dudin (A.N.), *6144*
- elastic bodies, elastodynamics, kinematics, Atanackovic (T.M.), *6166*
- composite structures, energy storage, flywheels, Portnov (G.G.), Kulakov (V.L.), *6196*
- constraints, penalty function, thermal loading, trusses, Bellagamba (L.), Yang (T.Y.), *6503*
- photoelasticity, plane stress, plates (holed), Durelli (A.J.), Rajaiah (K.), *6506*
- aerospace vehicles, space platforms, space vehicle structures, Heard (W.L.) Jr., Bush (H.G.), (et al.), *6546*
- abrasion, design (optimum), grinding, grinding wheels, Prasad (B.), Haftka (R.T.), (et al.), *6552*
- airplanes, flight path, fuel economy, simulation, Wauer (J.C.), Bruckner (J.M.H.), (et al.), *6729*
- aerodynamic performance, aerodynamics, axial turbines, geometrical properties, Macchi (E.), Perdichizzi (A.), *6736*
- biocontrol, gait, locomotion, Beletskii (V.V.), Kovaleva (E.D.), (et al.), *7111*
- computing techniques, dynamic programming, linear programming, nonlinear programming, Rao (S.S.), *7177, book*
- dynamic programming, penalty function, Rosenman (M.A.), Radford (A.D.), (et al.), *7178*
- algorithms, constraints, penalty function, Brunner (J.K.), *7179*
- algorithms, iterative methods, market equilibrium, numerical methods, operations research, Ahn (B.H.), *7227*
- differential games, synthesis, Kumar (P.R.), *7247*
- computer aided manufacturing, numerical control, operations research, Hitomi (K.), Ohashi (K.), *7250*
- biocontrol, man machine systems, rowing, time optimal systems, Senator (M.), *7258*
- beams (timoshenko), vibration (forced), Rikards (R.B.), *7384*
- dynamic response, vibration isolation, Warburton (G.B.), *7416*
- anisotropic media, composite materials, mathematical programming, polymers, shells (of revolution), Tomashevskii (V.T.), Nikolaev (B.A.), (et al.), *7594*
- shape factors, trusses, Saka (M.P.), *7598*
- bars, elastic bodies, shape factors, torsion, Dems (K.), *7599*
- drag, induced drag, subsonic flow, wakes, wings, Kuhlman (J.M.), *7786*
- centrifugal pumps, design, volutes, Kowalik (M.), Zarzer (E.), (et al.), *7804*
- energy conservation, energy storage, solar collectors, solar energy, Veziroglu (T.N.) ed., *7862, book*
- orbit transfer, payloads, space shuttle, thrusters, Macklis (H.), Sackheim (R.L.), (et al.), *7892*
- astronautics, celestial mechanics, design, mission analysis, orbits, space vehicles, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*
- differential inclusion, optimal control, time delay systems, Pshenichnyi (B.N.), Yakovleva (A.P.), *8166*

- control, design, linear systems, multivariable systems, servomechanisms, Davison (E.J.), Ferguson (I.J.), *8168*
- decision theory, dynamic programming, linear systems, time invariant systems, Hess (J.), Kagiwada (H.), (et al.), *8175*
- boundary value problems, design (optimum), distributed parameters, structural optimization, Haug (E.J.) eds., Cea (J.), *8440, book*
- airplanes, design, supersonic flow, transonic flow, vortex flow, wings, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- airplanes, flight path, fuel economy, subsonic flow, Large (E.), *8644*
- biodynamics, gait, muscles, Patriarco (A.G.), Mann (R.W.), (et al.), *9052*
- kinematics, manipulators, mechanisms (spatial), robotics, Benati (M.), Morasso (P.), (et al.), *9084*
- decision theory, existence theorems, vector methods, Alekseichik (M.I.), Naumov (G.E.), *9113*
- fredholm equations, regularization, smoothing of data, Butler (J.P.), Reeds (J.A.), (et al.), *9116*
- computing techniques, finite element techniques, integration, Peano (A.), *9129*
- design, queue theory, Gadjiev (A.G.), *9176*
- design, filters, kalman filters, wiener-hopf technique, Melnikov (B.G.), *9180*
- algorithms, cybernetics, optimal control, pursuit, search, trajectories, Vereshchagin (A.F.), Medvedev (V.S.), (et al.), *9184*
- design (optimum), dynamic analysis, vibration isolation, Rao (S.S.), Hati (S.K.), *9302*
- drilling, elastic waves, rocks, rods, Gupta (R.), *9335*
- beams, hinged bodies, structural optimization, Mikhailishchev (V.Ya.), *9438*
- design (minimum weight), design (optimum), trusses, Somekh (E.), Kirsch (U.), *9439*
- computer aided design, design (optimum), stochastics, Ruppert (M.), *9440*
- computer aided design, mathematical programming, nonlinear programming, reinforced concrete, Bond (D.), *9442*
- cables, trusses, Braga (F.), D'Asdia (P.), *9443*
- airfoil theory, flow reversal, heart, moment coefficient, valves, Tuck (E.O.), *9513*
- boundary layer, boundary layer (three dimensional), coordinate systems, Legner (H.H.), *9572*
- aerodynamic performance, airplanes, maneuverability, stalling, Well (K.H.), Faber (B.), (et al.), *9660*
- biot number, energy storage, heat exchangers, packed beds, thermal regenerators, Schmidt (F.W.), Willmott (A.J.), *9730, book*
- bearings (gas lubricated), bearings (thrust), design (optimum), lubrication (hydrostatic), Shevchenko (A.V.), Fedotov (V.A.), (et al.), *9968*
- bearings (gas lubricated), bearings (spherical), lubricants (gas), Emelyanova (L.S.), *9976*
- computing techniques, kinematics, mathematical methods, state space techniques, Sohoni (V.), Haug (E.J.), *10006*
- elliptic equations, iterative methods, Tsurkov (V.I.), *10025*
- approximations, mathematical methods, Fletcher (R.), Sinclair (J.W.), *10053*
- algorithms, computer programming, finite element techniques, Hua (B.-H.), *10066*
- dams, fail safe design, failure, reliability analysis, Bhattacharjee (M.C.), *10087*
- mathematical models, nonlinear programming, shells (cylindrical), stress analysis, stresses, Michael (W.), Siddall (J.N.), *10090*
- air pollution, control, linear programming, mathematical models, Kohn (R.E.), *10094, book*
- pressure, strings, Wang (C.-Y.), *10148*
- cutting, forming, grinding, metrology, *10268*
- constraints, design (minimum weight), trusses, Levy (R.), Parzynski (W.), *10342*
- columns, design (minimum weight), design (optimum), postbuckling behavior, Venkateswara Rao (G.), Narayanaswami (R.), *10351*
- axial turbines, blades, geometrical properties, Sagadeev (R.G.), Strunkin (V.A.), *10355*
- cams, design, kinematics, Berzak (N.), *10371*
- bearings (journal), design, lubrication (hydrodynamic), Mokhtar (M.O.A.), *10377*
- induced drag, lift, subsonic flow, swept wings, Lobert (G.), *10501*
- heat exchangers, maximum principle, Nishimura (H.), *10620*
- coding, computer aided design, condensers, numerical methods, Johnson (C.M.), Vanderplaats (G.N.), (et al.), *10625*
- gas turbines, mathematical models, starting regime, Agrawal (R.K.), Yunis (M.), *10722*
- actuators, controllability, design, oscillations, space vehicle structures, Arbel (A.), *11047*
- algorithms, linear programming, Gray (D.F.), Sutherland (W.R.S.), *11065*
- algorithms, mathematical programming, numerical methods, Russak (I.B.), *11074*
- algorithms, mathematical programming, numerical methods, quadratic programming, Coope (I.D.), Fletcher (R.), *11081*
- constraints, design (minimum weight), frequencies, Khan (M.R.), Willmert (K.D.), *11318*
- control, control surfaces, telescopes, Mustafaev (M.I.), *11320*
- composite materials, granular media, Banichuk (N.V.), Kobelev (V.V.), *11322*
- composite materials, design (optimum), plates, Bryzgalin (G.I.), *11323*
- numerical methods, reinforced bodies, stiffened structures, Kartvelishvili (V.M.), Mironov (A.A.), (et al.), *11325*
- bodies of revolution, compressible flow, drag, transonic flow, wave drag, Sigalov (G.F.), *11396*
- blunt bodies, compressible flow, drag, hypersonic flow, rarefied gases, shape factors, Bunimovich (A.I.), Dubinskii (A.V.), *11405*
- augmentation, cylindrical pin fins, extended surfaces, fins, heat transfer, Sonn (A.), Bar-Cohen (A.), *11771*
- bearings (hydrostatic), laminar flow, lubrication (hydrostatic), stiffness, Debailleux (C.), Flamme (J.M.), *12095*
- limit analysis, mathematical programming, plasticity, surveys, Maier (G.), Munro (J.), *79999*

Oran (C.), arches, buckling, imperfections, *5178*

Oran (E.S.), chemically reactive flow, combustion, flames (laminar), mathematical models, numerical methods, Boris (J.P.), *6833*

Oranescu (A.), dynamic analysis, four bar linkage, kinematics, linkages, mechanisms (spatial), Bocioaca (R.), *6560*

Orasanu (M.), finite difference methods, infiltration, porous media, *5861*
- complex variables, fluid mechanics, porous media, *7019*

Orasanu (M.T.), canals, seepage, soil mechanics, *9890*
- mathematical methods, porous media, seepage, *9891*
- boundary value problems, porous media, potential flow, two dimensional flow, *10833*

Orbeck (F.), see Henshall (S.H.), *1760*

orbit correction, attitude control, space vehicles, x ray techniques, Rose (R.E.), Berkery (E.A.), *1794*
- computer programming, impulsive transfers, reduction, simplex method, trajectory optimization, Vladimirov (V.P.), Aleksandrov (E.V.), *3920*
- interplanetary probes, optimization, orbit transfer, trajectory optimization, D'Amario (L.A.), Byrnes (D.V.), (et al.), *5707*

orbit decay, asymptotic behavior, drag, planetary atmospheres, Chakravarty (A.J.M.), *4760*
- artificial satellites, oblateness, reentry, upper atmosphere, De Lafontaine (J.), *6883*

orbit determination, algorithms, control, guidance, orbit mechanics, planetary entry, Bukharkina (A.P.), Golubev (Yu.F.), *2158*

orbit mechanics, central force field, kepler orbits, variational methods, Aleksandrov (Yu.S.), *870*
- convergence, kepler equation, newton method, numerical methods, Broucke (R.), *880*
- coordinate systems, inverse problems, potential theory, synodic systems, Szebehely (V.), Broucke (R.), *1785*
- restricted three body problem, three body problem, Patetta (N.), *1789*
- algorithms, control, guidance, orbit determination, planetary entry, Bukharkina (A.P.), Golubev (Yu.F.), *2158*
- kepler orbits, lambert's problem, orbits, trajectories, Sun (F.T.), *2923*
- asymptotic methods, differential equations (partial), nonlinear mechanics, perturbation methods, Kevorkian (J.), Cole (J.D.), *3111, book*
- perturbation methods, restricted three body problem, Kaufman (B.), *3918*
- canonical elements, hamiltonian equations, mathematical methods, Bond (V.R.), Janin (G.), *3919*
- geomagnetic field, libration theory, magnetic field, Zabluda (S.M.), Yanshin (A.M.), *4759*
- libration theory, rotating bodies, space vehicles, three body problem, Barkin (Yu.V.), *5699*
- perturbation methods, planetary theory, satellites, second order analysis, Gooding (R.H.), *5700*
- coordinate systems, differential equations (ordinary), Nazaroff (G.J.), *5705*
- kepler orbits, mean anomaly, probability theory, Serafin (R.A.), *6875*
- ks formulation, oblateness, perturbation methods, regularization, two body problem, Sharma (R.K.), *6877*
- artificial satellites, photography, Bykov (O.P.), *6878*
- potential theory, trajectories, Vjuga (A.A.), *7912*
- artificial satellites, perturbation methods, potential theory, Roth (E.A.), *7915*
- algorithms, computing techniques, equations of motion, space vehicle structures, space vehicles, Kane (T.R.), Levinson (D.A.), *7916*
- tides, Nagasawa (K.), *8024*
- mathematical methods, n body problems, Saari (D.G.), Hulkower (N.D.), *8836*
- magneto fluid dynamics, oscillations, Kuznetsov (L.I.), Chikova (N.V.), *9820*
- magneto fluid dynamics, oscillations, perturbation methods, Lyakhovka (G.V.), *9821*
- circumnavigation, lunar theory, perturbation methods, planetary satellites, three body problem, Henrard (J.), *10771*
- geosynchronous orbits, orbit transfer, Rosengren (M.), *10775*
- fly-by, interplanetary probes, perturbation methods, Georgiev (K.G.), Papkov (O.V.), *10778*

orbit stability, dust, perturbation theory, solar pressure, stochastics, Bakshian (B.T.), Nazirov (R.R.), (et al.), *8843*

orbit transfer, chemical propulsion, electric propulsion, vehicles, Rehder (J.J.), Wurster (K.E.), *849*
- interplanetary probes, optimization, orbit correction, trajectory optimization, D'Amario (L.A.), Byrnes (D.V.), (et al.), *5707*
- optimal control, optimization, trajectory optimization, Teschner (W.), *5708*
- optimization, payloads, space shuttle, thrusters, Macklis (H.), Sackheim (R.L.), (et al.), *7892*

- propulsion, space shuttle, space vehicles, Martin (J.A.), *10724*
- geosynchronous orbits, orbit mechanics, Rosengren (M.), *10775*

orbits, kepler orbits, lambert's problem, orbit mechanics, trajectories, Sun (F.T.), *2923*

- aerosols, zero g phenomena, Edwards (H.W.), *4016*
- gravity, restricted three body problem, solar system, swing-by, Farquhar (R.W.), Dunham (D.W.), *5706*
- astronautics, celestial mechanics, design, mission analysis, optimization, space vehicles, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*

Ordanovich (A.E.), see Latyshev (A.V.), *10477*

- see Kovalev (V.A.), *11539*

Oreper (G.M.), magneto fluid dynamics, mass transfer, spherical bodies, surface effect, two phase flow, *11820*

Oreshkin (O.F.), see Baibikov (B.S.), *9574*

organs, biomechanics, gallstones, hydroelastic waves, travelling waves, wave generation, wave interactions, Wu (Y.P.), Wong (G.R.), (et al.), *1045*

- biocontrol, heart, organ replacement, Beilovskii (M.A.), Super (N.A.), (et al.), *3226*
- blood flow, fredholm equations, liver, Holt (J.N.), Bracken (A.J.), *9066*

orifices, convection (forced), heat transfer, surface effect, Sparrow (E.M.), Gurdal (U.), *1691*

- cavitation inception, reynolds number, vorticity, Yamaguchi (A.), Suzuki (T.), *2586*
- cavitation inception, unsteady flow, vaporization, Yamaguchi (A.), *2587*
- design, ludwig tubes, reservoirs, Matsuo (K.), Kawagoe (S.), (et al.), *2763*
- jets, perturbation methods, Geer (J.P.), Strikwerda (J.C.), *3686*
- ducts, end effects, noise abatement, sound fields, Pollack (M.L.), *4777*
- propellants, space vehicles, spinning bodies, vortices, Pasley (G.F.), *5404*
- acoustic measurements, sound propagation, Lebedeva (I.V.), *6936*
- feedback, noise (aerodynamic), sound generation, Czarnecki (S.), Czechowicz (M.), (et al.), *7938*
- discharges, hydraulic instruments, jets, reynolds number (high), Akers (A.), *8510*
- jets, reservoirs, viscous buckling, Munson (B.R.), *8529*
- cams, mechanisms, pneumatic components, Lequoc (S.), Cheng (R.M.H.), *9483*
- discharges, internal flow, irrotational flow, weirs, Cranfield (R.R.), *10390*

Orkisz (J.), see Liszka (T.), *1124*

Orlandea (N.), design, manipulators, mechanisms, robotics, synthesis, Berenyi (T.), *6564*

Orlando (M.), see Curti (G.), *5374*

Orlanski (I.), gravity waves (internal), ocean waves, wave energy, wave interactions, Cerasoli (C.P.), *11588*

Orloff (K.L.), laser doppler velocimeters, lift coefficient, vortex lines, wakes, wings, *2729*

Orlov (D.V.), see Mikhalev (Yu.O.), *10755*

Orlov (L.G.), see Kuksenko (V.S.), *6438*

Orlov (L.P.), magnetic fluids, magneto fluid dynamics, seals, Fertman (V.E.), *5999*

Orlov (V.K.), boiling, capillary flow, cryogenics, gasification, porous surfaces, Savelev (V.N.), *5543*

Orlova (A.), carbides, creep, dislocations, electron microscopy, high temperature, precipitation, steel, Milicka (K.), (et al.), *6472*

Orosz (A.), cooling towers, reinforced concrete, thermal effects, *8452*

orr sommerfeld equation, boundary value problems, hydrodynamic stability, Solopenko (V.I.), *635*

- shear flow, turbulence (homogeneous), Kambe (R.), Doi (M.), (et al.), *648*
- boundary layer, hydrodynamic stability, roughness, shear flow, stability theory, Lewkowicz (A.K.), *2681*
- asymptotic methods, hydrodynamic stability, shear layer, stability theory, Monkewitz (P.A.), Monkewitz (M.A.), *2686*
- channel flow, developing flow, hydrodynamic stability, perturbations, two dimensional flow, Gupta (S.C.), Garg (V.K.), *3696*
- hydrodynamic stability, shear flow, stability theory, Salwen (H.), Grosch (C.E.), *4639*

Orsi (A.P.), see Monaco (R.), *6635*

Ortega (J.K.E.), concrete, convection (forced), energy storage, fins, solar energy, Bingham (C.E.), (et al.), *7863*

orthogonal functions, boundary value problems, elasticity, viscoelasticity, Melnikov (V.P.), *4962*

orthotropic materials, elasticity (linear), sheet metal, winding, Yagoda (H.P.), *236*

- brittle materials, mixed mode fracture, sheet metal, Lemant (F.), Pineau (A.), *454*
- composite materials, plates (anisotropic), stress concentration, stretching, Pelekh (B.L.), Makhnitskii (R.N.), *1180*
- blades, centrifugal turbines, rotating disks, thermal loading, Paul (A.K.), *1243*
- cracks, integro differential equations, mathematical methods, stefan problem, survey, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *1362*
- dislocations, elastic constants, stress concentration, strips, Krenk (S.), *2213*
- beams (composite), biharmonic equation, curved bars, Von Roth (W.), Epple (A.), *2248*
- bridges, curved members, decking, structural analysis, Dey (S.S.), Samuel (A.T.), *5357*
- anisotropy, composite materials, dynamic behavior, fibers, harmonic waves, Nemat-Nasser (S.), Yamada (M.), *7408*
- crack opening displacement, griffith cracks, Misra (J.C.), Mishra (M.), (et al.), *7515*
- edge dislocations, multiphase media, stress analysis, Wu (R.S.), Chou (Y.T.), *8191*
- acoustoelasticity, nondestructive tests, plane stress, ultrasonics, Okada (K.), *10315*

Ortwerth (P.J.), see Demetriades (A.), *4605*

Ory (D.), see Balageas (D.L.), *7816*

Osborne (M.J.), see Hatton (A.P.), *2670*

oscillating bodies, cylindrical bodies, secondary flow, visualization, Tatsuno (M.), *575*

- cylindrical bodies, navier stokes equation, secondary flow, two dimensional flow, Kubo (S.), Kitano (Y.), *581*
- boussinesq equation, mixtures, two phase flow, Matsufuji (H.), Hasegawa (E.), *936*
- boundary layer, hypersonic flow, laminar flow, Stepanov (G.N.), *1535*
- spherical bodies, stratified flow, virtual mass, Lai (R.Y.S.), Lee (C.-M.), *1602*
- buoys, damping, wave loads, Cavaleri (L.), MolloChristensen (E.), *1607*
- buoys, mathieu equation, surface waves, vibration (parametric), Ogihara (K.), *1609*
- airfoils, scale effects, transonic flow, Davis (S.S.), *1784*
- cylindrical bodies, secondary flow, visualization, Tatsuno (M.), *2604*
- optimization, salters duck, wave loads, wave machines, Tanaka (H.), Saito-O (M.), *2713*
- airfoil characteristics, airfoils, pressure distribution, schlieren methods, shock waves, Benetka (J.), Pernica (Z.), *2733*
- airfoils, pressure distribution, transonic flow, wind tunnels, Benetka (J.), Pernica (Z.), *2771*
- aerodynamic coefficients, aerodynamic loads, blades, cascades, Hanamura (Y.), Tanaka (H.), (et al.), *2909*
- particle fluid flow, rotating disks, velocity profiles, Mitra (P.), *3618*
- cylindrical bodies, elliptical bodies, secondary flow, vortex shedding, Tatsuno (M.), *3626*
- aerodynamic loads, airfoils, harmonic waves, incompressible flow, Filipkowski (S.), Nowak (M.), *3904*
- compressible flow, cylindrical bodies, damping, rods, wave absorbers, Lin (W.H.), Chen (S.S.), *3931*
- excitation, jets, Simmons (J.M.), Lai (J.C.S.), (et al.), *4633*
- crossflow, cylindrical bodies, Zavolzhenskii (M.V.), Terskov (A.Kh.), *4664*
- cylindrical bodies, elliptical bodies, unsteady flow, visualization, Hansen (S.B.), Taneda (S.), *4684*
- aerodynamic loads, bridges (suspension), flutter, Brancaleoni (F.), Brotton (D.M.), *4754*
- cylindrical bodies, dissipation, vibration, viscous effects, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5233*
- pipe flow, valves, water hammer, Thomann (H.), *5478*
- airfoils, transonic flow, unsteady flow, Shivamoggi (B.K.), *5491*
- disks, heat transfer, navier stokes equation, second order analysis, Dohara (N.), *6617*
- airfoils, flutter, one dimensional flow, transonic flow, unsteady flow, wakes, Mccroskey (W.J.), *6716*
- airfoils, three dimensional flow, transient effects, transonic flow, two dimensional flow, Dowell (E.H.), *6718*
- buoyancy, mixtures, particles, two phase flow, Matsufuji (H.), Hasegawa (E.), *6960*
- cylindrical bodies, separated flow, vibration (self excited), vortex shedding, Vales (N.G.), *7793*
- parachutes, payloads, separated flow, stabilization, vortex flow, Doherr (K.-F.), *7798*
- aerodynamic loads, airfoils, damping, subsonic flow, Salmond (D.J.), *7904*
- ellipsoids, free boundary, ship motion, singularities, source distribution, Inglis (R.B.), Price (W.G.), *8037*
- ellipsoids, laplace equation, unsteady flow, viscous effects, Geissler (W.), Kienappel (K.), *8539*
- aerodynamic interference, blades, cascades, damping, separated flow, turbomachinery, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- inertia, lubrication (hydrodynamic), plates (parallel), squeeze films, viscoelastic fluids, Roy (J.S.), Biswal (B.), *9026*
- flexible bodies, piles, vortex shedding, waves, Angrilli (F.), Cossalter (V.), *9512*
- airfoil theory, laminar flow, supersonic flow, trailing edge, Brown (S.N.), Cheng (H.K.), *9651*
- calibration, disks, viscometry, Kestin (J.), Shankland (I.R.), *9675*
- dynamic analysis, eigenvalues, vibration, Schneider (J.), *10187*
- pipelines, submerged bodies, virtual mass, wave loads, Efthymiou (M.), Narayanan (R.), *10394*
- airfoil characteristics, blades, helicopters, two dimensional flow, Maresca (C.A.), Favier (D.J.), (et al.), *10502*
- convection (free), magneto fluid dynamics, plates (vertical), unsteady flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10739*
- convection (free), magneto fluid dynamics, plates (vertical), stokes flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10740*
- bridges, infrasonics, sound generation, Imaichi (K.), Tsujimoto (Y.), (et al.), *10790*

- earth, mantle, spherical waves, Odaka (T.), *11170*
- finite difference methods, navier stokes equation, spherical bodies, streams, Urakawa (T.), Takahashi (K.), *11365*
- floating bodies, gravity waves (surface), wave generation, Martin (P.A.), *11585*
- floating bodies, ocean waves, wave energy, wave engines, Masubuchi (M.), Shinomiya (Y.), *11638*
- acoustic loading, tube bundles, Lin (W.H.), *11641*
- floating bodies, gravity waves (surface), ships, Kyozuka (Y.), Yoshida (K.), *11644*
- floating bodies, wave absorbers, wave energy, Evans (D.V.), *11645*
- cylindrical bodies, virtual mass, wave generation, Wang (S.), *11668*
- fluid-structure interaction, reynolds number (small), viscous flow, Guz (A.N.), *11677*
- floating bodies, gravity waves (finite depth), heaving, integral methods, Sayer (P.), *11682*
- compressible flow, hydroelasticity, spherical bodies, Guz (A.N.), *11686*
- boundary value problems, cylindrical bodies, sound fields, Rubanov (I.L.), *11951*
- acoustic waves, focusing, transducers, Madsen (E.L.), Goodsitt (M.M.), (et al.), *11970*

oscillations, differential equations (ordinary), stability, Zubova (A.F.), *26*
- differential equations (ordinary), linear systems, transition process, Kononyuk (V.A.), *28*
- earthquakes, finite element techniques, Artikov (T.U.), Khuzhaev (A.), *86*
- describing function, harmonic balance, nonlinear systems, nonlinear theory, Obabkov (V.K.), *120*
- blunt bodies, cylindrical bodies, vortex shedding, Graham (J.M.R.), *576*
- blunt bodies, similarity methods, wakes, Griffin (O.M.), *629*
- gravity waves, pressure distribution, wave generation, Chee-Seng (L.), *672*
- ferrous metals, liquids, magnetoelasticity, suspensions, Shishkin (L.A.), *862*
- convection (forced), finite difference methods, pressure drop, two phase flow, Akyuzlu (K.), Veziroglu (T.N.), (et al.), *947*
- asymptotic behavior, damping, dynamics, Philos (C.G.), Staikos (V.A.), *1080*
- biodynamics, damping, nonlinear mechanics, Bojadziev (G.N.), *1092*
- correlation, mellin transform, tracking, Lindsey (W.C.), Chie (C.M.), *2090*
- biomathematics, gastrointestinal system, mathematical models, myoelectrical activity, Smallwood (R.H.), Linkens (D.A.), (et al.), *2207*
- emulsions, inertia, two phase flow, viscoelasticity (dynamic), Oosterbroek (M.), Tropper (R.), (et al.), *2602*
- lyapunov's functions, periodic orbits, satellites, Sarychev (V.A.), Sazonov (V.V.), (et al.), *2918*
- ice, icebergs, ocean air interaction, oceanography, surface flow, Mcphee (M.G.), *3017*
- atmospheric circulation, hydrodynamic stability, stratification, Kadyshnikov (V.M.), *3029*
- bounded variables, difference differential equations, semi infinite media, Philos (C.G.), Staikos (V.A.), *3100*
- inequalities, mathematical methods, Grammatikopoulos (M.K.), *3101*
- nonlinear systems, optimal control, periodic movements, van der pol's solution, Izrailovich (M.Ya.), Morozova (N.I.), *3188*
- cranes, design, optimal control, Mamalyga (V.M.), *3219*
- couplings, fluid couplings, torque, Uchiyama (K.), Takagi (T.), (et al.), *3572*
- canals, helmholtz resonator, lakes, Miles (J.W.), *3610*
- bed load, ripples, scour, Honji (H.), *3611*
- drag, drops, fluctuating flow, reynolds number (small), Stewart (M.B.), *3623*
- boundary layer, damping, liquids, slip flow, u-shaped tube, Kozlov (L.F.), Nikitina (G.D.), *3661*
- drops, vortices, Zapryanov (Z.), Chervenivanova (E.E.), *4018*
- earth, elastic behavior, rotating bodies, Molodenskiy (M.S.), *4035*
- engines, hull propeller interaction, marine engineering, Babitskii (V.I.), Nerubenko (G.P.), *4103*
- acoustic waves, differential equations (ordinary), self excitation, Chernyshenko (S.I.), *4157*
- analytical methods, estimation, harmonic balance, harmonic linearization, Volovodov (S.K.), Rozenvasser (E.N.), *4240*
- frequency domain techniques, harmonic balance, harmonic linearization, nonlinear systems, Pismennyy (I.L.), *4243*
- excitation, sensitivity, Rozenvasser (E.N.), *4247*
- buildings (tall), structural stability, vibration, vibration (flow induced), wind loads, Soong (T.T.), Skinner (G.T.), *4328*
- acoustic measurements, acoustoelasticity, thickness oscillations, Hirao (M.), Miura (Y.), (et al.), *4508*
- lubrication (elastohydrodynamic), rubber, squeeze films, variational methods, Hori (Y.), Kato (T.), (et al.), *4897*
- lyapunov's functions, nonlinear mechanics, periodic orbits, poincare method, Proskuryakov (A.P.), *4945, book*
- almost periodic functions, differential equations (ordinary), existence theorems, Simirad (C.), *4950*
- asymptotic methods, averaging, nonlinear mechanics, Khodzhaev (K.Sh.), Shatalov (S.D.), *4990*
- riccati equation, time invariant systems, Nishimura (T.), Kano (H.), *5041*
- algorithms, gliding trajectory, numerical methods, optimal control, trajectory optimization, Williamson (W.E.) Jr., *5061*
- elliptical bodies, numerical methods, unsteady flow, vortex rings, Dhanak (M.R.), De Bernardinis (B.), *5396*
- containers (partially filled), nonlinear analysis, pitching, sloshing, Nakayama (T.), Washizu (K.), *5483*
- fluidized beds, heat transfer, Filippovskii (N.F.), Zharkov (A.A.), (et al.), *5849*
- asymptotic behavior, differential equations (ordinary), vibration, Taylor (W.E.) Jr., *6062*
- damping, relaxation, vibration (self excited), Levin (A.I.), *6066*
- dynamic response, roughness, vehicles, Hammond (J.K.), Harrison (R.F.), *6543*
- compressible flow, elastic bodies, panels, supersonic flow, Babin (O.A.), Vorobev (V.I.), (et al.), *6869*
- bubble dynamics, concentration, inclusions, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *6988*
- earthquake effects, fluids, seismic loading, Seimov (V.M.), Trofimchuk (A.N.), *7039*
- boundary layer (atmospheric), currents, ice, icebergs, surface flow, Mcphee (M.G.), *7055*
- dynamic analysis, time invariant systems, transient effects, Kononyuk (V.A.), *7234*
- describing function, feedback, nonlinear systems, nonlinear theory, Lambert (L.), Dittrich (F.), *7237*
- damping, diffusion, shock tubes, Srinivas (K.), Gururaja (J.), *7682*
- airfoil theory, deformation, lift, potential flow, Laporte (R.), *7787*
- bubble dynamics, contact problems, Keller (J.B.), *7966*
- earth, rotating bodies, Odaka (T.), *8005*
- asymptotic behavior, dynamics, matched asymptotic expansions, nonconservative systems, relaxation, van der pol equation, Grasman (J.), *8106*
- feedback, limit cycles, on off systems, relay systems, stability theory, Balasubramanian (R.), *8161*
- couette flow, hydrodynamic stability, numerical methods, Carmi (S.), Tustaniwskyj (J.I.), *8606*
- dispersion relation, models, rayleigh taylor instability, stabilization, Chakraborty (B.B.), *8825*
- biocontrol, muscles, nervous system, Oguztoreli (M.N.), Stein (R.B.), *9053*
- fourier transform, multiple scales, Jeffrey (A.), Kawahara (T.), *9111*
- nonlinear systems, suppression, Mcdonough (J.M.), *9153*
- modal control, optimal control, structural elements, structural response, structural stability, Masri (S.F.), Bekey (G.A.), (et al.), *9171*
- control, pulse control, structural analysis, structural design, structural response, vibration, Udwadia (F.E.), Tabaie (S.), *9183*
- impact jets, plates, reynolds number (small), viscous buckling, Cruickshank (J.O.), Munson (B.R.), *9526*
- magneto fluid dynamics, orbit mechanics, Kuznetsov (L.I.), Chikova (N.V.), *9820*
- magneto fluid dynamics, orbit mechanics, perturbation methods, Lyakhovka (G.V.), *9821*
- analytical methods, control, frequency response, pulsefrequency, Krasnoselskii (M.A.), Pokrovskii (A.V.), (et al.), *10076*
- fluid injection, generation, jets, Favre-Marinet (M.), Binder (G.), (et al.), *10456*
- axial flow, cylindrical bodies, flexible bodies, resonance, slender bodies, Paidoussis (M.P.), Issid (N.T.), (et al.), *10765*
- bubble dynamics, liquid vapor mixture, two phase flow, Foody (B.E.), Huber (P.W.), *10821*
- currents, inertial waves, ocean air interaction, oceanography, thermocline, Pollard (R.T.), *10867*
- actuators, controllability, design, optimization, space vehicle structures, Arbel (A.), *11047*
- damping, vibration, vibration isolation, Alley (T.L.), *11082*
- artificial satellites, dynamic analysis, solar arrays, space vehicle structures, Khoroshilov (V.S.), *11335*
- boundary layer, convection (free), curvature, cylindrical bodies, spherical bodies, temperature, Srivastava (A.C.), Bhattacharjee (R.C.), *11370*
- hydrodynamic stability, nonlinear theory, thin films, Hasegawa (E.), *11538*
- drops, rotational flow, zero g phenomena, Radyakin (N.K.), *11596*
- acoustics, burners, excitation, Larionov (V.M.), *11900*
- dispersion relation, ionic flow, nonlinear characteristics, plasma, relativity, Chian (A.C.-L.), *11934*
- damping capacity, design, masts, viscous effects, wind loads, Etkin (B.), Hansen (J.S.), *11942*
- bubble dynamics, heat transfer, two phase flow, Nigmatulin (R.I.), Khabeev (N.S.), *12031*
- bubble dynamics, drops, initial value problems, Prosperetti (A.), *12046*

oscillators, galerkin method, random excitation, Bergman (L.A.), Heinrich (J.C.), *1257*
- approximations, first-passage approximations, probabilistic design, probability theory, Lutes (L.D.), Chen (Y.-T.T.), (et al.), *2019*
- aeroelasticity, blunt bodies, models, nonlinear systems, Dowell (E.H.), *3908*
- asymptotic methods, differential equations (ordinary), limit cycles, nonlinear mechanics, van der pol equation, Grasman (J.), *4152*
- chaotic modulation, modulated systems, stochastics, Loginov (V.M.), Shapiro (V.E.), *4955*
- digital simulation, stochastic processes, van der pol oscillator, Spanos (P.-T.D.), *4956*

- diffraction, flow measurement, operational methods, Yamasaki (H.), Honda (S.), *6740*
- biomechanics, limit cycles, modal analysis, time delay systems, van der pol oscillators, Linkens (D.A.), Kitney (R.I.), *7154*
- limit cycles, nonlinear analysis, quenching, vibration (nonlinear), Singh (Y.P.), *7369*
- bifurcation, elastic bodies, flutter, limit cycles, modeling, Thompson (J.M.T.), Lunn (T.S.), *7910*
- boundary layer, fluid injection, supersonic flow, wedges, Kornienko (E.S.), Shmanenkov (V.N.), *8562*
- cams, dynamic stability, resonance, Cronin (D.L.), Labouff (G.A.), *9468*
- collision models, hamiltonian equations, perturbation theory, two body problem, Terry (P.W.), *10772*

oscillatory flow, capillary flow, electro fluid dynamics, laminar flow, Sears (A.R.), Groves (J.N.), *553*

- laminar flow, numerical methods, wavy walls, Matsunaga (N.), Kaneko (A.), (et al.), *602*
- bounded media, cylindrical bodies, magneto fluid dynamics, viscoelastic fluids, Varshneya (N.K.), *854*
- unsteady flow, viscoelastic fluids, viscous flow, Salathe (E.P.), *1485*
- drag reduction, particulate flow, viscoelastic fluids, Mclaughlin (J.), *1490*
- bingham fluid, creeping flow, slots, Sobolik (V.), *1561*
- ripples, sand, shape, Kaneko (A.), *2382*
- spectra, tides, turbulence, Anwar (H.O.), Atkins (R.), *2695*
- convection (free), laplace transform, magneto fluid dynamics, plates (perforated), viscous flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *2884*
- centrifugal compressors, diffusers, rotating stall, Abdelhamid (A.N.), Bertrand (J.), *3744*
- boundary layer, heat transfer, plates, unsteady state, Ishida (M.), Yamada (T.), *4608*
- compressional waves, damping, ducts (variable area), Yanko (A.K.), Korolev (P.V.), *4658*
- dispersion, gravity waves (surface), reynolds number (small), ripples, viscous flow, Kamachi (M.), Honji (H.), *5473*
- cylindrical bodies, inertia, virtual mass, Stansby (P.K.), *5482*
- boussinesq equation, heat transfer, plates, porous surfaces, Soundalgekar (V.M.), Hiremath (S.B.), *6622*
- boundary layer (turbulent), noise (aerodynamic), turbulent flow, Antonov (A.N.), *6640*
- boilers, density, density waves, Unal (H.C.), *6699*
- blood, bubble dynamics, pressure change, Tsujino (T.), Shima (A.), *7119*
- subsonic flow, two dimensional flow, wings, Lottati (I.), Nissim (E.), *7782*
- bodies of revolution, spikes, viscous flow, Shang (J.S.), Hankey (W.L.), (et al.), *7794*
- flow measurement, unsteady flow, viscoelastic fluids, Sigli (D.), Maalouf (A.), *8505*
- boundary layer, diffusers, transonic flow, Sajben (M.), Kroutil (J.C.), *8586*
- energy dissipators, pipe exit, pipe flow, wave engines, Knott (G.F.), Flower (J.O.), *8588*
- boundary layer, convection (free), elastico-viscous liquids, viscoelastic fluids, Mishra (S.P.), Mohapatra (U.), *8723*
- convection, magneto fluid dynamics, porous media, theory, Sharma (R.C.), Sharma (K.N.), *8824*
- cylindrical waves, hydroelasticity, vibration (flow induced), Sarpkaya (T.), *8834*
- bottom irregularities, laser doppler velocimeters, ocean bed, Du Toit (C.G.), Sleath (J.F.A.), *9517*
- compressible flow, slender bodies, transonic flow, Olshanskii (V.Yu.), *9550*
- boundary layer (turbulent), integral methods, perturbation methods, turbulence (structure), Patel (M.H.), *9562*
- dispersion, floating bodies, gravity waves (surface), visualization, Ergin (A.), *9633*
- disks, electro fluid dynamics, plates (parallel), theory, Govardhan Reddy (K.), Seshagiri Rao (S.V.), *9783*
- unsteady flow, variable area flow, wind tunnels, Retelle (J.P.) Jr., Mcmichael (J.M.), (et al.), *10541*
- laminar flow, molecular diffusion, pipe flow, Purtell (L.P.), *11494*
- ducts (variable area), numerical methods, piping systems, Belik (N.P.), Chirva (L.G.), *11629*

Osher (S.), see Engquist (B.), *7686*

Oshima (H.), see Kasano (H.), *3230*

Oshima (N.), absorption, conduction (heat), conductivity, dispersed flow, *2813*

- mechanical properties, mixtures, two phase flow, viscosity, *6980*
- dispersed flow, drag, particle fluid flow, *12021*

Osipov (A.A.), ducts (variable area), sound propagation, three dimensional formulation, *6929*

- ducts, ducts (variable area), sound propagation, *11918*

Osipov (I.O.), anisotropic media, elastic waves, half space, propagation, vibration, *11166*

Osipov (Iu.S.), see Korotkii (A.I.), *7240*

Osiptsov (A.N.), asymptotic methods, boundary layer, laminar flow, *9560*

Oskam (B.), airfoils, compressible flow, flaps, viscous flow, *6719*

Osman (M.O.M.), kinematics, mechanisms (spatial), robotics, Bahgat (B.M.), (et al.), *9085*

- design, dynamic analysis, four bar linkage, mechanisms (spatial), velocity profiles, Dukkipati (R.V.), *9479*
- design (optimum), grinding, gyroscopes, surface profiles, synthesis, tools, Sankar (S.), (et al.), *10370*

Osmont (D.), eigenvalues, spinning bodies, vibration (forced), Simon (L.), *5225*

Osmundsen (E.), attenuation, ear muffs, noise, noise abatement, nonlinear waves, shock waves, Gjaevenes (K.), *2958*

Osokin (A.E.), anisotropic media, green function, materials possessing memory, Suvorova (Iu.V.), *3077*

Osorgin (V.D.), see Ovchinnikov (V.A.), *2736*

Ostafin (V.A.), corrections, error, faults, reliability analysis, Romankevich (A.M.), *103*

Ostapenko (I.L.), see Grinberg (N.M.), *7488*

Ostapenko (V.V.), design, differential games, evasion, pursuit, *2127*

Ostergaard (C.), life expectancy, offshore structures, risk, Schellin (T.E.), *527*

Osterheld (A.), see Hedstrom (G.W.), *606*

Ostoja-Starzewski (M.), see Paidoussis (M.P.), *11636*

Ostrer (L.A.), see Bogaevskii (V.N.), *7149*

Ostrom (P.), creep, dislocations, steel, Lagneborg (R.), *8385*

Ostroushko (V.N.), see Dolgov (A.S.), *5424*

Ostrowski (J.), airfoils, boundary layer, design, gliders, laminar flow, sailplanes, Skrzynski (S.), (et al.), *5492*

Oswatitsch (K.), compressible flow, inviscid fluid, mathematical models, transonic flow, *8546*

Ota (T.), cylindrical bodies, external flow, heat transfer, hot wire, reattachment, separated flow, shear flow, Kon (N.), (et al.), *1665*

- see Yamada (E.), *2783*
- blunt bodies, heat transfer, reattachment, separated flow, transition, Asano (Y.), (et al.), *3654*
- blunt bodies, prandtl number, reattachment, separated flow, turbulence (transport), Kon (N.), *4602*

Otomo (K.), see Kodama (S.), *8258*

Ott (E.), adiabatic processes, hamiltonian equations, particle dynamics, plasma, theory, *1777*

Ottaviani (M.), field tests, piles, Marchetti (S.), *5258*

Otten (L.J.), anemometers, hot wire, thin films, turbulence (geophysical), Pavel (A.L.), (et al.), *9003*

Ottjes (J.A.), impact, particles, pneumatic transport, *5810*

Ottl (D.), damping, mechanical systems, vibration, *8287*

Ou (S.-C.S.), helmholtz equation, meteorology, solar radiation, thermal sciences, three dimensional formulation, transfer theory, Liou (K.-N.), *4180*

Oudeman (P.), birefringence, boundary layer, conducting fluid, rarefied gases, Korving (J.), (et al.), *5423*

Oudin (J.), see Gelin (J.C.), *10326*

Ousset (Y.), see Sayhi (M.N.), *12006*

Ovchinnikov (V.A.), aerodynamic performance, flaps, mathematical models, wings, Osorgin (V.D.), (et al.), *2736*

Ovchinskii (A.S.), see Moskvitin (V.V.), *285*

- see Sakharova (E.N.), *1210*

Oved (Y.), see Eidelman (S.), *2725*

overloads, crystals, failure, fatigue, Chu (S.N.G.), Li (J.C.M.), *1404*

- aluminum alloys, crack growth, fatigue, Wei (R.P.), Fenelli (N.E.), (et al.), *1405*

Overton (G.D.N.), cavitation, dynamic stresses, pressure, Trevena (D.H.), *12034*

Ovsyanko (V.M.), beams (flexural), elasticity (nonlinear), electrical analogies, *6206*

Ovsyannikov (M.P.), fluid injection, shock, shock waves, *1553*

Ovsyannikov (V.M.), acceleration, drag, pipe flow, unsteady flow, *10441*

Ovunc (B.A.), axial loading, dynamic response, frames, *3547*

Ow (C.S.), drops, experimental methods, sprays, two phase flow, Crane (R.I.), *7972*

Owen (F.K.), see Oberkampf (W.L.), *4638*

Owen (R.B.), low gravity, metals, schlieren methods, solidification, Johnston (M.H.), *10659*

Owen (W.S.), see Ling (H.C.), *8884*

Owens (D.H.), see Field (A.D.), *10079*

- see Boland (F.M.), *11045*

Oxenham (W.), see Leaf (G.A.V.), *5131*

oxidation, fretting, hardness, steel, wear, Kayaba (T.), Iwabuchi (A.), *4894*

- combustion, kinetics, porous media, Chernenko (E.V.), Ivleva (T.A.), (et al.), *6841*
- friction (solid solid), hot working, steel, Luong (L.H.S.), Heijkoop (T.), *7079*
- high temperature, lattices, semiconductors, strain, stress analysis, Franz (G.), Hartmann (W.), *9421*
- combustion, diffusion, evaporation, metals, Fursov (V.P.), Shevtsov (V.I.), (et al.), *9767*
- burning rate, carbon, combustion, particles, Matalon (M.), *9771*
- coal, combustion, combustion products, Song (Y.H.), Pohl (J.H.), (et al.), *11789*

oxidizers, combustion instability, filtration, porous media, Sukhov (G.S.), Yarin (L.P.), *9763*

- burning rate, flame propagation, inert gases, porous media, Lebedev (A.D.), Sokolov (A.S.), *11791*

Oxley (P.L.B.), forming, friction (solid solid), metals, plasticity, *1001*

- see Bhasin (Y.P.), *2234*

oxygen, afterburners, injection, turbofan engines, Fishbein (B.D.), *5662*
- blood, circulatory systems, prosthetic devices, Arunachalam (V.M.), Shettigar (U.R.), *7126*
- finite difference methods, mass transfer, stratified flow, thermocline, Naito (K.), Nakamura (Y.), (et al.), *9509*

Oyane (M.), ductile fracture, fracture, plasticity, porous media, Sato (T.), (et al.), *2446*

Oz (H.), gyrodynamics, gyroscopes, optimal control, space vehicles, Meirovitch (L.), *881*
- design, digital control, sampled data systems, Meirovitch (L.), (et al.), *5045*

Ozaka (Y.), dynamic analysis, elastoplasticity, piers, reinforced concrete, seismic loading, Yanagida (T.), (et al.), *3533*

Ozaki (T.), finishing, gear teeth, rolling, surface profiles, Imamura (A.), *3574*

Ozis (T.), see Crank (J.), *3003*

Ozisik (M.N.), see Vick (B.), *734*
- see Mennig (J.), *776*
- see Vick (B.), *3812*
- see Mikhailov (M.D.), *6828*
- absorption, radiant interchange, scattering, Sutton (W.H.), *8742*
- see Kim (K.H.), *8744*
- see Vick (B.), *8745*
- see Hassab (M.A.), *9702*
- see Bayazitoglu (Y.), *9725*

Ozoe (H.), annular flow, convection (free), cylindrical bodies, three dimensional flow, Shibata (T.), (et al.), *8703*

Ozsanlav (V.), see Hearle (J.W.S.), *5135*
- see Hearle (J.W.S.), *6202*

Ozturk (Y.), experimental methods, non newtonian flow, viscometry, Williams (R.W.), *6591*

P

Paakkonen (E.), see Tormala (P.), *5106*
Paavola (J.), see Mikkola (M.J.), *1220*
Pachpatte (B.G.), see Singare (S.M.), *1117*
- differential equations (ordinary), finite difference methods, inequalities, integro differential equations, mathematical methods, *4170*

Pachter (M.), design, linear-quadratic optimal control, optimal control, positive control, synthesis, *5048*
- see Getz (W.M.), *8170*
- see Getz (W.M.), *11086*
- differential games, evasion, pursuit, stochastic systems, Yavin (Y.), *11087*

Paciga (J.E.), biocontrol, bones, man machine systems, Richard (P.D.), (et al.), *3069*
packed beds, absorption, chemical reactions, interface phenomena, models, Patwardhan (V.S.), *832*
- heat transfer, mass transfer, mathematical models, Rao (S.P.), Gnielinski (V.), *4733*
- hydrodynamics, velocity profiles, Volkov (V.I.), Danilov (N.S.), (et al.), *5829*
- conductivity, heat transfer, Dietz (P.W.), *5856*
- heat transfer, heat transfer (combined modes), Smith (E.M.), *5857*
- fluidized beds, heat transfer, Adams (R.L.), *7018*
- flow measurement, fluid mechanics, mass transfer, Hoek (P.J.), De Rooij (J.G.), (et al.), *7877*
- energy conversion, energy storage, heat transfer, solar collectors, stratified flow, Phillips (W.F.), *8766*
- granular media, statistical theory, Shahinpoor (M.), *8918*
- collapse, granular media, infiltration, Buevich (Yu.A.), Ellengorn (S.M.), *8923*
- biot number, energy storage, heat exchangers, optimization, thermal regenerators, Schmidt (F.W.), Willmott (A.J.), *9730, book*
- catalyzed ignition, combustion, combustion (catalytic), granular media, mathematical models, reactive systems, Kiselev (O.V.), Matros (Yu.Sh.), *9753*
- crossflow, darcy flow, freezing, porous media, tubes, Okada (M.), *10597*
- energy storage, numerical methods, variable thermal properties, Gross (R.J.), Hickox (C.E.), (et al.), *10635*
- convection (free), mass transfer, porous media, Gabitto (J.F.), Bohm (E.), *10689*
- computer aided design, random media, Powell (M.J.), *12057*
- fluidized beds, heat transfer (combined modes), multiphase flow, Kato (Y.), Kago (T.), (et al.), *12068*

pade approximation, boltzmann equation, iterative methods, Elwakil (S.A.), El Batanoni (F.), (et al.), *1530*
- computing techniques, convergence, heat transfer, perturbation methods, Aziz (A.), *3112*
- computing techniques, fredholm equations, iterative methods, Adhikari (S.K.), *7185*
- laplace transform, nonlinear waves, singular perturbations, Venkatarangan (S.N.), Narendran (G.), *9109*

Padet (J.P.), see Cames-Pintaux (A.M.), *766*
Padmanabhan (N.), arteries, pulsatile flow, stenoses, *1955*
Padovan (J.), conduction (unsteady), finite element techniques, moving surfaces, nonlinear theory, *98*
- see Zeid (I.), *7210*
- conduction (unsteady), mesh generation, moving media, *7223*
- finite element techniques, mesh generation, moving loads, Zeid (I.), *8149*
- moving loads, spectral analysis, structural analysis, time dependence, *9332*

Padula (M.), see Russo (R.), *1491*
Page (J.K.), climatology, meteorology, solar collectors, Rodgers (G.G.), (et al.), *2835*
Pagni (P.J.), see Bard (S.), *3878*
Pai (S.I.), astrophysics, planetary atmospheres, propagation, shock waves, similarity methods, Menon (S.), (et al.), *9637*
- ice, icebergs, oceanography, two phase flow, Das (M.M.), (et al.), *10864*
- collision models, planetary theory, rarefied gases, transition flow, two phase flow, *11448*

Pai (S-I.), continuum mechanics, magneto fluid dynamics, multicomponent flow, plasma, radiation properties, *2896, book*
Pai Verneker (V.R.), see Seetharamacharyulu (D.), *11789*
Paidoussis (M.P.), axial flow, density, fluid-structure interaction, tube bundles, vibration (flow induced), Besancon (P.), *8624*
- axial flow, cylindrical bodies, flexible bodies, oscillations, resonance, slender bodies, Issid (N.T.), (et al.), *10765*
- axial flow, compressible flow, fluid-structure interaction, shells (cylindrical), Ostoja-Starzewski (M.), *11636*
- see Laithier (B.E.), *11642*
- crossflow, flutter, shells (cylindrical), thin walled structures, Wong (D.T.-M.), *11841*

Paige (C.C.), algorithms, controllability, linear systems, observability, time invariant systems, *2104*
Pailthorpe (B.A.), see Hughes (B.D.), *4584*
Pajewski (W.), see Kinh (N.V.), *5783*
Pakhomova (Z.S.), see Vishnevetskii (S.L.), *9589*
Pal (B.P.), see Mukherji (P.), *4031*
Pal (J.), see Rath (P.C.), *4142*
Pal (P.C.), cavities, viscoelastic materials, wave generation, *6340*
Pal (S.), turbulence (free), two dimensional flow, wakes, Raj (R.), *8597*
Palacios (J.), measurements, microstructures, neutron, nondestructive tests, transmission, Schwahn (D.), (et al.), *1420*
Palagin (E.G.), see Lykosov (V.N.), *1907*
Palagin (Yu.I.), see Malyshev (I.A.), *10060*
Palaiya (R.M.), see Srivastava (K.N.), *6343*
Palamarchuk (V.G.), dynamic stability, shells (cylindrical), shells (stiffened), springs, *356*
- see Amiro (I.Ya.), *5223*
- dynamic analysis, fins, shells (cylindrical), shells (stiffened), vibration (free), *11136*

Palaniathan (R.), pressure vessels, shells (anisotropic), shells (of revolution), shells (sandwich), underwater structures, Montague (P.), *320*
Palaszewski (S.J.), heat transfer, interaction, interface phenomena, sprays, three dimensional flow, Jiji (L.M.), (et al.), *8911*
Palchaev (D.K.), see Pashaev (B.P.), *5517*
Palchevskii (A.S.), frequency response, shells (cylindrical), vibration (free), Pryadko (A.A.), (et al.), *375*
Palen (J.W.), see Ishihara (K.), *1849*
Palgen (L.), see Hung (N.D.), *3544*
- see Drucker (D.C.), *8212*

Palienko (E.Ya.), endurance limit, fatigue, gas turbines, high temperature, nickel alloys, *7475*
Paliwal (R.C.), critical phenomena, diffusion, inclined layer, rayleigh number, stratified flow, thermal instability, Chen (C.F.), *8712*
- hydrodynamic stability, thermal diffusion, thin films, Chen (C.F.), *11536*

Paljaruci (G.), airplanes, control surfaces, design, equations of motion, flight control, mathematical models, *11733*
Palley (I.), see Kastelic (J.), *7106*
Palm (E.), limit cycles, mathematical methods, van der pol equations, Tveitereid (M.), *9098*
Palmer (D.), processing, refraction, seismic waves, *8003*
Palmer (D.R.), see Blodgett (M.L.), *1801*
Palmer (H.J.), convection, evaporation, heat transfer, interface phenomena, Makeshri (J.C.), *3849*
- evaporation, heat transfer, vacuum, Bose (A.), *10644*

Palmer (S.B.), see Edwards (C.), *1418*
Pamadi (B.N.), axisymmetric flow, boundary layer, impact jets, impingement, jets, plates, Belov (I.A.), *8540*
Pampreen (R.C.), blockage, boundary layer, centrifugal compressors, pressure distribution, rotors, *7803*
Pan (C.H.T.), bearings (journal), cavitation, lubrication (hydrodynamic), seals, squeeze films, Ibrahim (R.A.), *9959*
Pan (H.H.), differential equations (ordinary), green function, linear equations, Hohenstein (R.M.), *23*
Pan (S.-S.), bodies of revolution, cavitation inception, laminar flow, separation, water tunnels, Yand (Z.-M.), (et al.), *8514*
Pan (T.T.), see Carey (G.F.), *10420*
Pan (V.Ya.), algorithms, mathematical methods, matrices, matrix inversion, *2042*
Pan (Y.-C.), analysis, currents, experimental results, magneto fluid dynamics, power generation, Doss (E.D.), *6863*
Panagiotopoulos (P.D.), contact problems, elasticity (linear), singular integral equations, uniqueness, variational methods, Zastrow (U.), *254*
Panasyuk (A.L.), capillary flow, inhomogeneities, magneto fluid dynamics, mass transfer, porous media, Panchenko (M.S.), (et al.), *5677*
Panasyuk (V.V.), cracks, integro differential equations, mathematical methods, orthotropic materials, stefan problem, survey, Andrejkiv (A.E.), (et al.), *1362*
- crack opening displacement, cracks, fracture, plastic behavior, plates (weakened), Vitvitskii (P.M.), (et al.), *2440*
- cracks, fracture mechanics, mathematical methods, mathematical models, three dimensional formulation, Andrejkiv (A.E.), (et al.), *8396*

Panayotounakos (D.E.), deformation (finite), rods, Theocaris (P.S.), *299*
- buckling, curved bars, Theocaris (P.S.), *339*
- bending, nonlinear theory, rods, Theocaris (P.S.), *1222*
- beams (curved), statics, Theocaris (P.S.), *5153*

Panchal (C.B.), collocation, condensation, curved surfaces, extended surfaces, isothermal processes, Bell (K.J.), *807*
Panchenko (M.S.), see Panasyuk (A.L.), *5677*
Panchev (S.), boundary layer (atmospheric), ekman layer, Atanasov (D.), *982*
Panda (S.P.), see Kulkarni (S.G.), *10715*
Pande (G.N.), finite element techniques, interfaces, rocks, Sharma (K.G.), *6404*
Pande (S.S.), bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), surface profiles, Somasundaram (S.), *1936*
- bearings (gas lubricated), bearings (journal), finite difference methods, lubrication (hydrostatic), reynolds equation, Somasundaram (S.), *7098*

Pandey (B.D.), compressible flow, dissociation, hypersonic flow, Ram (R.), *11407*
Pandey (D.K.), fluidized beds, mass transfer, particles, Upadhyay (S.N.), (et al.), *4835*

Pandey (P.C.), see Jain (V.K.), *3429*
- see Bhatia (S.M.), *8065*

Pandey (R.C.), flywheels, high speed, machinery, shafts, vibration, Midha (A.), *5371*

Pandit (G.S.), beams, grooves, reinforced concrete, strength, torsion, Gupta (S.P.), *6519*

Pandit (S.M.), cratering, cutting, data analysis, electric spark discharge, geometrical properties, stochastics, Rajurkar (K.P.), *1348*

Pandolfini (P.P.), condensers, heat exchanger (folded-tube), heat exchangers, stratified flow, tube bundles, Dugger (G.L.), (et al.), *4716*

panels, pressure distribution, transonic flow, wing body combinations, Jain (R.K.), Redeker (G.), (et al.), *2741*
- plasticity, stochastic processes, Vasarhelyine Szabo (A.), *3270*
- collapse, plasticity, May (I.M.), *3514*
- compression, sandwich construction, Camarda (C.J.), *3539*
- cladding, gust loads, wind loads, Greenway (M.E.), *3551*
- flutter, modeling, perturbation methods, Sinay (L.R.), Reiss (E.L.), *4753*
- acoustic waves, acoustics (architectural), cavities, modes, transmission, Guy (R.W.), *5774*
- collapse, plates (rectangular), stability theory, Satyamurthy (K.), Khot (N.S.), (et al.), *6252*
- compressible flow, elastic bodies, oscillations, supersonic flow, Babin (O.A.), Vorobev (V.I.), (et al.), *6869*
- blast effects, cyclic loading, fatigue, plaster panels, shear loading, vibration, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- aeroelasticity, design, flutter, supersonic flow, Pierson (B.L.), Hajela (P.), *7907*
- acoustic loading, airplane structures, fatigue, galerkin method, monte carlo analysis, Maekawa (S.), *8434*
- fluid-structure interaction, sound generation, Schroter (V.), Fahy (F.J.), *10791*
- dynamic stability, fluid-structure interaction, incompressible flow, Matsuzaki (Y.), *11651*
- plates (sandwich), sound, transmission, Narayanan (S.), Shanbhag (R.L.), *11935*
- acoustics, elasticity, plates (sandwich), Narayanan (S.), Shanbhag (R.L.), *11971*
- echos, reflection, ultrasonics, Trivett (D.H.), *11973*

panels (curved), shells, Olshanskii (V.P.), *2269*
- elastoplasticity, large displacement, structural stability, Stolyarov (N.N.), Pestrovskii (G.M.), *2307*
- shells (viscoelastic), structural stability, Potapov (V.D.), *2313*
- membrane theory, shells (hyperbolic paraboloid), shells (thin), Layrangues (P.), *3306*

panels (flat), buckling, plates (stiffened), Elsharkawi (K.), Walker (A.C.), *3335*
- bending, reinforced concrete, shear, torsion, ultimate strength, Majid (K.I.), Celik (T.), *3534*
- plates, solar collectors, vibration (nonlinear), Zak (M.A.), *8300*
- insulation, magneto fluid dynamics, numerical methods, shear flow, Sastry (S.R.N.), *9789*
- infinite medium, laplace transform, magneto plasma dynamics, unsteady flow, Shivamoggi (B.K.), *11814*
- acceleration, hall effect, magneto plasma dynamics, unsteady flow, Borkakati (A.K.), Pop (I.), *11815*

panels (stiffened), composite structures, postbuckling behavior, shear webs, Agarwal (B.L.), *2288*
- aerospace vehicles, airplane structures, Anthony (F.M.), Helenbrook (R.G.), *3538*
- experimental results, plates (stiffened), postbuckling behavior, Rothwell (A.), *6238*
- design (optimum), plates (anisotropic), plates (stiffened), Garmash (L.I.), Olshanskii (V.P.), *8249*
- collapse, numerical methods, plastic behavior, Vasarhelyi (A.), *10174*

Panerai (R.B.), biomechanics, heart, modeling, muscles, *9054*

Panicker (V.B.), acoustic measurements, acoustics, impedance, sound propagation, Munjal (M.L.), *902*
- attenuation, ducts, exhaust gases, noise abatement, Munjal (M.L.), *11939*
- attenuation, ducts, exhaust gases, flow reversal, noise abatement, Munjal (M.L.), *11940*

Panik (F.), automobiles, dynamic behavior, maneuverability, steering, vehicles, Drosdol (J.), (et al.), *1459*

Panin (V.I.), nondestructive tests, piezoelectric devices, transducers, ultrasonics, *6483*

Panin (V.M.), convergence, linear theory, minimax techniques, *10051*

Panko (I.N.), beams, bending, cracks, stress intensity factor, Yakovchik (V.A.), *5299*

Pankova (N.V.), see Levin (E.M.), *4417*

Panovko (Ya.G.), bars, buckling, stability theory, vibration, Gubanova (I.I.), *8257, book*

Panzeca (T.), elastoplasticity, internal stresses, perturbation methods, work hardening, Polizzotto (C.), *269*
- see Mazzarella (C.), *6514*

Pao (C.V.), bifurcation, diffusion, dynamics, reactors, stability theory, *7173*

Pao (H.Y.), see Wang (S.T.), *334*

Pao (Y.-H.), see Gamer (U.), *1283*
- see Weaver (R.L.), *4782*
- see Sancar (S.), *7432*
- see Ceranoglu (A.N.), *11174*

Paolino (M.A.), energy conservation, thermodynamic processes, thermodynamics, Burghardt (M.D.), *10544*

Papa (L.), eigenvalue problems, gravity waves (surface), harbors, wind-wave interaction, *9620*

Papadakis (C.) eds., noise, power generation, two phase flow, water hammer, Scarton (H.), *5476, book*

Papadakis (D.N.), see Webb (D.R.) eds., *7800, book*

Papadakis (J.S.), see Lee (D.), *5788*

Papadopoulos (G.A.), see Theocaris (P.S.), *9416*

Papadrakakis (M.), dynamics, eigenvalue problems, finite element techniques, structural analysis, *7194*
- numerical methods, postbuckling theory, structural analysis, structural stability, *10166*

Papalambros (P.), design (optimum), monotonicity analysis, optimization, Wilde (D.J.), *1474*

Papamichael (N.), boundary value problems, differential equations (ordinary), splines, Worsey (A.J.), *8129*

Papas (C.H.), see Franceschetti (G.), *5250*

Papaspyropoulos (V.), crack opening displacement, finite element techniques, stress intensity factor, testing equipment, Ahmad (J.), *477*

Papazoglou (V.J.), aluminum alloys, control, structural analysis, structures, welded structures, welding, Masubuchi (K.), *2173*

paper, bonding, computing techniques, mathematical models, networks, Smith (J.C.), *1137*
- mechanical properties, structure, Herdman (P.T.), *2252*
- fibers, filamentary structures, strength, yarn, Dent (R.W.), *2253*
- containers, strength, stress strain relationships, Urbanik (T.J.), *3555*
- conduction (heat), containers, thermal properties, Bormett (D.W.), *4001*

Papirov (I.I.), beryllium, crystals, failure, material testing, Stoev (P.I.), (et al.), *3472*

Papkov (O.V.), see Georgiev (K.G.), *10778*

Pappas (M.), algorithms, computing techniques, nonlinear programming, optimization, *4994*
- computer aided design, constraints, design (optimum), structural optimization, *8453*

parabolic equations, boundary value problems, collocation, finite element techniques, Hayes (L.J.), *82*
- galerkin method, optimal control, Winther (R.), *168*
- asymptotic behavior, conduction (unsteady), one dimensional flow, short-time solutions, Gavalas (G.R.), Yortsos (Y.C.), *1087*
- cauchy problem, nonlinear systems, wave equations, Menzala (G.P.), *1090*
- acoustics, wave equations, Desanto (J.A.), Perkins (J.S.), (et al.), *1826*
- cooling, difference equations, metals, Drenska (N.T.), *2037*
- finite element techniques, finite element techniques, mathematical programming, stiffness matrix, Franke (R.), Salinas (D.), *2045*
- integration, nonlinear methods, numerical analysis, Adam (Y.), *2049*
- analog computation, differential equations (partial), elliptic equations, optical techniques, Cederquist (J.), Lee (S.H.), *2079*
- asymptotic behavior, initial value problems, singular perturbations, Alexiades (V.), *4175*
- difference equations, nonlinear theory, Schechter (E.), *4186*
- boundary conditions, boundary value problems, control, controllability, pseudoparabolic equations, White (L.W.), *4205*
- algorithms, distributed parameters, initial value problems, numerical methods, optimal control, Winther (R.), *4207*
- asymptotic behavior, fourier series, Belousov (L.A.), *4963*
- diffusion, vector methods, Lugt (H.J.), *4966*
- liquid gas mixture, mathematical models, reaction kinetics, Martin (R.H.) Jr., *4970*
- boundary value problems, diffusion, maximum principle, Aifantis (E.C.), Hill (J.M.), *4973*
- boundary conditions, conduction (unsteady), dirichlet problem, time dependence, Sommeijer (B.P.), Van Der Houwen (P.J.), (et al.), *5002*
- boundary value problems, cauchy problem, optimal control, Reid (D.W.), Teo (K.L.), *5049*
- conduction (unsteady), extrapolation, stability (numerical), Gourlay (A.R.), Morris (J.L.), *6090*
- convergence, differentiation, iterative methods, Heron (B.), *7183*
- finite difference methods, marching procedures, mesh generation, navier stokes equation, stability theory, Rubin (S.G.), *7191*
- convergence, estimation, galerkin method, norms, Thomee (V.), *7199*
- convergence, mathematical methods, stability (numerical), Crouzeix (M.), *7201*
- algorithms, control, differential games, distributed parameters, hyperbolic equations, position control, Korotkii (A.I.), Osipov (Iu.S.), *7240*
- boundary layer, finite difference methods, navier stokes equation, shear flow, Spradley (L.W.), Stalnaker (J.F.), (et al.), *7684*
- asymptotic methods, boundary layer (three dimensional), ships, wakes, Mori (K.), *9016*
- convergence, finite difference methods, mathematical methods, Heron (B.), *9114*
- convection, diffusion, finite difference methods, stability (numerical), Morton (K.W.), *9126*
- axisymmetric flow, numerical analysis, swirl flow, Nakamura (Y.), Uchida (S.), *9585*

- acoustic waves, finite difference methods, underwater acoustics, wave equations, Lee (D.), Botseas (G.), (et al.), *10043*
- computing techniques, singularities, Ryvkin (V.B.), Kopeliovich (B.L.), *10937*

parachutes, oscillating bodies, payloads, separated flow, stabilization, vortex flow, Doherr (K.-F.), *7798*

Paramguru (R.), see Maiti (M.), *3237*
- see Maiti (M.), *4492*
- see Maiti (M.), *9396*

Paranthoen (P.), hot wire, nusselt number, thermal measurements, thermocouples, Lecordier (J.C.), (et al.), *2782*
- see Petit (C.), *10590*

Parbery (R.D.), see Karihaloo (B.L.), *4523*
- beam columns, design (optimum), sandwich construction, Karihaloo (B.L.), *4528*
- see Karihaloo (B.L.), *8441*
- see Karihaloo (B.L.), *10347*

Pardee (W.J.), acoustic emission, continuum mechanics, elastic waves, *4456*
- cylindrical waves, elastic waves, surface waves, *8329*

Pardo (G.), see Gonzalez-Caballero (F.), *1737*

Pardoen (G.C.), bending, finite element methods, plates (circular), plates (orthotropic), Barton (D.E.), *5163*
- flywheels, plates (thick), rotating disks, stress analysis, Nudenberg (R.D.), (et al.), *5168*

Pardowitz (I.), see Hess (S.), *10551*

Pareschi (A.), navier stokes equation, numerical analysis, pipe flow, rotational flow, Montanelli (P.), *1565*

Parhi (H.), see Mohapatra (R.B.), *9415*

Parikov (A.N.), see Kein (V.M.), *7243*

Paris (P.C.), cracks, elastoplasticity, j-integral, Ernst (H.), (et al.), *3463*
- see Tada (H.), *4501*

Parisch (H.), large displacement, nonlinear materials, shells (thin), *6219*

Pariseau (W.G.), avalanches, landslides, modeling, snow, *1330*
- field tests, finite element methods, mining, Eitani (I.M.), *2392*
- columns, design, finite element methods, mines, pillars, structural support, underground, Sorensen (W.K.), *7610*

Park (E.L.) Jr., see Messina (A.D.), *740*

Park (K.C.), see Underwood (P.), *11154*

Park (R.), see Thompson (K.J.), *1883*
- see Thompson (K.J.), *7290*

Park (S.K.), elastic waves, honeycomb structures, layered media, Bertoni (H.L.), *7429*

Parker (B.), see Chiang (F.P.), *2475*

Parker (D.F.), deformation, dynamic loads, plates, reinforced bodies, slabs, *6198*
- acoustic waves, asymptotic methods, burgers equation, shock waves, *9644*
- acoustics, burgers equation, nonhomogeneous media, sound propagation, *11921*

Parker (G.), bottom irregularities, discharges, prediction, river beds, Peterson (A.W.), *4575*

Parker (G.J.), geometrical properties, injectors, pumps, *4678*

Parker (J.D.), see Ghajar (A.J.), *9700*

Parker (R.L.) Jr., interference, porous walls, three dimensional flow, transonic flow, wall effects, wind tunnels, Sickles (W.L.), *1647*

Parkin (B.R.), air, bubble dynamics, cavitation inception, diffusion, laminar flow, separation, *11382*
- bodies of revolution, bubble dynamics, cavitation inception, spherical bodies, *11383*

Parkins (D.W.), bearings (journal), lubrication (hydrodynamic), oil films, vibration, *1937*

Parkinson (G.V.), galloping, towers, vortex shedding, wind loads, Wawzonek (M.A.), *867*

Parks (P.B.), ablation, cylindrical bodies, stability (numerical), *795*

Parkus (H.), fluid-structure interaction, modes, shells (fluid-filled), vibration, *9527*

Parkus (H.) ed., electroelasticity, magnetoelasticity, piezoelectrics, thermoelectric phenomena, *7265, book*

Parmar (A.), see Ilahi (M.F.), *5112*

Parnes (R.), beam columns, buckling, *337*
- buried structures, pipes, seismic waves, soil structure interaction, underground, Weidlinger (P.), *969*
- elastic foundations, rods, *2260*

Parry (G.P.), crystals, elasticity (nonlinear), molecular theory, phase changes, *2*
- anisotropic media, stability theory, strain energy, *331*

Parsell (J.K.), see Allaire (P.E.), *4901*

Parson (J.R.), see Lord (P.R.), *7312*

Parsons (J.R.) Jr., convection (free), cylindrical bodies, empirical methods, heat addition, Mulligan (J.C.), *2802*

Parter (S.V.), convergence, initial value problems, stability theory, survey, *3125*

Parthasarathy (S.P.), airplanes, jet engines, noise abatement, Cuffel (R.F.), (et al.), *9852*

particle dynamics, boundary layer, diffusion, impact, mass transfer, Valentin (G.), Le Goff (P.), *803*
- diffusion, statistical theory, turbulence, turbulence model, Lamb (R.G.), *1586*
- brownian motion, diffusion, shear flow, Foister (R.T.), Van De Ven (T.G.M.), *1731*
- adiabatic processes, hamiltonian equations, plasma, theory, Ott (E.), *1777*
- dispersions, models, transport phenomena, Grossman (A.G.), *2850*
- conveyors, dynamic response, vibration (forced), Kogan (E.A.), *3342*
- finite element techniques, first passage, galerkin method, random excitation, stochastic systems, Bergman (L.A.), Heinrich (J.C.), *4985*
- collision models, particle fluid flow, stagnation point, walls, Matsufuji (H.), Hasegawa (E.), *6047*
- damping, dynamic analysis, vibration (nonlinear), Gershman (M.D.), *6273*
- conservation laws, lagrange equations, mechanics, Lutzky (M.), *7131*
- crystals, korteweg de vries equation, lattices, one dimensional waves, Askar (A.), *7140*
- laminar flow, optical techniques, particle fluid flow, velocity measurement, vessels, Kamiwano (M.), Motoyoshi (T.), (et al.), *7813*
- penetration, velocity profiles, Merzhievskii (L.A.), *8348*
- ballistics (interior), detonation, heat transfer, propagation, turbulent flow, Buckingham (A.C.), *8855*
- approximations, error, integration, linearization, Laitone (J.A.), Laitone (E.V.), *8913*
- contact points, granular media, soils, structure, Athanasiou-Grivas (D.), Harr (M.E.), *9359*
- drag coefficient, reynolds number (small), spherical bodies, visualization, Boillat (J.L.), Graf (W.H.), *9541*
- diffusion, turbulence, turbulence (transport), Mailliat (A.), Duhamel (P.), *9614*
- combustion, particles, Sulima (I.M.), *9761*
- analytical methods, nonholonomic system, variable mass, Ge (Z.-M.), Cheng (Y.-H.), *10010*
- channel flow, laminar flow, sublayers, turbulent flow, Grishin (Yu.M.), Mosin (A.A.), *11489*
- axisymmetric flow, impingement, jets, turbulent flow, Korobko (V.I.), Malyi (I.N.), (et al.), *11512*
- diffusion, turbulence, turbulence (geophysical), Middleton (J.F.), *11557*
- bubble dynamics, fluidized beds, potential flow, tubes, unsteady flow, Adams (R.L.), *12036*

particle fluid flow, compressible flow, nozzles, rockets, Chang (I.-S.), *624*
- absorption, Purcell (E.M.), *809*
- nonlinear systems, thermal diffusion, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *816*
- blood flow, peristaltic flow, viscoelastic fluids, Shen (M.C.), Lin (K.C.), (et al.), *1042*
- combustion products, diesel engines, exhaust gases, Cuthbertson (R.D.), Stinton (H.C.), (et al.), *1763*
- combustion products, diesel engines, exhaust gases, Carpenter (K.), Johnson (J.H.), *1764*
- pipes, pressure drop, sediment transport, slurries, Morikawa (Y.), *3607*
- oscillating bodies, rotating disks, velocity profiles, Mitra (P.), *3618*
- models, stochastics, suspensions, Bechteler (W.), *3856*
- bottom irregularities, channel flow, free boundary, turbulence, Sumer (B.M.), Deigaard (R.), *4572*
- granular media, pipelines, pressure drop, Ochi (M.), Nakajima (H.), (et al.), *4619*
- plates (parallel), pressure distribution, unsteady flow, Ramana Prasad (V.V.), Pattabhi Ramacharyulu (N.C.), *4620*
- ducts (curved), perturbation methods, trajectories, Yeung (W.-S.), *4621*
- density, measurements, two phase flow, Lourenco (L.), Riethmuller (M.L.), *4831*
- euler equations, lagrange equations, oceanography, tracers, Regier (L.), Stommel (H.), *4880*
- coal, rheology, Ghassemzadeh (M.R.), Carmi (S.), *5385*
- experimental results, nozzles, transonic flow, Myshanov (A.I.), Shorokov (N.N.), *5447*
- fluid mechanics, fluidized beds, Morooka (S.), Kawazuishi (K.), (et al.), *5846*
- spouted beds, two phase flow, King (D.F.), Harrison (D.), *5847*
- pressure drop, reynolds equation, Tozeren (H.), Skalak (R.), *5985*
- collision models, particle dynamics, stagnation point, walls, Matsufuji (H.), Hasegawa (E.), *6047*
- colloids, electro fluid dynamics, hydrodynamics, spherical bodies, Adler (P.M.), *6580*
- closed conduit flow, suspensions, velocity measurement, Kowalewski (T.A.), *6587*
- diffusion, particle size, reservoirs, turbidity, Miyanaga (Y.), Aki (S.), *6606*
- dust, noncircular pipes, unsteady flow, viscous flow, Dixit (L.A.), *6653*
- fluidized beds, velocity profiles, Grewal (N.S.), Saxena (S.C.), *7013*
- rheology, suspensions, viscosity, Tanaka (H.), White (J.L.), *7639*
- channel flow, critical speed, free boundary, pipe flow, Bonapace (A.C.), *7658*
- laminar flow, pressure gradient, turbulent flow, Stan (A.D.), Oana (S.), *7716*
- laminar flow, optical techniques, particle dynamics, velocity measurement, vessels, Kamiwano (M.), Motoyoshi (T.), (et al.), *7813*
- dilute solutions, suspensions, viscosity, Ryskin (G.), *8496*
- dust, laminar flow, noncircular pipes, unsteady flow, Gupta (M.), *8575*
- fluidized beds, heat transfer, Seki (N.), Fukusako (K.), (et al.), *8933*
- fluidized beds, testing equipment, velocity profiles, Ishida (M.), Shirai (T.), (et al.), *8935*
- gages, precipitation, snow, wind tunnels (environmental), Haasz (A.A.), Raimondo (S.), *9002*

- blood flow, couple stresses, mixture theories, polar fluids, Chaturani (P.), Upadhya (V.S.), *9060*
- metals, suspensions, Zolotko (A.N.), Matsko (A.M.), (et al.), *9745*
- one dimensional flow, shock waves (normal), two phase flow, unsteady flow, Marconi (F.), Rudman (S.), (et al.), *9873*
- moving media, oil removal, two phase flow, Singhal (A.K.), Dranchuk (P.M.), *9893*
- capsules, hydraulic transport, pipe flow, pressure drop, Tachibana (M.), Matsumoto (Y.), *10447*
- concentration, jets, mixing, scattered light, Long (M.B.), Chu (B.T.), (et al.), *10539*
- conductivity, contact problems, drying, Schlunder (E.-U.), *10638*
- electro fluid dynamics, rods, suspensions, Sherwood (J.D.), *11384*
- aerosols, chemically reactive flow, compressible flow, hypersonic flow, wakes, Dmitriev (L.M.), Markachev (Yu.E.), *11408*
- boundary layer (turbulent), heat transfer, two phase flow, Bose (T.K.), *11556*
- micromeritics, power law fluids, reynolds number (high), Hua (T.N.), Ishii (T.), *12017*
- mass transfer, pulsatile flow, Akselrud (G.A.), Fiklistov (N.I.), (et al.), *12019*
- channel flow, two phase flow, Chizhov (V.I.), Demura (M.V.), *12020*
- dispersed flow, drag, Oshima (N.), *12021*
- compressible flow, hypersonic flow, unsteady flow, Hui (W.H.), Tobak (M.), *12103*

particle size, abrasion, sliding, wear, Bayer (R.G.), *1927*
- abrasion, erosion, hardness, wear, Misra (A.), Finnie (I.), *1928*
- coagulation, colloids, emulsions, hydrodynamic stability, non newtonian suspensions, Reddy (S.R.), Fogler (H.S.), *3592*
- brownian motion, emulsions, floculation, suspensions, Reddy (S.R.), Fogler (H.S.), *3593*
- plumes, Sverdrup (G.M.), *4092*
- classification, testing equipment, Beeckmans (J.M.), *5826*
- fluidized beds, gasification, Weimer (A.W.), Clough (D.E.), *5845*
- aerosols, atmosphere, drops, refraction, Mathai (C.V.), Harrison (A.W.), *5960*
- diffusion, particle fluid flow, reservoirs, turbidity, Miyanaga (Y.), Aki (S.), *6606*
- particles, sediment transport, stochastics, streams, Troutman (B.M.), *6965*
- filtration, testing equipment, Bridgwater (J.), Cooke (M.H.), (et al.), *6998*
- drops, experimental methods, steam, Georgiev (K.G.), Savostyanov (V.A.), (et al.), *7000*
- emulsions, optical instruments, testing equipment, Lee (G.W.J.), Groves (M.J.), *7002*
- colloids, dispersions, optical techniques, Tausk (R.J.M.), Venselaar (H.C.J.), (et al.), *7003*
- froude number, hydraulics, models, sewerage, Halliwell (A.R.), Saul (A.J.), *7544*
- fluidized beds, gasification, Weimer (A.W.), Clough (D.E.), *7987*
- brittle materials, erosion, wear, Marshall (D.B.), Evans (A.G.), (et al.), *8052*
- pipes, slurries, transport, two phase flow, Parzonka (W.), Kenchington (J.M.), (et al.), *10823*
- concentration, optical techniques, velocity measurement, Stanley-Wood (N.G.), Llewellyn (G.J.), (et al.), *12058*

particles, machinability, metallurgy, steel, surface effect, Kallay (N.), Matijevic (E.), *552*
- convection (free), mass transfer, spectroscopy, Govindarao (V.M.H.), Lakshminarayanan (H.), *826*
- pyrolysis, shock tubes, Fussey (D.E.), Gosling (A.J.), (et al.), *839*
- heat transfer, mass transfer, spherical bodies, Hughmark (G.A.), *937*
- deposition, diffusion, filtration, turbulent flow, Gaidukov (N.I.), *1842*
- ductility, erosion, wear, Humphrey (J.A.C.), *1930*
- composite materials, conduction (heat), conductivity, thermal contact resistance, Yamada (E.), Ota (T.), *2783*
- impulsive propulsion, suspensions, Immich (H.), *2994*
- erosion, heat treatment, steel, wear, Salik (J.), Buckley (D.H.), *3504*
- granular media, particulate flow, pressure drop, surfaces, Mulhaupt (B.), Kampfen (Y.), *3772*
- models, pyrolysis, reaction rates, Villermaux (J.), Antoine (B.), *3872*
- heat transfer, models, pyrolysis, reaction rates, Villermaux (J.), Verzaro (F.), (et al.), *3873*
- aeration, channels, porous walls, two phase flow, Ishida (M.), Hatano (H.), (et al.), *4006*
- diffusion, pipelines, slurries, trajectories, two phase flow, Okuda (K.), *4011*
- aquifers, mixing, stochastics, stratification, Gelhar (L.W.), Gutjahr (A.L.), (et al.), *4025*
- deposition, rotating disks, suspensions, Adamczyk (Z.), Pomianowski (A.), *4822*
- fluidized beds, mass transfer, Pandey (D.K.), Upadhyay (S.N.), (et al.), *4835*
- diffusion, nonhomogeneous media, Dolgov (A.S.), Ostroushko (V.N.), *5424*
- aluminum, combustion, ignition, Polishchuk (D.I.), Shevchuk (V.G.), (et al.), *5628*
- contamination, discharges, plasma, thrusters, Rudolph (L.K.), Pless (L.C.), (et al.), *5665*
- exhaust gases, plumes, rockets, solid propellants, Strand (L.D.), Bowyer (J.M.), (et al.), *5809*
- impact, pneumatic transport, Ottjes (J.A.), *5810*
- eddies, suspensions, Alquier (M.), Gruat (J.), (et al.), *5811*
- gases, mixtures, pipe flow, Ginestra (J.C.), Rangachari (S.), (et al.), *5833*
- electron microscopy, friction (sliding), polymers, wear, Belin (M.), Mansot (J.L.), (et al.), *5975*
- gas turbines, wear, Mucklow (P.A.), *5976*
- abrasion, erosion, wear, Rabinowicz (E.), *5977*
- approximations, coalescence, electro fluid dynamics, turbulence (mechanisms), Lapiga (E.Ya.), Loginov (V.I.), *6962*
- fracture, shock waves, thermal stresses, Levin (A.L.), Murzinov (I.N.), (et al.), *6946*
- buoyancy, mixtures, oscillating bodies, two phase flow, Matsufuji (H.), Hasegawa (E.), *6960*
- absorption, concentration, deposition, Goldberg (I.S.), *6961*
- particle size, sediment transport, stochastics, streams, Troutman (B.M.), *6965*
- dispersion, multiphase flow, Nevolin (V.G.), Kirchanov (V.G.), *6966*
- aerosols, approximation methods, asymptotic behavior, coagulation, Tokar (Ya.I.), *6970*
- absorption, cylindrical bodies, radiant interchange, radiation properties, Felske (J.D.), Lee (K.M.), *7860*
- fluidized beds, separation, Geldart (D.), Baeyens (J.), (et al.), *7986*
- hardness, machinery, wear, Grosse (S.), *8053*
- electromagnetic waves, scattering, suspensions, Bayvel (L.P.), Jones (A.R.), *8088, book*
- mathematical methods, random media, waves, Furutsu (K.), *8339*
- boundary layer, compressible flow, deposition, gas turbines, two dimensional flow, Menguturk (M.), Sverdrup (E.F.), *8564*
- axial turbines, blades, cascades, combustion products, erosion, synthetic fuels, Wenglarz (R.A.), Menguturk (M.), *8807*
- motion, viscoelastic fluids, Brunn (P.), *8894*
- condensation, pulsatile flow, stochastics, two phase flow, Butov (V.G.), Vasenin (I.M.), (et al.), *8898*
- erosion, fluidized beds, Lin (L.), Sears (J.T.), (et al.), *8937*
- films, ignition, kinetics, metals, Arutyunyan (A.B.), Kharatyan (S.L.), (et al.), *9747*
- films, ignition, kinetics, metals, Grigorev (Yu.M.), Safaneev (D.Z.), *9748*
- combustion, particle dynamics, Sulima (I.M.), *9761*
- flame propagation, suspensions, Shevchuk (V.G.), Kondratev (E.N.), (et al.), *9768*
- aerosols, carbon, combustion, Bukatyi (V.I.), Sagalakov (A.M.), (et al.), *9769*
- burning rate, carbon, combustion, oxidation, Matalon (M.), *9771*
- electro fluid dynamics, elliptical bodies, stability theory, suspensions, Tsebers (A.O.), *9796*
- dust, shock tubes, shock waves, Miura (H.), Glass (I.I.), *9874*
- ferrography, lubricants (liquid), lubrication, wear, Kjer (T.), *9949*
- diffusion, kinetics, stokes flow, Polyanin (A.D.), Sergeev (Yu.A.), *10680*
- boron, ignition sensitivity, suspensions, Zolotko (A.N.), Polishchuk (D.I.), (et al.), *10698*
- burning velocity, chemical reactions, combustion, heat transfer, Strunin (V.A.), Dyakov (A.P.), (et al.), *10703*
- boilers, coal, combustion products, flyash, radiation, Wall (T.F.), Lowe (A.), (et al.), *10708*
- agglomeration, aluminum, combustion, Grigorev (V.G.), Zarko (V.E.), (et al.), *10713*
- boltzmann equation, collision models, transport, unsteady flow, Ganapol (B.D.), Boffi (V.C.), *11436*
- boltzmann equation, gases, kinetic theory, Chen (M.), *11440*
- carbon, char particles, combustion, fluidized beds, mass transfer, Gavalas (G.R.), *11792*
- carbon, char particles, combustion, mass transfer, porous media, Simons (G.A.), *11793*
- liquid metals, magneto fluid dynamics, reactor structures, thermonuclear energy, Muravev (E.V.), *11824*
- buoyancy, hele-shaw flows, laminar flow, optical techniques, trajectories, Buglarello (G.), Yanizeski (G.M.), *12016*
- bubble dynamics, interaction, two phase flow, Kremer (E.B.), Nagaev (R.F.), *12045*
- powders, scattering, Sakhnovskii (M.Yu.), Kunetskii (M.G.), *12059*

particulate damping, aerosols, luminous energy, turbulence, turbulence (geophysical), Kolosov (V.V.), Kuzikovskiy (A.V.), *11555*

particulate flow, suspensions, turbulence (transport), two phase flow, Genchev (Zh.D.), Karpuzov (D.S.), *657*
- drag reduction, oscillatory flow, viscoelastic fluids, Mclaughlin (J.), *1490*
- blast waves, gases, Eidelman (S.), Oved (Y.), (et al.), *2725*
- coal, pipelines, suspensions, viscometry, Davis (P.K.), Muchmore (C.B.), (et al.), *3594*
- granular media, particles, pressure drop, surfaces, Mulhaupt (B.), Kampfen (Y.), *3772*
- data analysis, laser doppler velocimeters, sampling, Edwards (R.V.), *4686*
- electrostatic precipitators, transport, Leonard (G.), Mitchner (M.), (et al.), *4821*
- finite amplitude, shock waves, unsteady state, Yamamoto (Y.), Kobayashi (S.), (et al.), *5486*
- combustion, combustors, mathematical models, Chung (P.M.), Carlson (L.), *5644*

- bubbly flow, powders, Simone (S.), Harriott (P.), *7012*
- constitutive equations, polymers, viscoelastic fluids, White (J.L.), Tanaka (H.), *7645*
- coal, combustion products, three dimensional flow, trajectories, turbomachinery, Beacher (B.), Tabakoff (W.), (et al.), *7889*
- containers, rotating shafts, transport phenomena, Abouzeid (A.-Z.M.), Fuerstenau (D.W.), (et al.), *8917*
- diffusion coefficient, mixing, mixtures, Koga (J.), Yamaguchi (K.), (et al.), *10561*
- mixing, mixtures, solids, Too (J.R.), Fan (L.T.), (et al.), *10562*

Parton (V.Z.), see Kudriavtsev (B.A.), *7266*

Partsevskii (V.V.), composite materials, edge effects, reinforced openings, Petrovskii (A.V.), *2249*

Parusnikov (N.A.), algorithms, linear systems, observers, *4237*

Parvatov (G.N.), cracks, diffraction, metals, nondestructive tests, surfaces, ultrasonics, Popov (A.A.), *6486*

Parvulescu (N.S.), displacement, plasticity, semi infinite media, stress analysis, *7260*

Parzonka (W.), particle size, pipes, slurries, transport, two phase flow, Kenchington (J.M.), (et al.), *10823*

Parzynski (W.), see Levy (R.), *10342*

Pascal (M.), dynamic analysis, lagrange equations, mathematical methods, *10009*

Pascal (R.), see Brossard (J.P.), *6360*

Paschenko (N.T.), see Gurevich (A.V.), *11406*

Pascovici (M.D.), bearings (hydrodynamic), couette flow, friction (solid fluid), torque, viscosity, *9025*

Pasechnik (V.I.), anisotropic media, biological membranes, inclusions, membranes (permeable), *8072*

Pashaev (B.P.), alloys, polyvalent metals, thermophysical properties, Palchaev (D.K.), (et al.), *5517*

Pashkovskii (G.S.), algorithms, bayesian decisions, decision theory, optimization, *2140*

Pasic (H.), dynamic behavior, imperfections, plates (rectangular), vibration, Herrmann (G.), *6268*

Pasini (A.), see Peano (A.), *8143*

Pasley (G.F.), orifices, propellants, space vehicles, spinning bodies, vortices, *5404*

Pasricha (M.S.), diesel engines, dynamic stresses, failure, rotating shafts, vibration (torsional), Carnegie (W.D.), *6303*

Passarelli (R.E.), see Srivastava (R.C.), *8773*

Passman (S.L.), geophysics, granular media, rock mechanics, shear flow, Nunziato (J.W.), (et al.), *4132*

- see Nunziato (J.W.), *12063*

Pastia (A.), see Nahlik (A.), *10209*

Pastrick (H.L.), see Nulk (R.A.), *2163*

Pasynkova (I.A.), existence theorems, mechanical systems, periodic orbits, *6067*

Patankar (S.V.), see Baliga (B.R.), *96*

- see Ramadhyani (S.), *5013*
- see Acharya (S.), *8684*

Pate (S.R.), see Whitfield (J.D.), *4689*

Patel (K.C.), see Gupta (J.L.), *7095*

- bearings (porous metal), lubrication (hydrodynamic), magneto fluid dynamics, squeeze films, *9044*

Patel (K.V.), see Chen (W.F.), *10139*

Patel (M.H.), boundary layer (turbulent), integral methods, oscillatory flow, perturbation methods, turbulence (structure), *9562*

Patel (M.R.), see Lee (Y.S.), *1200*

Patel (P.D.), drops, hydrodynamics, liquid liquid systems, Theofanous (T.G.), *10826*

Patel (V.K.), see Mansoori (G.A.), *8676*

Pateman (D.), see Ali (K.H.M.), *6613*

Patera (R.P.), optical instruments, radiant interchange, solar cells, solar concentrators, *3832*

Paterno (L.), see Belvedere (G.), *8960*

Patetta (N.), orbit mechanics, restricted three body problem, three body problem, *1789*

path integrals, crack growth, ductile fracture, j-integral, steel, Zahoor (A.), Abou-Sayed (I.S.), *1375*

- crack growth, fracture, j-integral, Kishimoto (K.), Aoki (S.), (et al.), *1388*
- conservation laws, elasticity (nonlinear), energy methods, Simmonds (J.G.), Nicholson (J.W.), *3229*
- dispersion, flexural waves, Brazier-Smith (P.R.), Butler (D.), (et al.), *6322*
- cracks, energy release, fracture mechanics, j-integral, mixed mode fracture, Herrmann (A.G.), Herrmann (G.), *8388*
- crack opening displacement, creep rupture, j-integral, Leckie (F.A.), Mcmeeking (R.M.), *8402*

Patil (M.R.), see Soundalgekar (V.M.), *10739*

- see Soundalgekar (V.M.), *10740*

Patnaik (A.), cylindrical bodies, heat addition, heat transfer, injection, porous walls, suction, *6760*

Patnaik (S.N.), cylindrical bodies, design (optimum), plates, safety, Srivastava (N.K.), *1430*

Patni (G.C.), conical bodies, laminar flow, navier stokes equation, rotating bodies, viscous flow, Rawat (M.L.), *3620*

Patriarco (A.G.), biodynamics, gait, muscles, optimization, Mann (R.W.), (et al.), *9052*

Patsegon (N.F.), approximations, discontinuities, liquid metals, magneto fluid dynamics, propagation, *9797*

Pattabhi Ramacharyulu (N.C.), see Ramana Prasad (V.V.), *4620*

pattern recognition, mathematical models, modeling, relativity, Jumarie (G.), *104*

- bayesian phenomena, classification, geomorphology, Kuchay (V.K.), Chuchadeyev (D.N.), *154*
- algorithms, similarity methods, Sahai (D.), *155*
- metallography, thermography, Fainzilberg (L.S.), *156*
- decision theory, multiple scales, Clarke (D.), Rivett (B.H.P.), *157*
- algorithms, estimation, Yurachkovskiy (Yu.P.), Groshkov (A.N.), *169*
- walsh-hadamard transform, Mure-Ravaud (A.), *3175*
- algorithms, operations research, optimization, sequential search, Nazarov (N.G.), Tarasenko (V.F.), *3198*
- algorithms, biomathematics, cybernetics, differential games, Yablonskij (S.V.), *9152, book*
- design, learning systems, Kittler (J.), *9174*
- karhunen-loeve expansion, mathematical models, matrix methods, Fernando (K.V.M.), Nicholson (H.), *10077*

Patterson (J.), see Imberger (J.), *5912*

Pattison (J.H.), see Griffin (O.M.), *11628*

Patwardhan (A.G.), experimental mechanics, location methods, three dimensional formulation, x ray techniques, Soni (A.H.), (et al.), *1978*

Patwardhan (V.S.), absorption, chemical reactions, interface phenomena, models, packed beds, *832*

Paul (A.K.), blades, centrifugal turbines, orthotropic materials, rotating disks, thermal loading, *1243*

Paul (B.), contact problems, contact stresses, elastic bodies, numerical methods, Hashemi (J.), *7268*

Paul (H.S.), asymptotic methods, piezoelectric devices, torsional waves, Raju (D.P.), *4443*

Paul (P.J.), combustion, hypergolic propellants, regression rate, self ignition, Mukunda (H.S.), (et al.), *9770*

Paulay (T.), earthquake effects, shear walls, slabs, Taylor (R.G.), *3010*

Paulon (J.), see Fabri (J.), *6737*

Paulson (J.W.) Jr., aerodynamic interference, aerodynamic performance, airplanes, boundary layer (control), longitudinal stability, stol, thrust, *10511*

Paulun (J.), bending, deformation (plastic), plates, *304*

Paumier (J.-C.), boundary value problems, convergence, iterative methods, newton method, *7195*

Pavel (A.L.), see Otten (L.J.), *9003*

Pavel (N.H.), evolution equations, existence theorems, nonlinear systems, *4949*

Pavelev (A.A.), see Navoznov (O.I.), *1572*

Pavelic (V.), see Mucino (V.H.), *8146*

Pavelka (J.), airplane performance, leading edge, stalling, transonic flow, visualization, wind tunnels, wings, Tatum (K.E.), *10499*

Pavin (N.Ya.), see Kasatkin (B.A.), *6485*

Pavlenko (M.I.), see Berzilovich (Ye.Yu.), *1149*

Pavlinov (M.I.), see Bashtovoi (V.G.), *861*

- see Bashtovoi (V.G.), *8813*

Pavlov (A.A.), see Shamina (O.G.), *9909*

Pavlov (A.R.), conduction (heat), dispersed flow, dispersed media, freezing, melting, thermophysical properties, Permyakov (P.P.), (et al.), *2815*

Pavlov (E.G.), compressible flow, cylindrical bodies, dynamic behavior, magneto fluid dynamics, optimal control, *6857*

Pavlov (I.V.), estimation, interval estimation, reliability, statistical theory, *2020*

Pavlov (K.B.), boundary layer, heat transfer, mass transfer, porous surfaces, Pokrovskii (L.D.), (et al.), *2638*

- dilatancy, magneto fluid dynamics, non newtonian flow, shear waves, theory, *11829*

Pavlov (P.A.), see Mulyukov (R.R.), *5518*

Pavlov (S.I.), see Mikelson (Yu.Ya.), *2876*

Pavlov (V.G.), see Boretskii (I.V.), *3149*

Pavlov (V.V.), control, design, man machine systems, Yakovlev (O.S.), (et al.), *217*

- control, design, ergatic control, man machine systems, Voronin (A.N.), *2185*

Pavlova (K.K.), see Kalyuzhnyi (I.L.), *5899*

Pavlovic (M.), connected bodies, plates, structural stability, Mansell (D.S.), (et al.), *347*

- see Djordjevic (V.D.), *11569*

Pavlovic (M.I.), convection, entrance region, variable fluid properties, variational methods, Milojevic (D.Z.), *731*

Pavlovic (M.N.), beam columns, imperfections, prestrained structures, structural stability, Stevens (L.K.), *3329*

- see Baker (G.), *8265*

Pavlovskii (V.S.), annuli, fluid-structure interaction, shells (fluid-filled), vibration, Ometsinskaya (E.B.), *8633*

- bubble dynamics, two component flow, vibration, Pelykh (N.A.), *12049*

Pavon (D.), conduction, relativity, thermodynamics, thermodynamics (irreversible), Jou (D.), (et al.), *3767*

Pawlik (P.S.), see Reismann (H.), *5069, book*
Pawlowski (Z.), see Pilarski (A.), *543*
Payer (H.G.), see Matthies (H.), *8276*
Payne (F.R.), see Wadia (A.R.), *2615*
Payne (P.R.), friction (skin), planing surfaces, plates, wakes, *8045*
- empirical methods, inviscid fluid, plates, virtual mass, *9543*

Paynter (G.C.), boundary layer, flow measurement, interaction, shock waves, *6643*
Payton (R.G.), elastic waves, elasticity (three dimensional), half space, *3390*
- see Musgrave (M.J.P.), *11164*

Pchelintsev (A.M.), construction, heaving, soils, Komarov (V.I.), *5254*
Peacock (R.E.), see Hashem (A.A.F.), *2610*
- aerodynamic interference, pressure gradient, thermal effects, wakes, wings, Hashem (A.A.F.), *6720*

Peake (D.J.), see Tobak (M.), *10433*
Peano (A.), crack propagation, singularities, stress intensity factor, Pasini (A.), *8143*
- computing techniques, finite element techniques, integration, optimization, *9129*

Pearce (B.R.), currents, ekman layer, ocean air interaction, rotating fluids, Cooper (C.K.), *8032*
Pearsall (I.S.), see Mcnulty (P.J.), *10530*
Pearson (J.B.) Jr., see Cheng (L.), *160*
Pecherskiy (D.M.), earth, earth's crust, magnetic field, mantle, Nazarova (E.A.), (et al.), *8001*
Peck (R.E.), aerodynamics, counterflow, finite difference methods, jets, *630*
Pecknold (D.A.), see Tansirikongkol (V.), *7041*
Peckover (R.S.), see Agrawal (A.K.), *10415*
peclet number, axial flow, closed conduit flow, conduction (heat), laminar flow, Vick (B.), Ozisik (M.N.), *3812*
- heat addition, heat transfer, plates (parallel), power law fluids, Dang (V.-D.), *5563*
- finite difference methods, finite element techniques, galerkin method, Smith (R.M.), *6120*
- boiling, rewetting, Bonakdar (H.), Mcassey (E.V.) Jr., *6773*
- bearings (journal), reynolds equation, temperature, viscosity, Smith (R.N.), Tichy (J.A.), *9039*
- concentration, diffusion, drops, wakes, Zhivotyagin (A.F.), *9539*
- channel flow, granular media, heat transfer, nusselt number, Spelt (J.K.), Brennen (C.E.), (et al.), *10570*
- pipe flow, solidification, Lee (S.L.), Hwang (G.J.), *10662*

Peddieson (J.) Jr., see Jaberolansaar (H.), *9252*
Pedersen (H.), absorption, film flow, mass transfer, Prenosil (J.E.), *10678*
Pedersen (K.), boundary layer (atmospheric), heat transfer (atmospheric), mass transfer, ocean air interaction, turbulence (geophysical), Boyum (G.), *5961*
Pedersen (M.A.), see Bannister (R.W.), *5724*
Pedersen (P.), damping, galerkin method, mathieu-hill equation, stability theory, *6069*
- finite element techniques, plates, stiffness matrix, vibration, Cederkvist (J.), *9136*

Pedersen (S.), relaxing media, stress relaxation, stresses (normal), viscoelastic fluids, viscometry, Chapoy (L.L.), *2577*
Pedley (T.J.), diffusion, dilute solutions, membranes (permeable), mixing, osmosis, *8078*
Pedotti (A.), see Boccardi (S.), *4910*
Peeken (H.), see Knoll (G.), *3146*
Pefley (R.K.), see Browning (L.H.), *840*
Pei (D.C.T.), see Ishii (T.), *6982*
Peigney (J.), see Birembaut (Y.), *5997*
Peindl (R.D.), see Engin (A.E.), *9072*
Pekarek (F.), kinematics, mechanisms, rigid bodies, *3087*
Pekau (O.A.), elastoplasticity, shear walls, structural analysis, Gocevski (V.), *3513*
Pekeris (C.L.), inertial waves, tides, *5936*
Pekker (M.S.), see Volosov (V.N.), *10932*
Pekurovskii (L.E.), diffraction, shock waves, wedges, *10494*
Pelant (J.), fluid mechanics, fredholm equations, incompressible flow, potential flow, *6076*
Pelczewski (W.), constraints, linear systems, optimal control, trajectory optimization, Walczak (S.), *199*
Pelecudi (C.), dyades, elastodynamics, linkages, mechanisms (planes), Mitsis (S.), *2553*
Peleg (K.), damping, dynamic properties, vibration (nonlinear), *6274*
Pelekh (B.L.), composite materials, orthotropic materials, plates (anisotropic), stress concentration, stretching, Makhnitskii (R.N.), *1180*
- reinforced openings, shells (spherical), stress concentration, Galesi (A.A.), (et al.), *2268*
- design (optimum), holes, reinforced openings, shells, Gleba (A.Yu.), *4380*

Pelinovskiy (Y.N.), internal waves, ocean air interaction, oceanography, wind-wave interaction, *4963*
Pelinovskiy (Ye.N.), see Yermakov (S.A.), *8982*
Peltzer (R.D.), see Rooney (D.M.), *5453*
- see Rooney (D.M.), *9594*

Pelykh (N.A.), see Pavlovskii (V.S.), *12049*
penalty function, inequality constraints, numerical analysis, optimization, Davis (C.S.), *1106*
- design (optimum), fillets, stress intensity factor, Queau (J.P.), Trompette (P.), *1425*
- convergence, nonlinear programming, optimization, Fujimoto (H.), Fujii (S.), (et al.), *2033*
- multivariable systems, newton method, Khenkin (M.Z.), *3124*
- constraints, finite element techniques, inelasticity, newton method, Malkus (D.S.), *3134*
- finite element techniques, laminates, plates (anisotropic), plates (sandwich), Reddy (J.N.), *3308*
- cracks, hardening, Yagawa (G.), Aizawa (T.), (et al.), *3459*
- algorithms, gauss method, inequalities, least squares, numerical methods, optimization, Bellagamba (L.), *4208*
- optimal control, space shuttle, stability theory, tethered systems, Bainum (P.M.), Kumar (V.K.), *5701*
- cracks, elastic behavior, linear systems, nonlinear systems, plates, Yagawa (G.), Aizawa (T.), (et al.), *6457*
- constraints, optimization, thermal loading, trusses, Bellagamba (L.), Yang (T.Y.), *6503*
- dynamic programming, optimization, Rosenman (M.A.), Radford (A.D.), (et al.), *7178*
- algorithms, constraints, optimization, Brunner (J.K.), *7179*
- finite element techniques, shells, Mohr (G.A.), *7348*
- elbows, pipes, shells, stiffness matrix, Bathe (K.J.), Almeida (C.A.), *10063*
- data analysis, existence theorems, finite element techniques, galerkin method, navier stokes equation, Sani (R.L.), Gresho (P.M.), (et al.), *10072*
- contact problems, plates (nonlinear), variational methods, Ohtake (K.), Oden (J.T.), (et al.), *11113*

Pender (M.J.), see Duncan Fama (M.E.), *3487*
Pendered (J.W.), see Natvig (B.J.), *8049*
pendulums, control, cranes, Zaremba (A.T.), Sokolov (B.N.), *174*
- dynamic analysis, mathematical methods, vibration (parametric), Kozlov (V.V.), *358*
- dynamic analysis, mathematical methods, vibration (nonlinear), Samson (A.), *3092*
- dynamic properties, polymers, ropes, torsion, transducers (displacement), Rind (E.), Bryant (E.L.), *3510*
- dynamic analysis, vibration (forced), Zlatoustov (V.A.), Sazonov (V.V.), (et al.), *4404*
- dynamic response, vibration (nonlinear), vibration (parametric), Khue (L.N.), *6275*
- elastic foundations, stability theory, vibration (nonlinear), Breitenberger (E.), Mueller (R.D.), *7370*

Penenko (V.V.), estimation, meteorology (physical), oceanography, optimization, *1910*
- atmospheric circulation, boundary layer (atmospheric), meteorology (physical), Aloyan (A.E.), (et al.), *1916*
- functional analyis, smoothing of data, variational methods, Obraztsov (N.N.), *2028*
- atmospheric circulation, finite difference methods, weather forecasting, Obraztsov (N.N.), *4055*
- meteorology, variational methods, Obraztsov (N.N.), *4064*

penetration, conical bodies, soils, stress analysis, Forrestal (M.J.), Norwood (F.R.), (et al.), *406*
- fluid injection, helium, jets, supersonic flow, Vlagov (V.V.), Masyakin (N.E.), (et al.), *631*
- erosion, jets, water, Walters (W.P.), Scott (B.R.), *1011*
- elastic waves, plates, unloading, Barclay (D.W.), Moodie (T.B.), (et al.), *1292*
- energy, explosive loading, finite element techniques, Tuft (D.B.), Murphy (M.J.), *1312*
- missiles, reinforced concrete, Degen (P.P.), *2372*
- field tests, soils, Singh (A.), Verma (M.S.), *2380*
- boundary conditions, hele-shaw cell, two component flow, viscous flow, Pitts (E.), *2597*
- boundary value problems, initial value problems, inviscid fluid, unsteady flow, Karzhikhov (A.V.), Ragulin (V.V.), *2598*
- anisotropic media, indentation, plasticity, Litewka (A.), Sawczuk (A.), *3257*
- liquefaction, soils, Tatsuoka (F.), Iwasaki (T.), (et al.), *3419*
- conical bodies, porous media, rocks, Forrestal (M.J.), Longcope (D.B.), (et al.), *4457*
- experimental results, field tests, soils, tools, Spektor (M.), *5253*
- conical bodies, porous media, rocks, Longcope (D.B.), Forrestal (M.J.), *6358*
- metals, slender bodies, Vantoyan (A.A.), *6359*
- slender bodies, soils, Yankelevsky (D.Z.), Adin (M.A.), *6361*
- cylindrical bodies, plates, Sagomonyan (A.Ya.), *6362*
- clay, cylindrical bodies, Dayal (U.), Allen (J.H.), (et al.), *6364*
- plane strain, plastic behavior, tools, Sitzer (M.R.), Durban (D.), *6406*
- computing techniques, convection (benard), diffusion coefficient, magneto fluid dynamics, Drobyshevski (E.M.), Kolesnikova (E.N.), (et al.), *6861*
- field tests, soils, Kezdi (A.), Mlynarek (Z.), *7442*
- field tests, soils, Baligh (M.M.), Vivatrat (V.), (et al.), *7447*

- ocean bed, sedimentation, underwater acoustics, Tjotta (J.N.), Tjotta (S.), *7943*
- particle dynamics, velocity profiles, Merzhievskii (L.A.), *8348*
- hulls, hydroelasticity, ship slamming, wedges, Gorshkov (A.G.), Vakalov (G.N.), *8628*

Penev (G.D.), biocontrol, identification, nervous system, Tairov (O.P.), *3225*

Penev (P.B.), dynamic analysis, flow, moment distribution, poisson flow, Romanov (V.G.), *148*

Peng (C.S.P.), adsorption, cooling, energy conservation, latent heat, solar collectors, Howell (J.R.), *8763*

- absorption, air conditioning, dehumidifying system, drying, evaporated films, film flow, fins, low temperature, Howell (J.R.), *10641*

Penkov (V.B.), computing techniques, crack closure, edge cracks, Tolokomnikov (L.A.), *8389*

Penning-Rowsell (E.C.), drainage, floods, Chatterton (J.B.), *4043*

Pennline (J.A.), boundary value problems, differential equations (ordinary), iterative methods, kinetics, *4178*

penny shaped crack, deformation (finite), elasticity (nonlinear), stress rupture, Selvadurai (A.P.S.), *234*

- anisotropic media, shear stress, stress intensity factor, Dahan (M.), *459*
- cavities, integro differential equations, oblateness, stress analysis, stress intensity factor, Hirai (H.), Satake (M.), *1365*
- conduction (steady), stress intensity factor, thermal stresses, Barber (J.R.), *2967*
- composite materials, crack growth, crazing, stress intensity factor, Mahapatra (R.B.), Satapathy (P.K.), (et al.), *3473*
- composite materials, ellipsoids, reinforced bodies, Taya (M.), *4356*
- diffraction, ultrasonics, Achenbach (J.D.), Adler (L.), (et al.), *4778*
- elastic waves, scattering, Visscher (W.M.), *6347*
- computing techniques, crack branching, interface cracks, singular integral equations, Theocaris (P.S.), *7516*
- cylindrical bodies, edge cracks, interface cracks, stress intensity factor, Fan (Y.-X.), Fan (T.-Y.), (et al.), *8386*
- computing techniques, crack opening displacement, infinite medium, stress intensity factor, Mohapatra (R.B.), Parhi (H.), *9415*

Penot (F.), boussinesq equation, conduction, convection (free), heat transfer, open thermosyphons, rayleigh number, thermosyphons, Peube (J.-L.), *6790*

Penzien (J.), see Gupta (S.), *10848*

Pepper (D.W.), air pollution, dispersion, galerkin method, numerical methods, Kern (C.D.), (et al.), *3028*

- cavities, finite element methods, laminar flow, recirculation, Cooper (R.E.), *8584*
- algorithms, numerical methods, three dimensional flow, transport, Baker (A.J.), *10693*

Perdang (J.), see Blacher (S.), *8107*

Perdichizzi (A.), see Macchi (E.), *6736*

Perdikaris (P.C.), see White (R.N.), *1462*

Perekhrest (V.I.), containers (partially filled), hydroelasticity, shells (cylindrical), shells (fluid-filled), vibration, Ulitin (G.M.), *1610*

Perelman (R.G.), drops, impact, stress analysis, Freishist (N.A.), *5251*

Perera (M.D.A.E.S.), boundary layer (turbulent), fences, porous surfaces, separated flow, two dimensional flow, *2628*

Perestyuk (N.A.), differential equations (ordinary), impulse, periodic orbits, Shovkoplyas (V.N.), *4952*

Perevalov (S.P.), nondestructive tests, reflection, surface flaws, ultrasonics, welded joints, Raikhman (A.Z.), *6489*

Perez (J. De J.), see Logan (J.D.), *9640*

Perez-Garcia (C.), see Lebon (G.), *1975*

- hydrodynamic stability, micropolar media, polar fluids, Rubi (J.M.), (et al.), *7644*
- see Lebon (G.), *8714*

Pergushev (L.P.), immiscible fluids, inhomogeneities, mass transfer, Rozentsvaig (A.K.), *5816*

periodic orbits, planetary satellites, resonance, solar system, stability theory, Wiesel (W.), *872*

- circumnavigation, lagrangian solution, libration theory, three body problem, Broucke (R.), Anderson (J.D.), (et al.), *874*
- libration theory, restricted three body problem, Breakwell (J.V.), Brown (J.V.), *876*
- hamiltonian equations, kepler orbits, n body problems, restricted three body problem, Meyer (K.R.), *1786*
- bifurcation, restricted three body problem, Robin (I.A.), *1788*
- computing techniques, three body problem, three dimensional formulation, Markellos (V.V.), *1790*
- asymptotic behavior, perturbation methods, random excitation, stability theory, Chow (P.L.), Chiou (K.L.), *1994*
- existence theorems, nonconservative systems, vibration, Pivovarov (I.), *1996*
- bifurcation, hamiltonian equations, restricted three body problem, Bottkol (M.), *1997*
- bifurcation, diffusion, perturbation methods, reaction-diffusion systems, Ermentrout (G.B.), *2003*
- bifurcation, integro differential equations, stability theory, Landman (K.A.), *2016*
- lyapunov's functions, oscillations, satellites, Sarychev (V.A.), Sazonov (V.V.), (et al.), *2918*
- computing techniques, three body problem, Ichtiaroglou (S.), *2919*
- lyapunov's functions, stability theory, Krechetov (G.S.), *3098*
- artificial satellites, libration theory, resonance, restricted three body problem, Barkin (Yu.V.), Markov (Yu.G.), *3916*
- lyapunov's functions, nonlinear mechanics, oscillations, poincare method, Proskuryakov (A.P.), *4945, book*
- differential equations (ordinary), impulse, Perestyuk (N.A.), Shovkoplyas (V.N.), *4952*
- existence theorems, mechanical systems, Pasynkova (I.A.), *6067*
- bifurcation, hopf bifurcation, stability theory, Spirig (F.), *6068*
- floquet theory, lunar theory, periodic orbits, planetary satellites, planetary satellites, solar system, solar system, Wiesel (W.E.), *6876*
- floquet theory, lunar theory, periodic orbits, planetary satellites, planetary satellites, solar system, solar system, Wiesel (W.E.), *6876*
- existence theorems, n body problems, Meyer (K.R.), *6880*
- diffusion, reaction kinetics, reaction-diffusion systems, travelling waves, Maginu (K.), *7168*
- collision models, hamiltonian equations, three body problem, Losco (L.), Marchal (C.), *7914*
- perturbation theory, planetary satellites, Khasanova (M.Kh.), *7918*
- computing techniques, planetary satellites, three dimensional formulation, Robin (I.A.), Markellos (V.V.), *7919*
- libration theory, planetary theory, restricted three body problem, Richardson (D.L.), *8840*
- computing techniques, restricted three body problem, Zikides (M.K.), *8841*
- bifurcation, biomathematics, differential equations (ordinary), Holmes (P.), Lewis (D.), *9097*
- computing techniques, riccati equation, Sanchez (D.A.), *9121*
- bifurcation, stability theory, three body problem, Markellos (V.V.), *9809*
- hamilton principle, restricted three body problem, series expansion, Hitzl (D.L.), Levinson (D.A.), *9812*
- restricted three body problem, stability theory, Kammeyer (P.C.), *9813*
- bifurcation, computing techniques, Contopoulos (G.), Michaelidis (P.), *9815*
- beams, differential equations (partial), evolution equations, vibration, Holmes (P.), Marsden (J.), *10024*
- bifurcation, circumnavigation, libration theory, mathematical methods, n body problems, solar system, Szebehely (V.) ed., *10769, book*

peristaltic flow, blood flow, particle fluid flow, viscoelastic fluids, Shen (M.C.), Lin (K.C.), (et al.), *1042*

- biomechanics, finite element techniques, fluid mechanics, Stavitsky (D.), Macagno (E.O.), (et al.), *7219*

Perkins (J.S.), see Desanto (J.A.), *1826*

Perl (M.), see Emery (A.F.), *3466*

- crack initiation, dynamic fracture, finite difference methods, griffith cracks, plates (rectangular), Shmuely (M.), (et al.), *10304*

Perlee (H.E.), see Kansa (E.J.), *8800*

permeability, bubble dynamics, cavitation, stabilization, Yount (D.E.), *943*

- porous media, two phase flow, El-Khatib (N.A.F.), *954*
- convection, porous media, Tewari (P.K.), Torrance (K.E.), *955*
- boundary layer (turbulent), fluid injection, roughness, Alimpiyev (A.I.), Alimpiyev (V.I.), *1552*
- freezing, snow, soils, thawing, Shtykov (V.I.), *3402*
- additives, polymers, porous media, water, Bakhitov (G.G.), Ogandzhanyants (V.G.), (et al.), *4022*
- porous media, rocks, Brace (W.F.), *4024*
- channel flow, porous media, Kubik (J.), *4027*
- fracture, numerical methods, Bawden (W.F.), Curran (J.H.), (et al.), *4028*
- flaws, fracture, rocks, Goodman (R.E.), Sundaram (P.N.), *4834*
- porous media, rocks, Neuzil (C.E.), Cooley (C.), (et al.), *5266*
- magneto fluid dynamics, pulsatile flow, theory, two dimensional flow, Varshney (C.L.), *6859*
- experimental methods, holes, porous media, Dees (P.J.), Tjan (T.G.), (et al.), *7007*
- diffusion, membranes (permeable), thermal effects, Ibanez (J.A.), Tejerina (A.F.), *7874*
- acoustic waves, porous media, Nur (A.M.), Walls (J.D.), (et al.), *7989*
- experimental methods, porous media, rocks, Batycky (J.P.), Mccaffery (F.G.), (et al.), *7990*
- cylindrical bodies, mass transfer, porous media, Swarup (S.), *8785*
- electro fluid dynamics, fluid mechanics, porous media, rocks, Kormiltsev (V.V.), Khachay (O.A.), *8921*
- interface phenomena, porous media, Bardon (C.), Longeron (D.G), *8929*
- emulsions, fluid mechanics, porous media, shear, surface profiles, surfactants, Kalpakci (B.), Klaus (E.E.), (et al.), *9887*

Permyakov (P.P.), see Pavlov (A.R.), *2815*

Pernica (Z.), see Benetka (J.), *2733*

- see Benetka (J.), *2771*

Perov (V.P.), discrete systems, dynamic analysis, synthesis, *7245*

Perry (A.E.), see Smits (A.J.), *10481*

Perry (B.) III, aerodynamic performance, airplanes, dynamic loads, flexible bodies, modeling, structural response, Kroll (R.I.), (et al.), *8647*

Perry (J.M.), see Robinson (I.S.), *9521*

Persoz (B.), deformation, heat, polymers, thermoelasticity, Rosso (J.C.), *1837*

perturbation methods, dynamic stability, gyroscopic stabilization, Kuzmina (L.K.), *15*
- coherent structure, power generation, power plants, Sastry (S.), Varaiya (P.), *124*
- elastoplasticity, internal stresses, work hardening, Panzeca (T.), Polizzotto (C.), *269*
- asymptotic methods, conduction (heat), mathematical models, variable thermal properties, Aziz (A.), Jaleel (A.), (et al.), *772*
- boundary layer, induced drag, magneto fluid dynamics, rotating fluids, Sneyd (A.D.), *860*
- asteroids, libration theory, regularization, resonance, Garfinkel (B.), *871*
- differential equations (ordinary), differential geometry, transformation, Rapaport (M.), *873*
- mathematical methods, oblateness, transformation, Deprit (A.), *878*
- gyroscopic stabilization, stability theory, Vozlinskii (V.I.), *1074*
- mathematical methods, plk method, supersonic flow, Mcintosh (S.C.) Jr., Nixon (D.), *1104*
- asymptotic behavior, computing techniques, fluid mechanics, nonlinear mechanics, Glowinski (R.) eds., Lions (J.E.), *1111, book*
- compressible flow, entrance region, lasers (gasdynamic), Kuznetsov (V.M.), *1523*
- boundary layer (thermal), convection (free), nusselt number, porous walls, Cheng (P.), Chang (I.-D.), *1680*
- asymptotic behavior, periodic orbits, random excitation, stability theory, Chow (P.L.), Chiou (K.L.), *1994*
- autonomous systems, differential equations (ordinary), stability theory, Huseyin (K.), *1995*
- bifurcation, diffusion, periodic orbits, reaction-diffusion systems, Ermentrout (G.B.), *2003*
- dynamic analysis, nonlinear analysis, Zhermolenko (V.N.), *2317*
- aerodynamics, compressible flow, inviscid fluid, transonic flow, Seebass (A.R.), Yu (N.J.), (et al.), *2617*
- integro differential equations, plasma, propagation, variational methods, wkb method, Berk (H.L.), Pfirsch (D.), *3105*
- asymptotic methods, differential equations (partial), nonlinear mechanics, orbit mechanics, Kevorkian (J.), Cole (J.D.), *3111, book*
- computing techniques, convergence, heat transfer, pade approximation, Aziz (A.), *3112*
- dynamic response, networks, ropes, vibration (nonlinear), Ivovich (V.A.), *3351*
- jets, orifices, Geer (J.P.), Strikwerda (J.C.), *3686*
- fins, transient effects, Aziz (A.), Na (T.Y.), *3817*
- extended surfaces, fins, heat transfer, variable thermal properties, Aziz (A.), Na (T.Y.), *3822*
- orbit mechanics, restricted three body problem, Kaufman (B.), *3918*
- heat transfer, porous media, Lu (P.-C.), *4029*
- approximations, boundary layer, Jovanovic (J.), Askovic (R.), *4597*
- ducts (curved), particle fluid flow, trajectories, Yeung (W.-S.), *4621*
- flutter, modeling, panels, Sinay (L.R.), Reiss (E.L.), *4753*
- circulation, hydrodynamic stability, oceanography, Zelenko (A.A.), *4877*
- bearings (journal), bearings (tilted pad), dynamic stability, Allaire (P.E.), Parsell (J.K.), (et al.), *4901*
- boundary conditions, cylindrical bodies, fredholm equations, potential theory, Rosenfeld (A.M.), Timsit (R.S.), *4957*
- bifurcation, boundary value problems, boussinesq equation, convection, Reiss (E.L.), Tavantzis (J.), *4974*
- series, variational methods, Roberts (S.M.), *4988*
- boundary value problems, finite amplitude, plates, series expansion, Kayuk (Ya.F.), Alekseeva (M.K.), *4991*
- boundary layer, crack propagation, dynamic fracture, elastoplasticity, Dunayevsky (V.), Achenbach (J.D.), *5308*
- orbit mechanics, planetary theory, satellites, second order analysis, Gooding (R.H.), *5700*
- ks formulation, oblateness, orbit mechanics, regularization, two body problem, Sharma (R.K.), *6877*
- lunar theory, oblateness, planetary satellites, three body problem, Schmidt (D.S.), *6881*
- differential equations (partial), resonance, Roberts (A.J.), *7166*
- bodies (liquid filled), boussinesq fluid, cavities, convection (free), moving media, Zarubin (A.G.), Ngo Zui Kan, *7838*
- artificial satellites, orbit mechanics, potential theory, Roth (E.A.), *7915*
- bearings (gas lubricated), bearings (journal), dynamic behavior, lubrication (hydrostatic), Murata (S.), Miyake (Y.), (et al.), *8067*
- asymptotic behavior, bending (elastic), boundary layer, plates (rectangular), Nazarov (S.A.), *8243*
- rotating bodies, stokes flow, toroids, viscous flow, Murray (J.C.), *8530*
- film flow, lubrication (hydrodynamic), rotating disks, stokes flow, Phan-Thien (N.), Antonia (R.A.), (et al.), *8533*
- convection, diffusion, hydrodynamic stability, nonlinear theory, Neu (J.C.), *8602*
- korteweg de vries equation, solitary waves, Grimshaw (R.), *8621*
- ellipsoids, reflection, shock waves, Gorbachev (L.P.), Sokolov (V.B.), *8635*
- composite materials, interlaminar stresses, laminates, rayleigh ritz method, Bar-Yoseph (P.), Pian (T.H.H.), *9249*
- elastic bodies, large displacement, rings, stick slip, Benson (R.C.), *9260*
- compressible flow, piston driven flow, shock waves, Schneider (G.H.), *9549*
- compressible flow, duct flow, three dimensional flow, Kraiko (A.N.), Shironosov (V.A.), *9553*
- boundary layer (turbulent), integral methods, oscillatory flow, turbulence (structure), Patel (M.H.), *9562*
- transformation, two body problem, Sidlichovsky (M.), *9808*
- magneto fluid dynamics, orbit mechanics, oscillations, Lyakhovka (G.V.), *9821*
- flexible bodies, rotating cylinders, vibration, Lakin (W.D.), Nachman (A.), *10198*
- circumnavigation, lunar theory, orbit mechanics, planetary satellites, three body problem, Henrard (J.), *10771*
- fly-by, interplanetary probes, orbit mechanics, Georgiev (K.G.), Papkov (O.V.), *10778*
- channels, friction factor, tidal waves, Kabbaj (A.), Le Provost (C.), *11610*

perturbation theory, controllability, nonlinear systems, Dacka (C.), *117*
- relay systems, stability, Tikhomirov (V.V.), *128*
- mathematical methods, series, transforms, Spirig (F.), *877*
- differential equations (ordinary), differential equations (partial), numerical analysis, runge kutta method, Ixaru (L.G.), *1112, book*
- differential equations (partial), fluid mechanics, mathematical methods, mathematical models, surveys, Brosowski (B.) eds., Martensen (E.), *2035, book*
- conduction (unsteady), rods, Kenig (K.E.), Korostelev (A.P.), *3120*
- estimation, singular perturbations, Sebald (A.V.), Haddad (A.H.), *4284*
- hamiltonian equations, planetary satellites, von zeipel method, Marchal (C.), *4761*
- bifurcation, diffusion, existence theorems, reaction diffusion equations, Rothe (F.), *4961*
- bifurcation, computing techniques, differential equations (ordinary), Weber (H.), *5015*
- anisotropic media, magneto fluid dynamics, models, turbulence, Montgomery (D.), Turner (L.), *5679*
- lunar theory, planetary satellites, planetary theory, solar system, Standaert (D.), *6874*
- periodic orbits, planetary satellites, Khasanova (M.Kh.), *7918*
- aquifers, computing techniques, identification, quasilinearization, Galligani (I.), *8127*
- falkner-skan equation, uniqueness, Aziz (A.), Na (T.Y.), *8556*
- dust, orbit stability, solar pressure, stochastics, Bakshian (B.T.), Nazirov (R.R.), (et al.), *8843*
- boundary layer, boundary value problems, elliptic equations, singular perturbations, Jiang (F.-R.), *9108*
- bifurcation, stability theory, Rosenblat (S.), Cohen (D.S.), *9110*
- dynamic programming, stochastics, variational methods, Hopkins (W.E.) Jr., Blankenship (G.L.), *10027*
- collision models, hamiltonian equations, oscillators, two body problem, Terry (P.W.), *10772*
- finite difference methods, slender wings, transonic flow, wings, Van Der Vooren (J.), Huizing (G.H.), (et al.), *11729*

Pervadchuk (V.P.), channel flow, ducts (curved), non newtonian flow, power law fluids, screw machinery, slip flow, Yankov (V.I.), (et al.), *10442*
Pervozvanskii (A.A.), see Gaitsgori (V.G.), *4227*
Pervushin (V.E.), see Kazankov (Yu.V.), *9709*
Peschel (W.), blades, creep, thermal fatigue, turbomachinery, Schreieck (R.), *1835*
Peskin (R.L.), see Kowalski (A.D.), *8609*
- see So (R.M.C.), *11559*

Pesko (F.), beams, vibration, waves, *2932*
Peskov (O.L.), see Boltenko (E.A.), *1674*
Peslyak (M.Yu.), anisotropic media, elastic waves, singularities, *11165*
Pesotskaya (N.K.), galerkin method, large displacement, plates (orthotropic), plates (rectangular), vibration (free), *7395*
Pestrovskii (G.M.), see Stolyarov (N.N.), *2307*
Pestryakov (A.K.), convex programming, fractional convex programming, linear systems, optimal control, synthesis, *4229*
Petasyuk (G.A.), see Golovchan (V.T.), *2274*
Petcu (V.), punch problems, reinforced concrete, shear strength, slabs, Stancu-Iescu (G.), (et al.), *4534*
Petela (R.), flames (diffusion), heat transfer, Wilk (K.), (et al.), *3963*
Peter (Y.S.), see Kan (C.L.), *4848*
Petera (J.), see Kemblowski (Z.), *1483*
- see Kemblowski (Z.), *11504*

Peters (D.A.), blades, damping, flapping, helicopters, Gaonkar (G.H.), *11736*
- see Gaonkar (G.H.), *11737*

Peters (J.M.), see Noor (A.K.), *1225*
- see Noor (A.K.), *4196*

Peters (N.), flames, models, *9756*
Peters (W.H.), see Smith (C.W.), *3479*
Petersen (I.F.), diffusion, evaporation, kinetics, models, *10648*
Peterson (A.W.), see Parker (G.), *4575*
- see Karahan (M.E.), *6598*

Peterson (H.A.), see Misra (A.), *6466*

Peterson (T.), see Dwyer (H.A.), *7754*
Petersson (P.-E.), crack growth, crack opening displacement, finite element techniques, fracture, j-integral, microcracks, reinforced concrete, *7539*
Petersson (P.E.), concrete, energy density, fracture criteria, fracture mechanics, *7522*
Petho (A.), fluidized beds, inversion, laplace transform, multiphase flow, numerical analysis, special functions, Kuhne (J.), *1101*
Petit (C.), see Lecordier (J.C.), *659*
- see Lecordier (J.C.), *7757*
- anemometers, thermal measurements, wires, wollaston wire, Paranthoen (P.), (et al.), *10590*

Petit (J.-P.), energy conversion, filamentary structures, inhomogeneities, magneto plasma dynamics, nonequilibrium effects, Billiotte (M.), *7899*
Petrak (G.J.), aluminum alloys, crack growth, fatigue, quenching, Ruschau (J.J.), *10272*
Petre (A.), aerodynamic loads, aeroelasticity (dynamic), bridges (suspension), dynamic stability, Sofronie (R.), *3910*
Petrichenko (I.A.), see Kenzhibaev (A.T.), *12082*
Petrie (D.J.), bubble dynamics, diffusion, freezing, liquid solid interface, solidification, two phase flow, Linehan (J.H.), (et al.), *10598*
Petrie (E.M.), adhesives, blades, bonding, dynamic loads, steam turbines, strain gages, *8427*
Petrila (T.), complex variables, cylindrical bodies, irrotational flow, two dimensional flow, walls, *6614*
- complex variables, cylindrical bodies, inviscid fluid, plates, porous surfaces, *8522*

Petrillo (A.), arch dams, damping, hydraulic jump, jets, radiating flow, Ranieri (M.), (et al.), *561*
Petrofsky (J.S.), see Phillips (C.A.), *7108*
petroleum, flood flow, oil removal, Tokareva (N.A.), Tsynkova (O.E.), *5842*
- flood flow, oil removal, recovery systems, Pope (G.A.), *12066*

petroleum deposits, porous media, reservoir engineering, Da Prat (G.), Cinco-Ley (H.), (et al.), *8922*
Petrosian (G.L.), finite element techniques, porous media, upset forging, Nersisian (G.G.), (et al.), *1875*
Petrov (A.G.), bubbly flow, cavities, hydrodynamic stability, surface tension, *11532*
Petrov (B.N.), control, generalized linearization, nonlinear systems, synthesis, Vasilyev (V.I.), (et al.), *3162*
- linear systems, linear theory, state space techniques, topological techniques, Babak (S.F.), (et al.), *8160*

Petrov (V.V.), nonlinear waves, ocean waves, stratified waves, wave interactions, *663*
Petrovacki (D.), distributed parameters, maximum principle, nonlinear systems, *3194*
Petrovskii (A.V.), see Partsevskii (V.V.), *2249*
Petrovsky (I.), see Kozel (K.), *3678*
Petrukhin (N.S.), see Dvoryakovskiy (V.P.), *4865*
Petryk (H.), indentation, machinability, slip line methods, wedges, *8406*
Pettersen (E.), bearing capacity, buckling, finite element methods, thin walled structures, ultimate strength, *2506*
Petukhov (B.S.), boiling, convection (forced), critical heat flux, heat transfer, helium, transition boiling, Zhukov (V.M.), (et al.), *1673*
- heat transfer, helium, pipe flow, resistance, two phase flow, Zhukov (V.M.), (et al.), *6976*

Petukhov (L.V.), beams (curved), beams (open section), beams (thin section), design (minimum weight), *4363*
Petushkov (V.G.), elastoplasticity, explosives, stress relieving, welded joints, Fadeenko (Yu.I.), *10382*
Peube (J.-L.), see Penot (F.), *6790*
Pevnev (A.K.), see Kuchay (V.K.), *1878*
Peyret (R.), see Le Balleur (J.C.), *1527*
- see Hollanders (H.), *10044*

Peyrot (A.H.), cables, flexible walls, nonlinear analysis, numerical analysis, offshore structures, pipes, *1216*
- cables, dynamic analysis, nonlinear analysis, offshore structures, *3283*

Pezzoli (G.), channel flow, discharges, finite difference methods, sediment transport, *3608*
Pfeifer (E.), see Mettke (H.), *8126*
Pfeiffer (M.), see Steinhardt (O.), *318*
Pfeifroth (L.), continuum mechanics, internal state variables, rheology, thermodynamics (nonequilibrium), *7133*
Pfeil (H.), boundary layer, transition, unsteady state, Herbst (R.), *5433*
Pfender (E.), see Abdel-Wahed (R.M.), *5527*
- see Mostaghimi (J.), *10563*

Pfiffner (O.A.), deformation, rocks, strain rate, tectonics, Ramsay (J.G.), *10261*
Pfirsch (D.), see Berk (H.L.), *3105*
Pfister (P.A.) Jr., see Bejan (A.), *2828*
Pfluger (A.), membrane theory, shells, theory, *9266*
Pfutzner (H.), see Markert (R.), *8283*
- see Markert (R.), *10220*

Phalswal (D.R.), analytical methods, plasma, slabs, wave interactions, waveguides, Singh (Y.P.), (et al.), *2901*
Phan (H.V.), see Desai (C.S.), *7438*
Phan-Thien (N.), flow enhancement, non newtonian flow, pressure gradient, pulsatile flow, shear thinning, *618*
- non newtonian flow, pipe flow, pressure gradient, vibration, *1559*
- constitutive equations, granular media, micromechanics, *1970*
- pressure distribution, roughness, slots, stokes flow, *2649*
- boundary roughness, channel flow, plates (parallel), stokes flow, *4583*
- see Antonia (R.A.), *4635*
- elasticity, friction (sliding), roughness, surface profiles, *7083*
- nonisothermal flow, reynolds number (small), similarity methods, squeeze flow, unsteady flow, *7724*
- lubrication (hydrodynamic), poiseuille flow, reynolds number, roughness, stokes flow, surfaces, *8063*
- film flow, lubrication (hydrodynamic), perturbation methods, rotating disks, stokes flow, Antonia (R.A.), (et al.), *8533*
- dilute solutions, linear systems, lyapunov's functions, polymers, stability theory, turbulent flow, Atkinson (J.D.), *9094*

pharmacokinetics, biomathematics, optimal control, Kusuoka (H.), Kodama (S.), (et al.), *9196*
Pharr (G.M.), cavities, creep, creep rupture, diffusion, Nix (W.D.), *3452*
phase changes, crystals, elasticity (nonlinear), molecular theory, Parry (G.P.), *2*
- conduction (heat), energy storage, liquid solid interface, melting, Henze (R.H.), Humphrey (J.A.C.), *768*
- heat transfer, melting, solidification, velocity profiles, Ramachandran (N.), Jaluria (Y.), (et al.), *769*
- drying, evaporation, Szentogyorgyi (S.), *792*
- compressibility, earth, thermal expansion, Trubitsyn (V.P.), *964*
- equations of state, steam, steam turbines, Hedback (A.J.W.), *2776*
- alloys, high temperature, materials properties, Guttmann (V.) ed., *2962, book*
- finite element methods, melting, stefan problem, vaporization, Bonnerot (R.), Jamet (P.), *3820*
- enthalpy, transforms, Wood (A.S.), Ritchie (S.I.M.), (et al.), *3823*
- convection (forced), energy storage, freezing, Hsu (C.F.), Sparrow (E.M.), *5577*
- chemical reactions, constitutive equations, continuum mechanics, Tokuoka (T.), *6037*
- freezing, modeling, soils, Hromadka (T.V.) II, Guymon (G.L.), *6388*
- free jets, melting, shielded arc welding, Kolesnichenko (A.F.), *6570*
- liquefaction, retrograde gases, shock waves, Dettleff (G.), *6753*
- cylindrical bodies, freezing, melting, Lunardini (V.J.), *6800*
- gasification, immersion, mathematical methods, thermal expansion, thermal loading, Hunter (L.W.), *7852*
- cylindrical bodies, heat transfer, pipes, stefan problem, underground, variable thermal properties, Lunardini (V.J.), *7854*
- pressure change, wells, Fair (W.B.) Jr., *7985*
- anisotropic media, nonhomogeneous media, strain energy, Tsakalakos (T.), *8091*
- metals, shock waves, vaporization, waves, Goloveiko (A.G.), Martynikhina (V.I.), *8874*
- inclusions, micromechanisms, steel, thermoelasticity, Ling (H.C.), Owen (W.S.), *8884*
- elastic waves, seismic waves, Grinfeld (M.A.), Movchan (A.A.), *8957*
- specific heat, thermophysical properties, Kuleshov (G.G.), *10560*
- conduction (heat), freezing, soils, Mostaghimi (J.), Pfender (E.), *10563*
- high pressure, lubricants (dry film), thermophysical properties, Rolle (K.C.), Crisp (J.N.), (et al.), *10564*
- conduction (heat), lasers, radiant interchange, radiation properties, Zscherpe (G.), *10607*
- diffusion, Druzhinin (A.A.), Tunitskii (N.N.), *10654*
- freezing, phase velocity, Cho (S.H.), Sunderland (J.E.), *11773*

phase locked loops, beams, control, convection, distributed parameters, modal control, observability, Balas (M.J.), *203*
phase velocity, inhomogeneities, propagation, scattering, second order analysis, Gray (S.H.), *1085*
- gravity waves (surface), gravity waves (trochoidal), wave trains, Shuleykin (V.V.), *1588*
- ocean waves, optical analysis, Gotwols (B.L.), Irani (G.B.), *5485*
- capillary waves, gravity waves (surface), harmonic waves, wilton ripples, Reeder (J.), Shinbrot (M.), *9623*
- freezing, phase changes, Cho (S.H.), Sunderland (J.E.), *11773*

Phatak (D.R.), earth pressure, retaining walls, *7444*
Philander (S.G.H.), atmospheric circulation, coasts, jet streams, *4859*
- see Willebrand (J.), *9000*

Philip (J.R.), adsorption, liquid vapor interface, plane surfaces, power law geometrics, *3850*
Philippe (J.-J.), see Chattot (J.-J.), *9666*
- see Monnerie (B.), *10514*

Phillips (C.A.), creep, dynamic behavior, muscles, stress strain relationships, Petrofsky (J.S.), *7108*
Phillips (K.), job scheduling, linear programming, operations research, optimization, *2171*
Phillips (M.G.), composite materials, materials properties, *10129*
Phillips (O.M.), finite amplitude, solitary waves, surveys, wave interactions, *662*
- gravity waves, internal waves, ocean air interaction, ocean waves, surface waves, thermocline, turbulence, turbulence (geophysical), *1888, book*

Phillips (R.S.), see Lax (P.D.), *35*
Phillips (W.F.), entrainment, froude number, plumes, two dimensional flow, *6867*
- energy conversion, energy storage, heat transfer, packed beds, solar collectors, stratified flow, *8766*

Phillips (W.R.C.), airfoils, trailing vortices, vortex flow, vortex sheets, wakes, *1506*
Philos (C.G.), asymptotic behavior, damping, dynamics, oscillations, Staikos (V.A.), *1080*
- bounded variables, difference differential equations, oscillations, semi infinite media, Staikos (V.A.), *3100*

Phoenix (S.L.), see Harlow (D.G.), *5138*
photoelasticity, crack tip geometry, experimental results, stress intensity factor, Bakshi (O.A.), Zaitsev (N.L.), (et al.), *482*
- elliptical holes, holes, stress concentration, Hanus (J.B.), Burger (C.P.), *1389*
- joints, offshore structures, tubes, Fessler (H.), Little (W.J.G.), *1390*
- crack propagation, stress intensity factor, wiener-hopf technique, Bandyopadhyay (S.N.), Deysarker (H.K.), *2430*
- birefringence, cyclic loading, elastoviscoplasticity, polymers, Nishitani (T.), Koike (Y.), *2466*
- crack tip geometry, stress intensity factor, Rossmanith (H.P.), *2467*
- crack propagation, direction, prediction, Gdoutos (E.E.), *2469*
- plates (circular), thermal stresses, transient, Stanley (P.), Edward (D.C.), *2470*
- drawing, polymers, viscoplasticity, Nishitani (T.), *2471*
- in-plane displacement, measurements, moire methods, propagation, waves, Basehore (M.L.), Post (D.), *2472*
- crack propagation, mixed mode fracture, stress intensity factor, surface flaws, Smith (C.W.), Peters (W.H.), (et al.), *3479*
- lasers, photoelasticity (three dimensional), scattered light, Berghaus (D.G.), *3482*
- design (optimum), optimization, Durelli (A.J.), *3517*
- experimental mechanics, strain, tires, Chow (C.L.), Woo (C.W.), *3560*
- anisotropy, composite materials, stress analysis, Jacob (K.A.), *5141*
- crack opening displacement, plastic flow, steel, stress intensity factor, Bandyopadhyay (S.N.), Singh (N.), (et al.), *5304*
- experimental methods, friction (solid solid), interference fits, stress analysis, Ghosh (S.P.), Dattaguru (B.), (et al.), *5316*
- crack tip geometry, error, fracture mechanics, stress intensity factor, Doyle (J.F.), Kamle (S.), (et al.), *5317*
- holes, plane strain, plates (holed), strain measurement, stress concentration, Erickson (M.), Durelli (A.J.), *6461*
- beams, boundary conditions, design (optimum), plates (holed), slots, Durelli (A.J.), Rajaiah (K.), *6504*
- optimization, plane stress, plates (holed), Durelli (A.J.), Rajaiah (K.), *6506*
- bars, stress concentration, Fessler (H.), Woods (P.J.), *7284*
- stress concentration, stress intensity factor, Richard (H.A.), *7541*
- strain measurement, stresses (normal), Vologzhaninov (Yu.I.), *7545*
- airy stress function, plane stress, scattered light, Pindera (J.T.), *7546*
- crack tip geometry, fracture mechanics, stress intensity factor, white light, Chiang (F.P.), Asundi (A.), *7555*
- brittle fracture, caustics, crack tip geometry, fracture mechanics, surfaces, Theocaris (P.S.), *7556*
- photoelasticity (three dimensional), scattered light, stress analysis, Ascough (J.), *11313*

photoelasticity (dynamic), biomechanics, birefringent materials, Harris (J.K.), *481*
- crack initiation, crack propagation, rayleigh waves, Rossmanith (H.P.), Fourney (W.L.), *2465*
- crack opening displacement, crack propagation, stress intensity factor, Rossmanith (H.P.), *3453*
- crack propagation, fracture mechanics, wave interactions, Rossmanith (H.P.), Shukla (A.), *3481*
- faraday rotator, holography, Qin (Yu.W.), *3484*
- thermal stresses, thermoelasticity (transient), Miskioglu (I.), Gryzagorides (J.), (et al.), *7957*
- boreholes, explosive loading, oil wells, Fourney (W.L.), Barker (D.B.), (et al.), *8408*
- impact, lasers, stress analysis, Grellier (J.P.), Lagarde (A.), *10311*
- cracks, plane stress, scattered light, stress intensity factor, Ross (E.L.), Kaminski (G.), (et al.), *10312*

photoelasticity (three dimensional), cylindrical bodies, holes, stress concentration, Stanley (P.), Day (B.V.), *2468*
- lasers, photoelasticity, scattered light, Berghaus (D.G.), *3482*
- birefringent materials, scattered light, Robert (A.), Royer (J.), *7547*
- photoelasticity, scattered light, stress analysis, Ascough (J.), *11313*

photography, fracture, joints, mining, rocks, Hagan (T.O.), *426*
- caustics, crack arrest, stress intensity factor, Theocaris (P.S.), Milios (J.), *472*
- biomechanics, experimental mechanics, kinematics, Miller (N.R.), Shapiro (R.), (et al.), *1046*
- flow measurement, mach reflection, reflection, shock waves, transition, Ben-Dor (G.), Takayama (K.), *6714*
- artificial satellites, orbit mechanics, Bykov (O.P.), *6878*
- bubble dynamics, evaporation, Lerner (Y.), Sonn (A.), (et al.), *6991*
- flow, visualization, Van Dyke (M.), *8667*
- schlieren methods, visualization, Kaspar (J.), *8668*

photoplasticity, friction (solid solid), plasticity, strain measurement, Gomide (H.A.), Burger (C.P.), *3483*
- composite materials, elasticity (linear), shells, viscoelasticity, Kuznetsov (G.B.) eds., Shakirov (N.V.), *5071, book*

photothermoelasticity, analysis, holes, photoviscoelasticity, plates (circular), Demidova (I.I.), *1392*
photoviscoelasticity, dynamic stresses, impact, propagation, time dependence, Arenz (R.J.), Soltesz (U.), *1391*
- analysis, holes, photothermoelasticity, plates (circular), Demidova (I.I.), *1392*

physical properties, continental slope, soils, structure, Mcgregor (B.A.), Bennett (R.H.), (et al.), *410*
- crack propagation, failure, Vinokurov (V.A.), Makarov (G.I.), *469*
- composite materials, materials, nondestructive tests, Van Suchtelen (J.), *1211*
- conductivity, liquids, sound speed, thermal properties, Mamedov (A.M.), *1656*

Pian (T.H.H.), finite element techniques, plates, shells, structural analysis, survey, variational methods, Tong (P.), *83*
- see Kondo (K.), *1234*
- see Kondo (K.), *2233*
- see Kondo (K.), *6212*
- see Bar-Yoseph (P.), *9249*

Piat (J.-F.), boundary layer (turbulent), flow measurement, interface phenomena, richardson number, Hopfinger (E.J.), *8557*
Piau (J.-M.), dilute solutions, drag reduction, hot film, polymers, *6590*
Pica (A.), mindlin plates, plates, postbuckling behavior, shells (of revolution), shells (shallow), Wood (R.D.), *9283*
Picard (R.), see Neittaanmaki (P.), *5026*
Pichard (C.R.), metals, thermal properties, thin films, Tellier (C.R.), (et al.), *4003*
Pickens (J.R.), aluminum alloys, corrosion fatigue, high strength, powder metallurgy, *8368*
Pickering (G.A.), culverts, locks, valve loss, valves, *3602*
Pickering (W.M.), see Sozou (C.), *11388*
Picot (J.J.C.), atomization, drops, measurements, sprays, Tomey (T.D.), (et al.), *6985*
Piepers (J.), see Reijnhart (R.), *8030*
Pierce (A.D.), acoustic waves, aeroacoustics, energy conservation, fluid mechanics, *897*
- see Kinney (W.A.), *3943*

Pierce (F.J.), see Tennant (M.H.), *2761*
piercing, detonation (condensed phase), explosives, impact, Lucas (G.), Sorel (J.), (et al.), *6893*
- punch problems, tubes, Johnson (W.), Reid (S.R.), (et al.), *9429*

Pierini (P.), see Law (C.G.) Jr., *2848*
piers, cylindrical bodies, drag, grids, piles, reynolds stresses, submerged bodies, Ball (D.J.), Hall (C.D.), *2585*
- dynamic analysis, elastoplasticity, reinforced concrete, seismic loading, Ozaka (Y.), Yanagida (T.), (et al.), *3533*
- beaches, bottom irregularities, coastal engineering, sediment transport, Hashimoto (H.), Uda (T.-A.), *5393*
- bridges (suspension), modal analysis, seismic loading, substructuring, Balendra (T.), *6525*
- bed load, scour, sediment transport, Jain (S.C.), Fischer (E.E.), *6601*
- bed load, river beds, scour, vortices, Qadar (A.), *7649*
- bridges, cylindrical bodies, scour, Jain (S.C.), *9518*
- axial loading, caissons, foundations, strength, Gruodis (R.I.), *11329*

Pierson (B.L.), aeroelasticity, design, flutter, panels, supersonic flow, Hajela (P.), *7907*
Pierucci (M.), bending, fluid-structure interaction, plates (thick), *2709*
Piesche (M.), see Felsch (K.-O.), *10580*
Pietrafesa (L.J.), see Klinck (J.M.), *9938*
Pietraszkiewicz (W.), nonlinear theory, shells (nonlinear), *1235*
- bending, finite strain, shells (nonlinear), theory, *5161*

Pietruszczak (S.), finite element techniques, stability (numerical), strain softening, Mroz (Z.), *94*
piezoelectric devices, elastic waves, electric effects, surface waves, Cerowski (Z.), Opilski (A.), *1298*
- asymptotic methods, torsional waves, Paul (H.S.), Raju (D.P.), *4443*
- fluid-structure interaction, vibration, Borisyuk (A.I.), Kirichok (I.F.), *5222*
- attenuation, damping, vibration, Bondarenko (A.A.), Kutsenko (G.V.), (et al.), *6324*
- disks, travelling waves, Vovkodav (I.F.), Talatynova (E.K.), *6328*
- deformation, elastoplasticity, fatigue, ultrasonics, Bajons (P.), *6464*
- ceramics, electromechanical components, transducers, Aronov (B.S.), *6465*
- nondestructive tests, transducers, ultrasonics, Panin (V.I.), *6483*
- half space, nondestructive tests, transducers, ultrasonics, Kasatkin (B.A.), Pavin (N.Ya.), *6485*
- ceramics, shells (of revolution), vibration (forced), Gololobov (V.I.), *7400*
- ceramics, electromechanical components, vibration (free), Aronov (B.S.), *11131*
- transducers, underwater acoustics, Ricketts (D.), *12008*
- impulse, transducers, Hazony (D.), *12009*

piezoelectrics, boundary elements, elasticity (linear), Tanaka (K.), Tanaka (M.), *242*

- crystals, dynamic properties, shock, single crystals, Novitskii (E.Z.), Korotchenko (M.V.), (et al.), *2499*
- arrays, diagnostics, transducers (ultrasonic), ultrasonics, Sato (J.), Kawabuchi (M.), (et al.), *2955*
- electroelasticity, electromechanical components, Budgayci (N.), Bogy (D.B.), *3239*
- cracks, elastodynamics, electroelasticity, scattering, shear waves, Sabbagh (H.A.), *3240*
- acoustic emission, transducers, Hill (E.K.), Egle (D.M.), *3984*
- anisotropic media, nonhomogeneous media, Muller (L.), *4337*
- sound generation, vibration, wave generation, Kinh (N.V.), Pajewski (W.), *5783*
- bones, ceramics, Johnson (M.W.), Williams (W.S.), (et al.), *6008*
- biomechanics, bones, elastic waves, electroelasticity, Guzelsu (N.), Saha (S.), *6026*
- electroelasticity, magnetoelasticity, thermoelectric phenomena, Parkus (H.) ed., *7265, book*
- bones, electroelasticity, materials properties, Johnson (M.W.), Chakkalakal (D.A.), (et al.), *9051*
- membranes, transducers, Lerch (R.), *11898*

Pifko (A.B.), see Levy (A.), *5121*

Piggott (M.R.), see Martinez (G.M.), *6190*
- composite materials, compression, fibers, mechanical analysis, strength, *6191*

Pignataro (M.), beams, buckling, frames, hinged bodies, postbuckling behavior, Rizzi (N.), (et al.), *343*
- see Di Carlo (A.), *3321*
- buckling, frames, postbuckling behavior, Di Carlo (A.), (et al.), *9281*

Pikalov (V.V.), see Klimkin (V.F.), *5694*

Pikashov (V.S.), fluidized beds, heat transfer (combined modes), two phase flow, Ilchenko (A.I.), (et al.), *10613*

Pilarski (A.), adhesives, bonded joints, layered media, ultrasonics, Pawlowski (Z.), *543*

Pilat (M.J.), see Prem (A.), *7001*

piles, dynamic response, elastic foundations, vibration (forced), Aboul-Ella (F.), Novak (M.), *386*
- bearing capacity, soils, Rollberg (D.), *1326*
- bearing capacity, soils, Murff (J.D.), *1327*
- clay, scale models, Ranjan (G.), Ramasamy (G.), (et al.), *1328*
- load transfer, loads, porous media, saturation, soils, Niumpradit (B.), Karasudhi (P.), *2385*
- cylindrical bodies, drag, grids, piers, reynolds stresses, submerged bodies, Ball (D.J.), Hall (C.D.), *2585*
- field tests, saturation, soils, stress strain relationships, Bartolomei (A.A.), Yushkov (B.S.), (et al.), *3408*
- foundations, scale models, soil structure interaction, soils, Wiesner (T.J.), Brown (P.T.), *3409*
- seismic loading, soils, Nuti (C.), *3410*
- field tests, sand, uplift, Prakash (C.), *3411*
- experimental methods, settlements, Dente (G.), *3412*
- bridges, layered media, soil structure interaction, Takemiya (H.), Yamada (Y.), *4036*
- clay, stability, Burgess (I.W.), *5256*
- field tests, Ottaviani (M.), Marchetti (S.), *5258*
- cyclic loading, offshore structures, Dawson (T.H.), *5365*
- bridges, foundations, matrix methods, reinforced concrete, structural response, (G.), *7607*
- dynamic response, friction, soil structure interaction, vibration, Akiyoshi (T.), *8014*
- buildings, foundations, joints, rock mechanics, shear, Dight (P.M.), Chiu (H.K.), *9485*
- flexible bodies, oscillating bodies, vortex shedding, waves, Angrilli (F.), Cossalter (V.), *9512*
- seismic loading, soil structure interaction, Kagawa (T.), Kraft (L.M.) Jr., *9919*
- design, Poulos (H.G.), Davis (E.H.), *10250, book*
- soils, vibration, vibratory driving, Rodger (A.A.), Littlejohn (G.S.), *10252*
- design, lateral pressure, Bannerjee (R.), *10255*
- soils, stresses, Chickanagappa (L.S.), Ramiah (B.K.), (et al.), *10256*
- caps, footings, interaction, Akinmusuru (J.O.), *10257*
- soil structure interaction, vibration, Nogami (T.), Novak (M.), *10258*
- biaxial loading, design, reinforced concrete, Klein (G.K.), Karavaev (V.N.), *10259*
- experimental methods, reinforced concrete, strain gages, Gatti (G.), Collotta (T.), (et al.), *10260*
- rafts, stability, Balaam (N.P.), Booker (J.R.), *11178*
- analytical methods, design, soil consolidation, Randolph (M.F.), Wroth (C.P.), *11179*

Pilhofer (T.), see Krizan (P.), *7971*

Pilipchuk (V.N.), see Manevich (L.I.), *10191*

Pilkey (W.), see Woomer (E.), *11145*

Pilkey (W.D.), see Chu (F.H.), *1114*

Pilkington (R.), crack growth, crack opening displacement, creep, elastic behavior, Smith (E.), *8383*

Pilyugin (N.N.), see Apshtein (E.Z.), *796*
- air, approximation methods, radiation, wakes, Tikhomirov (S.G.), (et al.), *11516*

Pimsner (V.), airfoil characteristics, blades, cascades, turbines, two dimensional flow, Beran (N.), *4740*

Pina (E.), developable surfaces, membrane theory, shells, Campoy (G.), *5158*

Pina (H.L.G.), boundary elements, computing techniques, integration, singularities, Fernandes (J.L.M.), Brebbia (C.A.), *4179*

Pinaev (A.V.), see Mitrofanov (V.V.), *1797*

pinch effect, alfven number, generators, magneto fluid dynamics, pumps, Rutkowski (J.), *9799*
- electron beams, modeling, relativity, vlasov equation, Zharinov (A.V.), Chikhachev (A.S.), *9802*

Pinder (G.F.), see Safai (N.M.), *6377*

Pindera (J.T.), airy stress function, photoelasticity, plane stress, scattered light, *7548*
- see Krishnamurthy (A.R.), *9678*

Pineau (A.), see Lemant (F.), *454*

Pinet (B.), leaks, models, two phase flow, *1869*

Pinkster (J.A.), drift, floating structures, nonlinear analysis, wave loads, *3714, book*

pinned joints, dynamic behavior, seismic loading, structural response, Ballio (G.), Gobetti (A.), (et al.), *8321*

Pinus (N.Z.), atmospheric circulation, cyclones, meteorology (physical), Kapitanova (T.P.), *12076*

Pinyagin (A.Yu.), binary flow, cavities, convection (free), inclined cavity, liquids, thermal diffusion, Pshenichnikov (A.F.), *8706*

pipe flow, entrainment, laminar flow, swirl flow, Singh (M.P.), Sinha (P.C.), (et al.), *610*
- approximations (higher order), ducts (curved), elliptical cross-section, noncircular pipes, Srivastava (R.S.), *611*
- laminar flow, noncircular pipes, velocity profiles, Vasilescu (A.), Andrei (V.I.), *612*
- drag reduction, entrance region, integral methods, turbulent flow, Embaby (M.H.), Verba (A.), *615*
- analogies, turbulent flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *617*
- laminar flow, non newtonian flow, yield condition, Froishteter (G.B.), Vinogradov (G.V.), *619*
- entrance region, heat transfer, integral methods, transforms, Vick (B.), Ozisik (M.N.), (et al.), *734*
- convection (forced), engines, heat transfer, jets, swirl flow, Caton (J.A.), Heywood (J.B.), *735*
- critical heat flux, flashing, friction (internal), pressure drop, thermodynamics (nonequilibrium), void fraction, Miropolskiy (Z.L.), Shneyerova (R.I.), (et al.), *747*
- fluid injection, heat transfer, mass transfer, suction, Zaychik (L.I.), *815*
- liquid metals, magneto fluid dynamics, numerical analysis, pulsatile flow, Sudou (K.), Tomita (Y.), (et al.), *864*
- liquid gas mixture, transition, two phase flow, Barnea (D.), Shoham (O.), (et al.), *938*
- mercury, prandtl number, prandtl number (low), turbulence (structure), Eyler (L.L.), Sesonske (A.), *1556*
- holdup, liquid liquid interface, oil-water flow, pressure drop, Mukherjee (H.), Brill (J.P.), (et al.), *1558*
- non newtonian flow, pressure gradient, vibration, Phan-Thien (N.), *1559*
- hydrodynamic stability, non newtonian flow, shear-rate dependent, viscosity, Akbay (U.), *1560*
- navier stokes equation, numerical analysis, rotational flow, Pareschi (A.), Montanelli (P.), *1565*
- convection, spectra, turbulence, turbulence (correlations), Mcconachie (P.J.), *1584*
- boilers, critical heat flux, dryout, helical flow, pressure drop, tubes, two phase flow, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
- hydrodynamic pressure, sound generation, turbulent flow, vibration (flow induced), Bull (M.K.), Norton (M.P.), *1807*
- ducts, ducts (constant area), two phase flow, Prasad (N.K.), Chand (P.), (et al.), *1841*
- bends, liquid gas mixture, two phase flow, Hoang (K.), Davis (M.R.), *1853*
- approximations (higher order), entrance region, mass transfer, turbulent flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *2645*
- approximations (higher order), ducts (variable area), viscoelastic fluids, Williams (E.W.), Javadpour (S.H.), *2646*
- approximations (higher order), unsteady flow, viscoelastic fluids, Manero (O.), Walters (K.), *2647*
- boundary layer, coherent structure, jets, turbulence (structure), Cantwell (B.J.), *2688*
- articulated structures, dynamic stability, pipelines, vibration (parametric), Rousselet (J.), Herrmann (G.), *2719*
- compressible flow, flow measurement, viscous flow, Botezatu (N.P.), *2762*
- non newtonian flow, turbulent flow, Quader (A.K.M.A.), *2805*
- heat transfer, turbulent flow, viscoelastic fluids, Cho (Y.I.), Ng (K.S.), (et al.), *3670*
- entrance region, laminar flow, porous walls, Masuzawa (J.), Tanahashi (T.), (et al.), *3672*
- constrictions, experimental results, hydrodynamic stability, reynolds number (critical), Lopez (J.L.), *3705*

- drag reduction, heat transfer, turbulent flow, Smith (R.), Edwards (M.F.), *3708*
- resonance, unsteady flow, wavy walls, Latinopoulos (P.), Tolikas (D.K.), *3711*
- buoyant flow, convection, heat transfer, supercritical flow, turbulent flow, Kakarala (C.R.), Thomas (L.C.), *3790*
- laminar flow, power law fluids, pressure drop, thermal effects, Nowak (Z.), Gryglaszewski (P.), (et al.), *3803*
- laminar flow, power law fluids, pressure drop, thermal effects, viscous effects, Gryglaszewski (P.), Nowak (Z.), (et al.), *3804*
- convection, diffusion, plug flow, Bauer (H.P.), *3851*
- Benedict (R.P.), *4616, book*
- fluid injection, porous walls, transpiration, turbulent flow, Eroshenko (V.M.), Ershov (A.V.), (et al.), *4622*
- developing flow, inlet flow, laminar flow, non newtonian flow, Al-Nassri (S.A.), Unny (T.), *4626*
- channel flow, hydrodynamic stability, stability theory, Stuart (J.T.), Meyer (R.E.), *4641*
- boundary layer, turbulence, turbulence model, Lam (C.K.G.), Bremhorst (K.), *4548*
- extended surfaces, fins, heat transfer, laminar flow, Sparrow (E.M.), Charmchi (M.), *4699*
- buoyant flow, cryogenics, geysering, Shugan (I.V.), Bosykh (L.A.), *4703*
- boundary layer (turbulent), condensation (filmwise), heat transfer, turbulent flow, Chisholm (D.), *4706*
- culverts, discharges, head, scale models, Sassy (L.), *5387*
- eddy viscosity, turbulent flow, Vasilescu (A.A.), Andrei (V.I.), *5438*
- dimensional analysis, osborne reynolds formulae, turbulent flow, Barr (D.I.H.), *5440*
- slots, sudden expansion, velocity profiles, Skawinski (R.), Lasowska (A.), (et al.), *5443*
- developing flow, hydrodynamic stability, reynolds number (critical), velocity profiles, Garg (V.K.), *5460*
- oscillating bodies, valves, water hammer, Thomann (H.), *5478*
- boiling, critical heat flux, roughness, Chernobai (V.A.), *5546*
- annuli, convection (free), heat transfer, prandtl number, Kuehn (T.H.), Goldstein (R.J.), *5551*
- freezing, hydrodynamic stability, thermal instability, turbulent flow, Thomason (S.B.), Mulligan (J.C.), *5578*
- gases, mixtures, particles, Ginestra (J.C.), Rangachari (S.), (et al.), *5833*
- annular flow, friction factor, moving surfaces, transition, Shands (J.), Alfredsson (H.), (et al.), *6648*
- developing flow, hydrodynamic stability, reynolds number (critical), three dimensional flow, Garg (V.K.), Gupta (S.C.), *6676*
- acoustic emission, duct flow, heat transfer, resonance, turbulent flow, unsteady flow, Andre (P.), Creff (R.), *6764*
- bond number, critical heat flux, tubes, Nejat (Z.), Mottaghian (R.), *6774*
- convection, heat transfer (combined modes), Hieber (C.A.), *6780*
- brinkman number, convection (forced), non newtonian flow, Dunwoody (N.T.), Hamill (T.A.), *6789*
- heat transfer, helium, resistance, two phase flow, Petukhov (B.S.), Zhukov (V.M.), (et al.), *6976*
- channel flow, critical speed, free boundary, particle fluid flow, Bonapace (A.C.), *7658*
- computing techniques, heat transfer, laminar flow, noncircular pipes, swirl flow, Masliyah (J.H.), Nandakumar (K.), *7715*
- rotational flow, turbulent flow, wavy walls, Silberman (E.), *7717*
- turbulence (structure), turbulent flow, Langeheineken (T.), *7718*
- flexible walls, porous walls, unsteady flow, Ohki (M.), *7719*
- nonlinear analysis, rivlinericksen fluid, viscoelastic fluids, Erdogan (E.), *7721*
- heat transfer, inlet flow, turbulent flow, Lau (S.C.), Sparrow (E.M.), (et al.), *7751*
- dynamic stability, vibration (flow induced), Thompson (J.M.T.), Lunn (T.S.), *7773*
- heat transfer, laminar flow, pseudoplastic fluids, Joshi (S.D.), Bergles (A.E.), *7826*
- boiling, high pressure, thermal measurements, Sekoguchi (K.), Tanaka (O.), (et al.), *7830*
- friction (skin), laminar flow, unsteady flow, Achard (J.L.), Lespinard (G.M.), *8565*
- developing flow, surveys, turbulent flow, Klein (A.), *8571*
- drag reduction, eddy viscosity, turbulence model, Edwards (M.F.), Smith (R.), *8572*
- dilute solutions, drag reduction, polymers, pressure drop, Leca (A.), Hubert (I.), (et al.), *8578*
- heat transfer, micropolar media, non newtonian flow, Shirkot (K.S.), Thakur (D.S.), *8590*
- energy dissipators, oscillatory flow, pipe exit, wave engines, Knott (G.F.), Flower (J.O.), *8588*
- heat transfer, pulsatile flow, turbulent flow, unsteady flow, Creff (R.), Andre (P.), (et al.), *8615*
- critical heat flux, film cooling, film flow, heat transfer, surface tension, Ganic (E.N.), Roppo (M.N.), *8686*
- convection (free), film boiling, hydrodynamic stability, liquid vapor interface, thermal instability, two phase flow, Sherman (D.C.), Sabersky (R.H.), *8690*
- heat transfer, laminar flow, mist flow, spray flow, Yao (S.-C.), Rane (A.), *8697*
- convection, reynolds number (critical), thermal instability, El-Hawary (M.A.), *8713*
- drag reduction, polyacrylamide, turbulent flow, viscous effects, weissenberg number, Kwack (E.Y.), Hartnett (J.P.), *8722*
- jets, nuclear reactors, tube bundles, Krebs (L.), Bremhorst (K.), (et al.), *8725*
- conduction (heat), convection (forced), heat exchangers, heat transfer (combined modes), slug flow, Vick (B.), Ozisik (M.N.), *8745*
- monte carlo analysis, simulation, turbulent flow, two phase flow, Yoshida (H.), Masuda (H.), (et al.), *8893*
- acceleration, friction factor, roughness, Baibikov (B.S.), Oreshkin (O.F.), (et al.), *9574*
- coils, ducts (curved), heat exchangers, laminar flow, secondary flow, Balejova (M.), Cakrt (J.), (et al.), *9576*
- choked flow, flashing, mass flow, two phase flow, Chisholm (D.), *9580*
- annuli, compressible flow, irrotational flow, rotating cylinders, swirl flow, Neuberger (A.W.), *9586*
- heat transfer, turbulence, Ibrahim (M.B.), Walker (V.), *9611*
- channel flow, convection (forced), viscous effects, Nazmeev (Yu.G.), Feifer (L.I.), (et al.), *9684*
- annular flow, critical heat flux, critical region, slug flow, Bonn (W.), Krebs (R.), (et al.), *9689*
- heat transfer, Soos (F.), *9734*
- design, hydraulics, pipelines, soil structure interaction, Stephenson (D.), *10369*
- acceleration, drag, unsteady flow, Ovsyannikov (V.M.), *10441*
- capsules, hydraulic transport, particle fluid flow, pressure drop, Tachibana (M.), Matsumoto (Y.), *10447*
- bubbly flow, convection (forced), heat transfer, two phase flow, Sekoguchi (K.), Nakazatomi (M.), (et al.), *10566*
- boiling, subcooled boiling, void fraction, Edelman (Z.), Elias (E.), *10575*
- heat transfer, laminar flow, non newtonian flow, nusselt number, power law fluids, rheology, Joshi (S.D.), Bergles (A.E.), *10582*
- flow obstructions, freezing, ice, Gilpin (R.R.), *10661*
- peclet number, solidification, Lee (S.L.), Hwang (G.J.), *10662*
- diffusion, impurities, porous walls, Eroshenko (V.M.), Zaichik (L.I.), *10669*
- annular flow, magneto fluid dynamics, numerical methods, porous walls, Verma (P.D.S.), Singh (M.), *10732*
- end effects, interface phenomena, magneto fluid dynamics, thermoelectric phenomena, Shercliff (J.A.), *10735*
- compressible flow, numerical methods, unsteady flow, Ainola (L.Ya.), Lamp (Yu.Yu.), (et al.), *11417*
- deposition, oil flow, solidification, wax, Krasovitskii (B.A.), Maron (V.I.), *11488*
- jets, liquid liquid interface, mixing, Fitzgerald (S.D.), Holley (E.R.), *11492*
- laminar flow, molecular diffusion, oscillatory flow, Purtell (L.P.), *11494*
- flow irregularities, pressure drop, two phase flow, unsteady flow, vibration (flow induced), Fokin (B.S.), Goldberg (Ye.N.), *11495*
- non newtonian flow, power law fluids, unsteady flow, velocity profiles, Balmer (R.T.), Fiorina (M.A.), *11497*
- coal, experimental results, slurries, Shook (C.A.), Haas (D.B.), (et al.), *11498*
- risers, slug flow, two phase flow, Schmidt (Z.), Brill (J.P.), (et al.), *11499*
- critical phenomena, thermal explosions, variable fluid properties, viscous flow, Aleksanopolskii (N.B.), Naidenov (V.I.), *11501*
- friction factor, materials possessing memory, non newtonian flow, thixotropic media, Kemblowski (Z.), Petera (J.), *11504*
- simulation, unsteady flow, viscoelastic fluids, De Saint Victor, Ly (D.P.), (et al.), *11506*
- hydrodynamic stability, swirl flow, vortex flow, Suematsu (Y.), Ito (T.), *11537*
- mass transfer, molecular diffusion, turbulence, Von Alfthan (C.), Rantapuska (S.), *11558*
- numerical methods, unsteady flow, water hammer, Wylie (E.B.), Streeter (V.L.), *11598*
- compressible flow, compressional waves, entrance region, Zhestkov (G.B.), Mareev (V.A.), *11601*
- beams (timoshenko), equations of motion, fluid-structure interaction, follower forces, Laithier (B.E.), Paidoussis (M.P.), *11642*
- articulated structures, damping, dynamic stability, vibration (flow induced), Sugiyama (Y.), Noda (T.), *11685*
- flexible walls, unsteady flow, viscoelastic materials, Regirer (S.A.), Rutkevich (I.M.), *11690*
- pipelines, vibration, viscoelastic materials, Guin (M.S.), *11691*

pipelines, finite element techniques, geometric nonlinearities, ocean, submerged bodies, three dimensional formulation, Odorizzi (S.), Schrefler (B.A.), *93*

- buried structures, ocean bed, porous media, potential flow, wave loads, Macpherson (H.), *562*
- compressors, gas turbines, performance, pumps, Kuznetsov (A.L.), Evdokimov (V.E.), (et al.), *700*
- buckling, large displacement, lateral stability, Angrilli (F.), Bergamaschi (S.), *1256*
- offshore structures, pipe laying, sensitivity, wave loads, Rammant (J.P.), Backx (E.), *1453*
- characteristic methods, compressional waves, pneumatic components, transient effects, Matsumoto (Y.), Ishibashi (K.), *1597*
- dynamic analysis, frequency response, pneumatic components, Matsumoto (Y.), Okazaki (M.), *1598*

- pneumatic transport, slug flow, two phase flow, waves, Tomita (Y.), Jotaki (T.), (et al.), *1839*
- liquid gas mixture, transition, two phase flow, Weisman (J.), Duncan (D.), (et al.), *1850*
- submerged bodies, vortex shedding, wave loads, Schrecker (M.), *2584*
- friction factor, roughness, Kumar (A.), *2650*
- articulated structures, dynamic stability, pipe flow, vibration (parametric), Rousselet (J.), Herrmann (G.), *2719*
- design, graph theory, integer programming, networks, optimization, Grosz (M.), *3193*
- coal, particulate flow, suspensions, viscometry, Davis (P.K.), Muchmore (C.B.), (et al.), *3594*
- laminar flow, pulsatile flow, unsteady flow, visualization, Muto (T.), Nakane (K.), *3666*
- eddy viscosity, turbulent flow, unsteady flow, Kita (Y.), Adachi (Y.), (et al.), *3667*
- numerical methods, ocean bed, wave loads, Efthymiou (M.), Narayanan (R.), *3718*
- characteristic methods, hyperbolic equations, rupture, shock tubes, Cronje (J.S.), Bishnoi (P.R.), (et al.), *3721*
- diffusion, particles, slurries, trajectories, two phase flow, Okuda (K.), *4011*
- granular media, particle fluid flow, pressure drop, Ochi (M.), Nakajima (H.), (et al.), *4619*
- mining, ocean bed, vibration (flow induced), Rogers (A.C.), Abramson (H.N.), *4665*
- elastic foundations, ocean bed, soil mechanics, stress analysis, underwater structures, winkler foundation, Hobbs (R.E.), *6551*
- slug flow, two phase flow, Schmidt (Z.), Brill (J.P.), (et al.), *6969*
- dugdale model, fracture criteria, fracture mechanics, welded structures, De Wit (R.), Smith (J.H.), *7531*
- experimental results, ocean waves, submerged bodies, wave loads, Grace (R.A.), Zee (G.T.Y.), *7769*
- bending, cracks, fracture criteria, j-integral, plasticity, Zahoor (A.), Kanninen (M.F.), *8400*
- crack arrest, fracture criteria, fracture toughness, material testing, pressure vessels, Hahn (G.T.) eds., Kanninen (M.F.), *8415, book*
- mining, ocean bed, vibration (flow induced), Chung (J.S.), Whitney (A.K.), (et al.), *8626*
- buried structures, seismic loading, underground, Hindy (A.), Novak (M.), *8967*
- estimation, leak detection, leaks, piping systems, Siebert (H.), Klaiber (T.), *9192*
- design, hydraulics, pipe flow, soil structure interaction, Stephenson (D.), *10369*
- oscillating bodies, submerged bodies, virtual mass, wave loads, Efthymiou (M.), Narayanan (R.), *10394*
- attenuation, pressure gradient, water hammer, Thielen (H.), Burmann (W.), *10487*
- compressors, energy conservation, exhaust gases, gas turbines, heat engines, heat exchangers, Ludtke (K.), *10547*
- pulsatile flow, slurries, Round (G.F.), *10822*
- deformation, experimental mechanics, thermal loading, Kogan (E.A.), Zlodeev (V.P.), *11333*
- bodies of revolution, capsules, dynamic analysis, floating bodies, rafts, rivers, Ginevskii (A.S.), Kolesnikov (A.V.), *11387*
- annular flow, dynamic stability, hydroelasticity, Kozarov (M.), Mladenov (K.), *11687*
- pipe flow, vibration, viscoelastic materials, Guin (M.S.), *11691*
- hydraulic transport, slurries, surveys, Round (G.F.), *79999*

pipes, bubble dynamics, buoyant flow, flow measurement, river beds, Sargent (D.M.), *564*

- choked flow, discharges, tubes, Tikhonenko (L.K.), Kevorkov (L.R.), (et al.), *941*
- buried structures, seismic waves, soil structure interaction, underground, Parnes (R.), Weidlinger (P.), *969*
- cables, flexible walls, nonlinear analysis, numerical analysis, offshore structures, Peyrot (A.H.), *1216*
- bending, bends, shells (cylindrical), tubes, Kitching (R.), Zarrabi (K.), (et al.), *1241*
- buried structures, earthquake effects, underground, Hindy (A.), Novak (M.), *1882*
- crack penetration, crack propagation, fluid-structure interaction, Emery (A.F.), Perl (M.), (et al.), *3466*
- buckling, buried structures, nondestructive tests, underground, Valsangkar (A.J.), Britto (A.M.), (et al.), *3567*
- particle fluid flow, pressure drop, sediment transport, slurries, Morikawa (Y.), *3607*
- acoustic waves, nonlinear waves, reflection, Nakamura (T.), Nakamura (A.), (et al.), *3942*
- brittle materials, experimental mechanics, rupture, Baum (M.R.), Elston (M.J.H.), *4548*
- buried structures, finite element methods, flexible bodies, underground, Moser (K.), Swoboda (G.), *5260*
- circumferential cracks, ductile fracture, j-integral, stability theory, Zahoor (A.), Kanninen (M.F.), *5303*
- ducts, modes, sound propagation, vibration, Kerschen (E.J.), Johnston (J.P.), *5773*
- mixtures, reynolds number (small), turbulent flow, two phase flow, Chisholm (D.), *5815*
- cracks, fatigue, flaw detection, reflection, threaded joints, Lyapkov (A.A.), Spektorov (I.Sh.), *6494*
- geometric nonlinearities, offshore structures, underwater structures, wave loads, Felippa (C.A.), Chung (J.S.), *6534*
- finite element techniques, shells (nonlinear), Lazzeri (L.), *7346*
- dynamic analysis, elastoplasticity, large displacement, Heifetz (J.), Benjamin (M.), (et al.), *7362*
- fracture mechanics, inelasticity, stress analysis, thermal stresses, Severud (L.K.), *7619*
- experimental mechanics, fatigue, flaws, fracture, Shibata (K.), Oba (T.), (et al.), *7620*
- mine shafts, mines, reinforced bodies, stress analysis, thin walled structures, Tsoi (N.G.), Kolesnikov (A.V.), (et al.), *7621*
- cylindrical bodies, heat transfer, phase changes, stefan problem, underground, variable thermal properties, Lunardini (V.J.), *7854*
- bolted joints, flanges, pressure vessels, Blach (A.E.), Bazergui (A.), *8464*
- buckling (local), experimental mechanics, propagation, Kyriakides (S.), Babcock (C.D.), *8465*
- buckling, collapse, experimental mechanics, explosive loading, Kinelovskii (S.A.), *8466*
- dust, two phase flow, Radhakrishnamacharya (G.), Maiti (M.K.), *8895*
- buckling, buried structures, pressurized pipes, soil structure interaction, Bournazel (C.), *9293*
- forming, rolling, wrinkling, Kiuchi (M.), Shintani (K.), (et al.), *9374*
- composite materials, fibers, reinforced bodies, Ainsworth (L.), *9466*
- drag reduction, polymers, sewerage, Sellin (R.H.J.), Ollis (M.), *9504*
- elbows, penalty function, shells, stiffness matrix, Bathe (K.J.), Almeida (C.A.), *10063*
- elastoplasticity, elbows, finite element techniques, Lazzeri (L.), *10068*
- computer programming, cracks, finite element techniques, stress intensity factor, three dimensional formulation, Miyazaki (N.), Watanabe (T.), (et al.), *10284*
- bending, cracks, j-integral, material testing, stability theory, Wilkowski (G.M.), Zahoor (A.), (et al.), *10301*
- particle size, slurries, transport, two phase flow, Parzonka (W.), Kenchington (J.M.), (et al.), *10823*

piping systems, design, graph theory, networks, optimization, Bhaskaran (S.), Salzborn (F.J.M.), *1165*

- power plants, vibration, Iotti (R.C.) eds., Bernstein (M.D.), *2327, book*
- dynamic analysis, nonlinear analysis, Prachuktam (S.), Bezier (P.), (et al.), *2548*
- cavitation, closed conduit flow, slurries, transient effects, Chaudhry (M.H.) eds., Yevjevich (V.), *3596, book*
- iterative methods, linear theory, Isaacs (L.T.), Mills (K.G.), *3597*
- edge cracks, reactor structures, stability theory, Tada (H.), Paris (P.C.), (et al.), *4501*
- cavitation, fluid-structure interaction, Kot (C.A.), Hsieh (B.J.), (et al.), *6803*
- acoustic loading, frequency domain techniques, vibration (forced), El-Raheb (M.), *8295*
- dynamic response, modal analysis, seismic loading, Krause (G.), *8467*
- networks, numerical methods, Wood (D.J.), Rayes (A.G.), *8583*
- estimation, leak detection, leaks, pipelines, Siebert (H.), Klaiber (T.), *9192*
- acoustics, dynamic effects, fluid-structure interaction, Schwirian (R.E.), Karabin (M.E.), *10071*
- design, failure, fatigue, fracture, materials properties, pressure vessels, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- fluid-structure interaction, matrix methods, vibration (flow induced), Keskinen (R.P.), *11600*
- valves, vibration (flow induced), water hammer, Silva (M.A.G.), *11603*
- compressional waves, ducts (variable area), resonance, Belik (N.P.), Chirva (L.G.), *11605*
- flapper valves, valves, vibration (flow induced), Hayashi (S.), Matsui (T.), (et al.), *11606*
- ducts (variable area), numerical methods, oscillatory flow, Belik (N.P.), Chirva (L.G.), *11629*
- boiling, two phase flow, water hammer, Wilkinson (D.H.), Dartnell (L.M.), *12102*

Pipkin (A.C.), continuum theory, fibers, networks, *255*

- cracks, failure, filamentary structures, reinforced bodies, textiles, Rogers (T.G.), *1385*

Piquemal (J.), interface phenomena, liquid liquid interface, measurements (dynamic), optical instruments, Barrau (J.J.), *3759*

Pirogov (E.N.), see Erasov (V.S.), *2485*

Pirumov (U.G.), see Davydov (L.M.), *810*

- see Kireev (V.I.), *5418*

Pisanko (A.N.), see Lesnichaya (V.A.), *10214*

Pisarenko (G.S.), damping, dissipation, dynamic response, mathematical models, Boginich (O.E.), *3362*

- creep, cyclic loading, low cycle fatigue, metals, Troshchenko (V.T.), (et al.), *8213*

Pisarev (V.N.), see Gadzhiev (A.D.), *2624*

Piskareva (M.V.), see Akimov (A.I.), *10492*

Piskun (V.V.), see Kovalenko (V.A.), *322*

Piskunov (V.G.), see Antonenko (V.M.), *6307*
Pismen (L.M.), differential equations (partial), liquid liquid interface, plates, two component flow, viscous flow, Nir (A.), *9538*
Pismennyy (I.L.), frequency domain techniques, harmonic balance, harmonic linearization, nonlinear systems, oscillations, *4243*
Pissanetzky (S.), computing techniques, mesh generation, three dimensional formulation, *2062*
Pister (K.S.), see Ray (D.), *106*
- see Bhatti (M.A.), *12070*

Pister (K.S.) ed., mechanics, solid mechanics, structures, *1421, book*
piston driven flow, design, internal combustion engines, laser doppler velocimeters, swirl, Morse (A.), Whitelaw (J.H.), (et al.), *706*
- laser doppler velocimeters, unsteady flow, vortices, Bicen (A.F.), Vlachos (N.S.), (et al.), *707*
- hydraulic machinery, pumps, Beswarick (W.J.), *1637*
- engines, internal flow, laser doppler velocimeters, Morse (A.P.), Whitelaw (J.H.), (et al.), *1758*
- control, displacement control, pumps, Yamaguchi (A.), Ishikawa (T.), *2188*
- fluid power, hydraulics, pumps, El Heeny (Y.A.H.), *2757*
- expansion, shock waves, Emanuel (G.), *3720*
- data analysis, injection systems, pumps, Turcoiu (T.), Apostolescu (N.), *5503*
- sound generation, vibration (flow induced), Harris (G.R.), *5776*
- compressible flow, perturbation methods, shock waves, Schneider (G.H.), *9549*
- noise, noise abatement, positive displacement pumps, sound generation, Lechner (E.), Stich (B.), *10721*
- bearings (hydrostatic), friction, leaks, positive displacement pumps, Bakhin (I.I.), (et al.), *11752*

piston rings, coatings, residual stresses, stress analysis, thermoelasticity (steady), Kulik (A.Ya.), Shapiro (M.I.), *5099*
- cooling, heat transfer, internal combustion engines, Ustinov (A.N.), Neznaev (A.N.), (et al.), *5648*
- internal combustion engines, tribology, Furuhama (S.), Hiruma (M.), (et al.), *5650*
- design (optimum), Mcallister (G.T.), Rohde (S.M.), *8445*
- diesel engines, leaks, pressure, Ruddy (B.L.), Dowson (D.), (et al.), *8801*

pitching, aerodynamic performance, containers, ejectable containers, falling bodies, lift, Ramachandra (S.M.), Sudhakar (K.), (et al.), *2743*
- containers (partially filled), nonlinear analysis, oscillations, sloshing, Nakayama (T.), Washizu (K.), *5483*
- impact, ocean waves, ship slamming, vibration, Hansen (H.-J.), *5962*
- balancing, high speed, machinery, rotating shafts, yawing, Freudenstein (F.), Macey (J.P.), (et al.), *6553*
- critical region, heaving, shallow water, slender bodies, Plotkin (A.), *9942*
- heaving, rolling motion, ship motion, virtual mass, yawing, Troesch (A.W.), *10878*

Pitkaranta (J.), convergence, corners, dirichlet problem, finite element methods, lagrange multiplier, *9133*
pitot tube, error, three dimensional flow, vortex flow, Bubnov (V.A.), Gabdullin (I.Z.), (et al.), *5401*
- sensitivity, yawing, Millward (A.), *7075*
- mass transfer, measurements, two phase flow, Hau (K.-F.F.-L.), Banerjee (S.), *7970*
- calibration, data analysis, flow measurement, three dimensional flow, velocity measurement, Nishimura (H.), *8673*
- dilute solutions, inlets, laminar flow, polymers, Bistagnino (C.), Cancelli (C.), (et al.), *10444*

Pitt (S.P.), see Lynch (J.F.), *3956*
Pittman (C.M.), see Brewer (W.D.), *1723*
Pittr (J.), computing techniques, finite element techniques, thermal loading, Hartl (H.), *2076*
Pitts (E.), boundary conditions, hele-shaw cell, penetration, two component flow, viscous flow, *2597*
Pitts (J.H.), boiling, pressure vessels, steam, two phase flow, *1856*
Piva (A.), see Viola (E.), *1366*
- see Viola (E.), *7535*

Piva (R.), finite element methods, incompressible flow, navier stokes equation, two dimensional flow, Di Carlo (A.), (et al.), *2611*
Pivovarov (I.), existence theorems, nonconservative systems, periodic orbits, vibration, *1996*
- dynamic analysis, nonlinear analysis, vibration (nonlinear), vibration (self excited), *7371*

Pizey (G.), see Hsu (T.R.), *9716*
Pizialli (R.L.), biological joints, biomechanics, knees, tendons, Seering (W.P.), (et al.), *1946*
- see Seering (W.P.), *1947*

Place (W.), see Mertol (A.), *8756*
Plakhtienko (N.P.), nonlinear systems, structural analysis, vibration (forced), Lysak (N.V.), *1261*
- dissipation, dynamic properties, friction, vibration (forced), *2316*

Planat (M.), acoustic waves, anisotropic media, finite amplitude, rayleigh waves, *398*
Planchard (J.), acoustic waves, cavities, eigenvalues, resonance, tube bundles, *2949*

plane flow, compressible flow, rotational flow, streamlines, subsonic flow, vortex flow, Nikolskiy (A.A.), *568*
- diffusers, numerical methods, stalling, Bardina (J.), Lyrio (A.), (et al.), *1567*
- convection, eckert number, grashof number, heat transfer, incompressible flow, Gupta (A.S.), Popp (I.), (et al.), *1667*
- boundary layer (thermal), thermal measurements, turbulent flow, Andreopoulos (J.), Bradshaw (P.), *1678*
- boundary layer (thermal), buoyant flow, closed conduit flow, convection (free), Sparrow (E.M.), Prakash (C.), *1681*
- boundary layer (thermal), heat transfer (combined modes), laminar flow, nusselt number, Gosse (J.), *1710*
- convection (forced), heat transfer, laminar flow, transient effects, Hanawa (J.), *2788*
- boundary layer (thermal), boundary layer (turbulent), convection, heat transfer, transient effects, turbulent flow, Hanawa (J.), *3781*
- flow irregularities, three dimensional flow, Chelyshkov (V.S.), *4660*
- multilayer, temperature, thermal effects, Mkhitaryan (A.M.), Girol (A.P.), (et al.), *4698*
- convection (free), cylindrical bodies, laminar flow, Zariffeh (E.K.), Daguenet (M.), *4708*
- convection (free), edge effects, heat transfer, Hatfield (D.W.), Edwards (D.K.), *5549*
- binary flow, cellular motions, thermal instability, thermal waves, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *5554*
- chemically reactive flow, convection (forced), thermal instability, Eremin (E.A.), Kolesnikov (A.K.), *6785*
- integral methods, radiant interchange, radiation properties, Borishanskii (V.M.), Gotovskii (M.A.), (et al.), *7866*
- moving media, polymers, porous walls, Kalita (W.), Lubonski (J.), *8561*
- buoyancy, convection, injection, Grishin (A.M.), Gruzin (A.D.), (et al.), *8685*
- boundary layer, constitutive equations, heat transfer, micropolar media, Takhar (H.S.), Soundalgekar (V.M.), *10583*
- compressible flow, numerical methods, transonic flow, Kozel (K.), Polasek (J.), (et al.), *11430*
- channel flow, poiseuille flow, rarefied gases, Siewert (C.E.), *11437*

plane strain, finite difference methods, finite element techniques, mesh generation, Kunar (R.R.), *55*
- finite strain, imperfections, shear bands, shear stress, Abeyaratne (R.), Triantafyllidis (N.), *231*
- clay, modeling, saturation, strength, Mitachi (T.), Kitago (S.), *414*
- crack growth, crack opening displacement, Smith (E.), *467*
- plastic flow, plasticity, shear, shear bands, steel, Anand (L.), Spitzig (W.A.), *1196*
- cylindrical bodies, strain rate, work hardening, Lee (Y.S.), Patel (M.R.), (et al.), *1200*
- dynamic effects, forging, forming, high speed, inertia, materials properties, Arora (K.L.), Sachdev (A.S.), (et al.), *1338*
- analysis, caustics, elasticity, plane stress, Theocaris (P.S.), Ioakimidis (N.), (et al.), *1397*
- bending (elastic), bending (plastic), finite element methods, sheet metal, Oh (S.I.), Kobayashi (S.), *2399*
- deformation (plastic), elastoplasticity, finite element methods, Corradi (L.), Gioda (G.), *3260*
- forming, plasticity, stream function, Tomita (Y.), Seguchi (Y.), (et al.), *3274*
- bifurcation, sand, soil stability, Vardoulakis (I.), *4389*
- extrusion, slip line methods, Murakami (T.), Takahashi (H.), *4470*
- deformation (finite), elasticity (nonlinear), holes, plane stress, Varley (E.), Cumberbatch (E.), *5084*
- bending, defects, fracture toughness, steel, Boichenko (Yu.A.), Sosnin (A.V.), (et al.), *5333*
- penetration, plastic behavior, tools, Sitzer (M.R.), Durban (D.), *6406*
- holes, photoelasticity, plates (holed), strain measurement, stress concentration, Erickson (M.), Durelli (A.J.), *6461*
- necking, slip line methods, strips, Del (G.D.), Oding (S.S.), *8203*
- constitutive relations, crack opening displacement, elastoplasticity, Gao (Y.-C.), *9407*
- bends, creep, pressurized pipes, Zverkov (B.V.), Danyushevskii (A.I.), *10153*
- crack tip geometry, fracture, fracture toughness, specimen design, Wei (S.), Tingshi (Z.), (et al.), *10338*

plane stress, finite element techniques, stress concentration, structural optimization, Schnack (E.), *239*
- anisotropic media, work hardening, yield criteria, Hodge (P.G.) Jr., *268*
- analysis, fracture toughness, ultimate strength, Markochev (V.M.), Morozov (E.M.), *497*
- analysis, caustics, elasticity, plane strain, Theocaris (P.S.), Ioakimidis (N.), (et al.), *1397*
- finite strain, membranes, wrinkling, Wu (C.H.), Canfield (T.R.), *4369*
- deformation (finite), elasticity (nonlinear), holes, plane strain, Varley (E.), Cumberbatch (E.), *5084*
- finite element techniques, mesh generation, semi infinite media, singularities, Shephard (M.S.), Gallagher (R.H.), (et al.), *6104*
- masonry, plasticity, Tyupin (G.A.), *6184*
- composite materials, failure, strength, Tennyson (R.C.), Nanyaro (A.P.), (et al.), *6435*

- optimization, photoelasticity, plates (holed), Durelli (A.J.), Rajaiah (K.), *6506*
- airy stress function, photoelasticity, scattered light, Pindera (J.T.), *7546*
- geometric nonlinearities, material nonlinearities, reinforced concrete, shells (thin), Arnesen (A.), Sorensen (S.I.), (et al.), *7603*
- design (optimum), plates (holed), Dhir (S.K.), *8443*
- finite element techniques, plates (stiffened), ship structures, Mukhopadhyay (M.), *9140*
- cracks, photoelasticity (dynamic), scattered light, stress intensity factor, Ross (E.L.), Kaminski (G.), (et al.), *10312*
- acoustoelasticity, nondestructive tests, orthotropic materials, ultrasonics, Okada (K.), *10315*

plane surfaces, condensation (filmwise), thermal effects, Schroppel (J.), *808*
- convection (free), mass transfer, Arai (N.), Takahashi (S.), (et al.), *818*
- half space, stokes flow, viscous flow, Mukherjee (S.), Bhattacharyya (P.), *3619*
- adsorption, liquid vapor interface, power law geometrics, Philip (J.R.), *3850*
- processing, seismic waves, Nikolayev (I.V.), Leontyeva (T.N.), *7025*
- coordinate systems, heat transfer, navier stokes equation, three dimensional flow, Agrawal (A.K.), Peckover (R.S.), *10415*

plane waves, pressure distribution, stratified flow, wave generation, Dotsenko (S.F.), *1600*
- diffusers, modes, scattering, wave energy, Strube (H.W.), *3949*
- aerosols, finite amplitude, heat transfer, Borisov (A.A.), Vakhgelt (A.F.), (et al.), *7760*
- acoustic waves, barriers, liquid solid interface, reflection, ultrasonics, Claeys (J.M.), Leroy (O.J.), (et al.), *11648*
- barriers, diffraction, Kendig (R.P.), *11972*

planetary atmospheres, asymptotic behavior, drag, orbit decay, Chakravarty (A.J.M.), *4760*
- aerosols, meteorology, radiant interchange, Konyukh (L.A.), Yurevich (F.B.), (et al.), *5586*
- ballistics (terminal), optimal control, planetary entry, reentry, Ivanov (N.M.), Martynov (A.I.), (et al.), *5713*
- atmosphere, numerical methods, radiation, Karp (A.H.), *7065*
- ablation, conservation laws, interplanetary probes, shock layer, Moss (J.N.), Simmonds (A.L.), (et al.), *7777*
- gravity waves, magneto fluid dynamics, shear flow, wind, El Mekki (O.M.), *8822*
- astrophysics, propagation, shock waves, similarity methods, Pai (S.I.), Menon (S.), (et al.), *9637*
- compressible flow, plasma, rarefied gases, shock waves, supersonic flow, Gurevich (A.V.), Paschenko (N.T.), *11406*

planetary entry, algorithms, control, guidance, orbit determination, orbit mechanics, Bukharkina (A.P.), Golubev (Yu.F.), *2158*
- ballistics (terminal), optimal control, planetary atmospheres, reentry, ivanov (N.M.), Martynov (A.I.), (et al.), *5713*

planetary satellites, periodic orbits, resonance, solar system, stability theory, Wiesel (W.), *872*
- dissipation, friction (solid solid), moon, stochastics, tides, Cappallo (R.J.), Counselman (C.C.) III, (et al.), *3913*
- hamiltonian equations, perturbation theory, von zeipel method, Marchal (C.), *4761*
- lunar theory, perturbation theory, planetary theory, solar system, Standaert (D.), *6874*
- floquet theory, lunar theory, periodic orbits, periodic orbits, planetary satellites, solar system, solar system, Wiesel (W.E.), *6876*
- floquet theory, lunar theory, periodic orbits, periodic orbits, planetary satellites, solar system, solar system, Wiesel (W.E.), *6876*
- lunar theory, oblateness, perturbation methods, three body problem, Schmidt (D.S.), *6881*
- periodic orbits, perturbation theory, Khasanova (M.Kh.), *7918*
- computing techniques, periodic orbits, three dimensional formulation, Robin (I.A.), Markellos (V.V.), *7919*
- circumnavigation, lunar theory, orbit mechanics, perturbation methods, three body problem, Henrard (J.), *10771*

planetary theory, oblateness, potential theory, torque, two body problem, Schutz (B.E.), *3914*
- orbit mechanics, perturbation methods, satellites, second order analysis, Gooding (R.H.), *5700*
- lunar theory, perturbation theory, planetary satellites, solar system, Standaert (D.), *6874*
- gravimetrics, mars, potential theory, Christensen (E.J.), Williams (B.G.), *6887*
- circumnavigation, fluid mechanics, gravity waves, potential theory, Demin (V.G.), Barkin (Yu.V.), *7913*
- jacobian constant, restricted three body problem, solar system, stability theory, Szebehely (V.), Mckenzie (R.), *8837*
- libration theory, periodic orbits, restricted three body problem, Richardson (D.L.), *8840*
- galactic system, kepler orbits, stability theory, Szebehely (V.), *8844*
- collision models, rarefied gases, transition flow, two phase flow, Pai (S.I.), *11448*

planing surfaces, high speed flow, hulls, yawing, Casling (E.M.), *3034*
- fredholm equations, linear theory, surface tension, Tuck (E.O.), *7076*
- friction (skin), plates, wakes, Payne (P.R.), *8045*

Plant (R.E.), bifurcation, biomathematics, neural nets, neurons, *9198*

plasma, existence theorems, wave interactions, wave packets, Shulman (E.I.), *5*
- estimation, frequency response, mathematical models, Gvozdkov (Yu.V.), *138*
- arcs, cutting, heat transfer, Hinds (B.K.), De Almeida (S.M.), *436*
- electron beams, modes, numerical methods, turbulence (mechanisms), Kirk (J.), Weiland (J.), *865*
- capillary waves, evolution equations, gravity waves, nonlinear analysis, soliton solutions, Ma (Y.-C.), *1094*
- adiabatic processes, hamiltonian equations, particle dynamics, theory, Ott (E.), *1777*
- initial value problems, linearization, theory, two phase flow, Forste (J.), *1778*
- chemical reactions, equilibrium, injection, ionization, Poissant (G.), Prudhomme (R.), *1779*
- equilibrium, hamilton principle, inhomogeneities, linear theory, Lewis (H.R.), Symon (K.R.), *1780*
- continuum mechanics, magneto fluid dynamics, multicomponent flow, radiation properties, Pai (S-I.), *2896, book*
- diagnostics, nuclear fusion, radiation properties, tokamak, Koopman (D.W.), Mcilrath (T.J.), (et al.), *2898*
- analytical methods, slabs, wave interactions, waveguides, Phalswal (D.R.), Singh (Y.P.), (et al.), *2901*
- compressional waves, cylindrical waves, explosions, nuclear fusion, Kaliski (S.), *2902*
- integro differential equations, perturbation methods, propagation, variational methods, wkb method, Berk (H.L.), Pfirsch (D.), *3105*
- control, feedback, stability theory, Sen (A.K.), *3213*
- calorimetry, conduction (heat), inverse problems, Bespalov (A.M.), Gorshkov (M.I.), (et al.), *3773*
- differential equations (partial), hydrodynamics, theory, two component flow, Forste (J.), *3897*
- containment, discharges, swirl flow, theory, Boulos (M.I.), Gagne (R.), (et al.), *3898*
- containment, energy transport, theory, transport phenomena, D'Ambrogio (E.), Tessarotto (M.), *3899*
- experimental methods, metals, rotating fluids, spectroscopy, Brand (G.F.), James (B.W.), (et al.), *3903*
- collapse, discharges, schlieren methods, shock waves, Baronets (P.N.), Saprykin (A.I.), (et al.), *4667*
- alfven number, stability theory, tokamak, turbulence (mechanisms), Hatakeyama (R.), Inutake (M.), (et al.), *4749*
- dispersion relation, modes, nonlinear characteristics, waves, Franklin (R.N.), Edgley (P.D.), (et al.), *4750*
- excitation, inhomogeneities, perturbations, waves, Chang (M.), *4751*
- bifurcation, elliptic equations, free boundary, tokamak, Sijbrand (J.), *4975*
- contamination, discharges, particles, thrusters, Rudolph (L.K.), Pless (L.C.), (et al.), *5665*
- earth, magneto plasma dynamics, nonlinear waves, shock waves, Chang (T.T.S.), *5682*
- discharges, high pressure, measurements, walled structures, Kiparenko (G.F.), Kozyukov (A.V.), *5690*
- electron beams, excitation, lasers, spectral analysis, Ono (K.), Kamimoto (G.), (et al.), *5691*
- charged particles, currents, diagnostics, saturation, Benilov (M.S.), Tirskii (G.A.), *6858*
- arcs, energy transport, numerical methods, turbulence (transport), Galeev (Z.M.), Ziganshin (R.R.), (et al.), *6966*
- coding, similarity methods, Demchenko (V.V.), *7775*
- compression, explosive forming, materials processing, projectiles, Kirko (V.I.), *7903*
- collision models, heat transfer, propagation, waves, Namikawa (T.), Hamabata (H.), *8828*
- electric effects, kinetic theory (relativistic), theory, vlasov equation, Milantev (V.P.), *9800*
- compressibility, modes, rayleigh taylor instability, theory, Shivamoggi (B.K.), *9801*
- acoustic waves, nonlinear theory, stability theory, wave energy, Khiet (T.), Abdel-Gawad (H.), *9803*
- containment, currents, heating, helical flow, Yamagishi (T.), *10757*
- hall effect, korteweg de vries equation, turbulence (transport), waves, Granik (A.T.), *10758*
- adiabatic processes, discontinuities, theory, waves, Menon (V.V.), Sharma (V.D.), *10759*
- computing techniques, conservation laws, difference equations, differential equations (ordinary), fokker-planck equation, Volosov (V.N.), Pekker (M.S.), *10932*
- compressible flow, planetary atmospheres, rarefied gases, shock waves, supersonic flow, Gurevich (A.V.), Paschenko (N.T.), *11406*
- discharges, electrical properties, theory, turbulence (transport), Ziganshin (R.R.), Ismagilov (R.Kh.), (et al.), *11831*
- dispersion relation, ionic flow, nonlinear characteristics, oscillations, relativity, Chian (A.C.-L.), *11834*
- existence theorems, rarefied gases, statistical theory, vlasov equation, Kharchenko (A.P.), *11836*

- isothermal processes, kinetic theory, numerical methods, waves, Musher (S.L.), *11836*
- annular flow, convection, theory, waves, Shivamoggi (B.K.), *11837*
- drift waves, magnetic field, nonhomogeneous media, stability theory, Shivamoggi (B.K.), *11839*

plasma (toroidal), automatic control, stability, thermonuclear energy, tokamak, Gubarev (V.F.), Krivonos (Yu.G.), (et al.), *3218*
- modes, nonlinear theory, stability theory, tokamak, Biskamp (D.), *3896*
- heating, macroscopic characterization, tokamak, turbulence (mechanisms), Mitarai (O.), *3902*
- free boundary, magneto fluid dynamics, tokamak, Berestycki (H.), Brezis (H.), *4969*
- energy spectrum, high temperature, measurements (dynamic), tokamak, Nakamura (K.), Hiraki (N.), (et al.), *5692*
- density, interferometry, measurements (dynamic), tokamak, Mitarai (O.), Nakashima (H.), (et al.), *5693*
- density, nonlinear characteristics, tokamak, waveguides, Krapchev (V.B.), Theilhaber (K.S.), (et al.), *8829*
- containment, nuclear fusion, thermonuclear energy, tokamak, Bromberg (L.), Cohn (D.R.), (et al.), *8831*
- containment, experimental methods, fusio, stabilization, Schumacher (R.W.), Fukao (M.), (et al.), *10760*
- containment, equilibrium, pressure, stability theory, Kovrizhnykh (L.M.), Shchepetov (S.V.), *11838*

plasma jets, arcjets, gaseous fuels, generators, Chan (A.K.F.), Hilliard (J.C.), (et al.), *2905*
- arcjets, discharges, dynamic behavior, generators, Sergienko (A.S.), *5695*
- arcs, experimental methods, performance, porous walls, Gonopolskii (A.M.), Slobodkina (F.A.), *10761*

plastic behavior, cylindrical bodies, rate sensitivity, torsion, work hardening, Meguid (S.A.), *277*
- failure, sand, yield criteria, Desai (C.S.), *419*
- folds, sheet metal, Johnson (W.), Yu (T.X.), *434*
- bending, plates (circular), shear, Nakamura (Y.), Tatenami (T.), (et al.), *1229*
- collapse, large displacement, postbuckling behavior, rings, Kyriakides (S.), Babcock (C.D.), *1249*
- soils, yield criteria, Van Eekelen (H.A.M.), *1315*
- forming, roughness, sheet metal, surfaces, Yamaguchi (K.), Nishimura (S.), (et al.), *1345*
- blood, cell behavior, experimental methods, membranes, Waugh (R.E.), La Celle (P.L.), *1949*
- bauschinger effect, heat treatment, thermal effects, Aran (A.), Demirkol (M.), *2237*
- impulsive loading, shells (cylindrical), Ramu (S.A.), Iyengar (K.J.), *2373*
- cold working, forming, upset forging, yield condition, Pohlandt (K.), *2393*
- crack opening displacement, cracks, fracture, plates (weakened), Panasyuk (V.V.), Vitvitskii (P.M.), (et al.), *2440*
- fracture, inequalities, microcracks, Bazant (Z.P.), *2443*
- failure, notch tests, steel, Margetson (J.), *2444*
- combined loading, plasticity, Gorodetskii (A.V.), *3261*
- variational methods, work hardening, yield condition, Casey (J.), Naghdi (P.M.), *3266*
- large displacement, punch problems, rings, Ghosh (S.K.), Johnson (W.), (et al.), *3296*
- beam columns, buckling (plastic), dynamic stability, Lepik (U.), *3340*
- deformation (plastic), geometric nonlinearities, materials processing, metals, Lysov (M.I.), Sosov (N.V.), *3421*
- computing techniques, finite element techniques, forming, Erlmann (K.), Dung (N.L.), *3427*
- dissipation, material testing, plastic flow, Saix (C.), Jouanna (P.), *3995*
- boundary value problems, plates (annular), yield condition, Sanguineti (G.), *4354*
- elastoplasticity, flexure, shells (cylindrical), shells (shallow), Kolesnik (I.A.), Troshin (V.G.), *4372*
- micromechanisms, necking, plasticity, shear bands, Iwakuma (T.), Nemat-Nasser (S.), *5111*
- experimental results, shells (cylindrical), steel, Ohashi (Y.), Tanaka (E.), *5113*
- concrete, nonlinear analysis, shells (cylindrical), Chen (W.F.), Suzuki (H.), (et al.), *5116*
- computing techniques, constitutive equations, creep, Levy (A.), Pifko (A.B.), *5121*
- failure, structural design, Marek (P.), Sejnoha (J.), *6185*
- cyclic loading, ductility, shells (cylindrical), Mozharovskii (N.S.), Bobyr (N.I.), *6186*
- dislocations, relaxing media, Blum (W.), Nix (W.D.), *6187*
- beams (plastic), deformation (finite), large displacement, Kondo (K.), Pian (T.H.H.), *6212*
- girders (plate), postbuckling behavior, shear loading, Niinobe (Y.), *6239*
- buckling (large amplitude), imperfections, shells (spherical), Kao (R.), *6260*
- elastoplasticity, structural optimization, variational methods, Cinquini (C.), Sacchi (G.), *6270*
- penetration, plane strain, tools, Sitzer (M.R.), Durban (D.), *6406*
- beams (flexural), cyclic loading, flexural loading, Lyuberov (B.I.), *7319*
- failure, holes, mining, tunnels, Kaczmarek (J.), *8155*
- inelasticity, large displacement, strain rate, structural analysis, Symonds (P.S.), *8347*
- cracks, cyclic loading, fatigue, finite element techniques, Billardon (R.), Brunet (M.), (et al.), *8370*
- fracture, Pranckevicius (G.A.), *9410*
- fracture, nonlinear materials, Dougill (J.W.), Rida (M.A.M.), *9411*
- bearing capacity, limit analysis, shells (of revolution), shells (stiffened), Dekhtyar (A.S.), *10152*
- collapse, numerical methods, panels (stiffened), Vasarhelyi (A.), *10174*
- bearing capacity, collapse, foundations, slabs, Dolinski (K.), Sawczuk (A.), *10176*
- deformation (plastic), fatigue, strength, Glikman (L.A.), Gurevich (B.G.), *10274*

plastic flow, elasticity, inequalities, plasticity, variational methods, Necas (J.), *51*
- drawing, tubes, Durban (D.), *276*
- crossflow, cylindrical bodies, experimental results, Mizushina (T.), Usui (H.), (et al.), *551*
- plane strain, plasticity, shear, shear bands, steel, Anand (L.), Spitzig (W.A.), *1196*
- chip formation, drawing, friction, rolling, Dobrucki (W.), Odrzywolek (E.), *1341*
- low cycle fatigue, material testing, metals, Hatanaka (K.), Yamada (T.), (et al.), *1406*
- constitutive equations, power law fluids, thixotropic media, Kemblowski (Z.), Petera (J.), *1483*
- unsteady flow, viscoplasticity, Ogibalov (P.M.), Mirzadzhanzade (A.Kh.), *2574, book*
- abrasion, indentation, ploughing, wear, De Vathaire (M.), Delamare (F.), (et al.), *3035*
- damage, metals, viscoplasticity, Nicholson (D.W.), *3078*
- cutting, extrusion, forming, materials properties, Shaw (M.C.), *3420*
- dissipation, material testing, plastic behavior, Saix (C.), Jouanna (P.), *3995*
- anisotropic media, granular media, slip line methods, Lippmann (H.), *5107, book*
- cylindrical bodies, impact, Klee (K.-D.), Wriggers (P.), *5248*
- crack opening displacement, photoelasticity, steel, stress intensity factor, Bandyopadhyay (S.N.), Singh (N.), (et al.), *5304*
- crack tip geometry, fracture toughness, pressure vessels, steel, Kotilainen (H.), *6479*
- hardness, indentation, residual stresses, Rubenstein (C.), *6480*
- extrusion, jets, non newtonian flow, Kaithia (N.L.), *6576*
- experimental results, polycrystalline materials, work hardening, Mecking (H.), Kocks (U.F.), *7289*
- computing techniques, high temperature, rolling, steel, stochastics, Murthy (A.), Lenard (J.G.), *7456*
- constitutive equations, creeping flow, viscoelastic fluids, White (J.L.), *8086*
- extrusion, galerkin method, high temperature, Shestopal (V.O.), Shestopal (O.Ya.), *8360*
- deep drawing, drawing, von mises flow rule, yield criteria, Zivanovic (S.), *8362*
- buckling (local), buckling (plastic), shear spinning, spinning bodies, tubes, Gur (M.), Tirosh (J.), *9295*
- bending, plasticity, shear bands, Triantafyllidis (N.), Needleman (A.), (et al.), *10144*
- blast waves, deformation (plastic), impulsive loading, plates (circular), Yakupov (R.G.), *10245*
- axisymmetric loading, compression, stress strain relationships, upset forging, Gelin (J.C.), Oudin (J.), (et al.), *10326*
- coatings, friction (sliding), models, Heilmann (P.), Rigney (D.A.), *12089*

plastic waves, aluminum alloys, strips, Senda (T.), *3391*
- deformation (plastic), half space, thermoplasticity, Nagrelli (V.E.), *3996*
- combined loading, dislocations, Jimma (T.), Inoue (H.), (et al.), *4445*
- finite element techniques, rods, Yokoyama (T.), Tsuzuki (M.), *4446*
- continuum mechanics, shear waves, Druianov (B.A.), *5237*
- plates, rate sensitivity, rods, strain rate, Stepanov (G.V.), Serbin (A.A.), *6326*
- bifurcation, flexural waves, impact, rods, Lee (L.H.N.), *7419*
- dislocations, singular waves, Markenscoff (X.), *8336*
- cylindrical bodies, rods, Swegle (J.W.), Ting (T.C.T.), *10233*

plasticity, elasticity, inequalities, plastic flow, variational methods, Necas (J.), *51*
- boundary value problems, deformation (finite), variational methods, Klie (W.), *265*
- constitutive equations, existence theorems, yield criteria, Kamenyarzh (Ya.A.), *267*
- elastoplasticity, forming, stress analysis, Lee (E.H.), *273*
- explosive loading, shells (spherical), Anantha Ramu (S.), Iyengar (K.J.), *408*
- forming, friction (solid solid), metals, Oxley (P.L.B.), *1001*
- inversion, volterra equations, Mashchenko (I.P.), Churikov (F.S.), *1095*
- plane strain, plastic flow, shear, shear bands, steel, Anand (L.), Spitzig (W.A.), *1196*
- plates, taylor instability, Drucker (D.C.), *1301*
- composite materials, creep rupture, laminates, polymers, Brinson (H.F.), Griffith (W.I.), (et al.), *1356*
- cracks, fracture criteria, upset forging, Mizuta (A.), Tsuda (O.), (et al.), *1379*

- crack opening displacement, cracks, j-integral, stability, Kumar (V.), Shih (C.F.), *1381*
- continuum mechanics, endochronic theory, work hardening, Valanis (K.C.), *2231*
- deformation (finite), plates (circular), Kondo (K.), Pian (T.H.H.), *2233*
- metals, porous media, yield criteria, Gadala (M.S.), Mullins (M.L.), (et al.), *2243*
- modeling, soils, Mroz (Z.), *2381*
- crack growth, energy-release rate, j-integral, Holstein (T.), Schmitt (W.), *2445*
- ductile fracture, fracture, porous media, Oyane (M.), Sato (T.), (et al.), *2446*
- algorithms, elastoplasticity, linear programming, wolfe-markowitz algorithm, Smith (D.L.), *2507*
- continuum mechanics, tensor methods, Blinowski (A.), *3094*
- composite materials, computing techniques, eigenvalue problems, elasticity, finite element methods, fracture, optimization, variational methods, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- anisotropic media, indentation, penetration, Litewka (A.), Sawczuk (A.), *3257*
- deformation (plastic), kinematics, strain analysis, Lubarda (V.A.), Lee (E.H.), *3258*
- deformation (finite), deformation (plastic), strain analysis, Lee (E.H.), *3259*
- combined loading, plastic behavior, Gorodetskii (A.V.), *3261*
- differentiation, hardening, hardening (kinematic), incremental analysis, Kaneko (K.), *3267*
- crystals, deformation, metals, Berveiller (M.), *3268*
- panels, stochastic processes, Vasarhelyine Szabo (A.), *3270*
- relaxation methods, variational methods, Germain (P.), *3272*
- forming, plane strain, stream function, Tomita (Y.), Seguchi (Y.), (et al.), *3274*
- crack initiation, ductile fracture, rings, rotating disks, Tomkins (B.), Atkins (A.G.), *3431*
- friction (solid solid), photoplasticity, strain measurement, Gomide (H.A.), Burger (C.P.), *3483*
- collapse, panels, May (I.M.), *3514*
- elastoplasticity, inequalities, integral inequalities, Berezhnoi (I.A.), Iviev (D.D.), *4350*
- continuum mechanics, crystals, micromechanisms, Lin (T.H.), Ribeiro (G.), *4351*
- boundary value problems, functional analyis, variational methods, Kuznetsov (V.N.), *4355*
- anisotropic media, experimental methods, soils, Murff (J.D.), *4461*
- alloys, deformation, grain boundaries, superplastics, Kaibyshev (O.A.), Valiev (R.Z.), *4515*
- compression, deformation (plastic), high temperature, testing equipment, Brovman (M.Ya.), *4517*
- knees, prosthetic devices, wear, Walker (P.S.), Ben-Dov (M.), (et al.), *4921*
- functional analyis, stress invariants, vector methods, yield criteria, Stokes (V.K.), *4927*
- elasticity, functional analyis, solid mechanics, Necas (J.), Hlavacek (I.), *5068, book*
- micromechanisms, necking, plastic behavior, shear bands, Iwakuma (T.), Nemat-Nasser (S.), *5111*
- aluminum alloys, anisotropic media, diaphragms, pressurized components, Ilahi (M.F.), Parmar (A.), (et al.), *5112*
- cyclic loading, stress strain relationships, work hardening, Esin (A.), *5119*
- deformation (finite), extrusion, finite element techniques, forming, Dung (N.L.), *5272*
- dynamic analysis, shear, snow, tracked vehicles, vehicles, Brown (R.L.), *5366*
- deformation, strain analysis, thermoplasticity, viscoplasticity, Lehmann (T.), *6034*
- aging, creep, steel, Cho (U.W.), Findley (W.N.), *6174*
- anisotropic media, brittle materials, slip line methods, Levitas (V.I.), *6177*
- constitutive equations, shells (thin), torsion, Mozharovskaya (T.N.), *6178*
- masonry, plane stress, Tyupin (G.A.), *6184*
- composite structures, dynamic analysis, waves, Skovoroda (A.R.), Shapiro (G.S.), *6195*
- impact, spherical bodies, Rickerby (D.G.), Macmillan (N.H.), *6365*
- brittle fracture, kinetics, Stepanov (W.A.), Shpeizman (V.V.), *6442*
- dynamic testing, mechanical properties, steel, strain, tension, Novikov (N.V.), Ulyanenko (A.P.), (et al.), *6475*
- limit analysis, linear programming, yield criteria, Cannarozzi (A.A.), *6501*
- design (optimum), statically indeterminate structures, Mazzarella (C.), Panzeca (T.), *6514*
- biaxial loading, hysteresis, Hooker (R.J.), *7138*
- displacement, semi infinite media, stress analysis, Parvulescu (N.S.), *7260*
- constitutive equations, elastoplasticity, finite strain, Sidoroff (F.), *7281*
- anisotropy, strain analysis, work hardening, Besdo (D.), *7282*
- anisotropy, bauschinger effect, stress strain relationships, work hardening, Rees (D.W.A.), *7285*
- damping, dynamic response, plates, Kumar (A.), Hegde (M.), *7426*
- finite element methods, mathematical models, soils, Desai (C.S.), Phan (H.V.), (et al.), *7438*
- constitutive relations, deformation (plastic), soil mechanics, Borcia (E.), *7439*
- dynamic plasticity, shakedown structures, Auconi (F.), *8067*
- composite materials, elasticity, solid mechanics, Hopkins (H.G.) eds., Sewell (M.J.), *8179, book*
- constitutive equations, strain analysis, Yoder (P.J.), Iwan (W.D.), *8204*
- existence theorems, uniqueness, work hardening, Suquet (P.-M.), *8205*
- axiomatic models, continuum mechanics, thermodynamics (nonequilibrium), Lubliner (J.), *8206*
- constitutive equations, materials possessing memory, superplastics, Lenskii (V.S.), *8207*
- relaxing media, variational methods, Temam (R.), Strang (G.), *8210*
- boundary elements, pressurized pipes, stress concentration, Oliveira Faria (L.M.), Mota Soares (C.A.), (et al.), *8215*
- conical bodies, deformation (plastic), finite element techniques, impact, time dependence, Chiesa (M.L.), Callabresi (M.L.), *8342*
- bending, cracks, fracture criteria, j-integral, pipelines, Zahoor (A.), Kanninen (M.F.), *8400*
- beams, deflections, elastoplasticity, frames, yield condition, Bandyszewski (W.), Sawczuk (A.), *8439*
- bolted joints, design, joints, riveted joints, Surtees (J.O.), Gildersleeve (C.P.), (et al.), *8482*
- fluid-structure interaction, submerged bodies, transient loading, Krajcinovic (D.), *9630*
- bending, plastic flow, shear bands, Triantafyllidis (N.), Needleman (A.), (et al.), *10144*
- shells (conical), shells (of revolution), Vyshedkevich (I.U.), *10155*
- collapse, finite element techniques, numerical methods, Marti (J.), Cundall (P.), *10183*
- aluminum alloys, servomechanisms, steel, strain measurement, stress relaxation, Meguid (S.A.), *10334*
- aluminum alloys, copper, crystals, deformation (plastic), dislocations, Kolkman (H.J.), *10336*
- dislocations, shock waves (normal), Dynin (E.A.), *11158*
- combined loading, design (optimum), space frames, structural analysis, Grierson (D.E.), Aly (A.A.), *11319*
- limit analysis, mathematical programming, optimization, surveys, Maier (G.), Munro (J.), *79999*

plastics, adhesives, friction (sliding), polymers, Korshak (V.), Gribova (I.A.), *275*
- deformation, surfaces, visualization, Sevenhuijsen (P.J.), *484*
- cyclic loading, fatigue, Bucknall (C.B.), Stevens (W.W.), *1202*
- composite materials, fibers, materials properties, Womdle (R.), Daschner (W.), *1203*
- composite materials, creep, polymers, Sokolov (E.A.), Maksimov (R.D.), *2228*
- flow, polymers, rheology, Cogswell (F.N.), *2573, book*
- failure, reinforced bodies, Turvey (G.J.), *3275*
- crack propagation, fatigue, Hyakutake (H.), Hagio (T.), *3442*
- endurance limit, fatigue, Suvorova (Yu.V.), Viktorova (I.V.), (et al.), *4478*
- crack opening displacement, environmental tests, failure, life expectancy, stress rupture, Shanahan (M.E.R.), Schultz (J.), *4486*
- dynamic fracture, fracture, plates, polymethyl-methacrylate, strength, Tsai (Y.M.), Chen (Y.T.), *4499*
- convection, film cooling, film flow, heat transfer, polypropylene film, Shapovalov (V.M.), Tyabin (N.V.), (et al.), *5570*
- bearing capacity, composite materials, shells (cylindrical), thermal effects, Tretyachenko (G.N.), Dzyuba (V.S.), (et al.), *6265*
- bonded joints, composite materials, fracture, transient loading, Suvorova (Yu.V.), Sorina (T.G.), (et al.), *7298*
- composite materials, shells (cylindrical), shells (plastic), Khoroshun (L.P.), Streichenko (I.G.), *7341*
- composite materials, fatigue, polymers, Furue (H.), Shimamura (S.), *7968*
- creep, deep drawing, drawing, forming, interface phenomena, Ohsawa (H.), Nishimura (H.), *8358*
- crack growth, low cycle fatigue, Labedeva (M.F.), Aleshin (V.I.), (et al.), *9386*
- fibers, laminates, material testing, stretching, Polyakov (V.A.), Tanevskii (V.V.), *10133*
- deformation, pressure vessels, reinforced bodies, shells (torispherical), strength, Barton (D.C.), Soden (P.D.), (et al.), *10367*
- bolted joints, composite materials, fibers, mechanical joints, Godwin (E.W.), Matthews (F.L.), *10381*

plates, finite element techniques, mesh generation, Stefanou (G.D.), Syrmakezis (K.), *78*
- finite element techniques, shells, structural analysis, survey, variational methods, Pian (T.H.H.), Tong (P.), *83*
- elastoplasticity, imperfections, Rhodes (J.), *270*
- buckling, composite structures, laminates, Sharma (S.), Iyengar (N.G.R.), (et al.), *287*
- boundary integral methods, flexure, Bezine (G.), *303*
- bending, deformation (plastic), Paulun (J.), *304*
- connected bodies, structural stability, Pavlovic (M.), Mansell (D.S.), (et al.), *347*
- variational methods, vibration (free), Buculei (M.), *373*
- drag, stokes flow, two dimensional flow, viscous flow, Moon-Uhn Kim, Chang-Ho Son, *573*
- edge effects, Hiba (M.), *1239*
- optimal control, vibration (free), Litvinov (V.G.), *1276*
- elastic waves, penetration, unloading, Barclay (D.W.), Moodie (T.B.), (et al.), *1292*
- plasticity, taylor instability, Drucker (D.C.), *1301*

- ice, viscoelastic waves, Bates (H.F.), Shapiro (L.H.), *1303*
- computer aided design, rolling, stress analysis, Lahoti (G.D.), Akgerman (N.), (et al.), *1342*
- cracks, elasticity, singular integral equations, Kruger (K.H.), *1373*
- flexure, measurements, sensitivity, strain measurement, Stepanov (V.V.), Lanin (A.G.), (et al.), *1413*
- cylindrical bodies, design (optimum), safety, Patnaik (S.N.), Srivastava (N.K.), *1430*
- condensation, jet streams, Balakleyevskiy (Yu.I.), *1726*
- boundary layer, flames, velocity profiles, Garo (A.), Puechberty (D.), (et al.), *1757*
- acoustics, barriers, Freedman (A.), *1810*
- bending, boundary value problems, differential equations (ordinary), splines, Usmani (R.A.), Warsi (S.A.), *2044*
- bending, finite element techniques, interpolation, locking, matrix methods, mindlin plates, shells, Tsach (U.), *2070*
- discontinuities, shells (stiffened), theory, Mikhailov (B.K.), *2278, book*
- limit design, Dewolf (J.T.), Sarisley (E.F.), *2284*
- buckling, edge effects, structural stability, Cimetiere (A.), *2303*
- buckling, faults, rocks, tectonics, Golecki (J.J.), *2311*
- dynamic response, soil structure interaction, Savidis (S.A.), Richter (T.), *2346*
- dynamic response, numerical methods, Nikiforovskii (V.S.), Tetenov (E.V.), (et al.), *2377*
- crack propagation, fracture toughness, torsion, Chow (C.L.), Ngan (K.M.), *2438*
- caustics, crack arrest, crack propagation, dynamic loads, Theocaris (P.S.), Milios (J.), *2451*
- boundary elements, cracks, elliptical cracks, time dependence, Mukherjee (S.), Morjaria (M.), *2459*
- finite element techniques, fluid-structure interaction, vibration, Aggarwal (K.R.), Sinhasan (R.), (et al.), *2714*
- concentration, convection (forced), mass transfer, Atimtay (A.), Gill (W.N.), *2949*
- convection (free), friction (skin), magneto fluid dynamics, similarity methods, Brar (G.S.), *2885*
- corners, elasticity (linear), re-entrant corners, stress intensity factor, Theocaris (P.S.), Prassianakis (J.), *3233*
- shells, theory, Galimov (K.Z.), *3298*
- elastic foundations, inclusions, large displacement, Watanabe (K.), *3303*
- dynamic response, shock waves, transient effects, vibration (forced), Coleby (J.R.), Mazumdar (J.), *3365*
- impact, ogives, Skovoroda (A.R.), *3394*
- defects, delamination, heat transfer, nondestructive tests, thermography, Vavilov (V.P.), *3509*
- bending elements, design (optimum), finite element techniques, optimization, Haftka (R.T.), Prasad (B.), *3516*
- beams, elastoplasticity, Kamtekar (A.G.), *3525*
- boundary layer, cauchy problem, compressible flow, computing techniques, reynolds equation, Yakhot (A.), Ben-Dor (G.), (et al.), *3657*
- boundary layer, chemically reactive flow, ignition, vaporization, Law (C.K.), Law (H.K.), *3865*
- boundary layer, chemically reactive flow, ignition, nonequilibrium flow, vaporization, Ahluwalia (R.K.), Chung (P.M.), *3866*
- thermal stresses, thermoelasticity (steady), Marin (V.A.), Popovich (V.E.), (et al.), *3991*
- bending elements, curved elements, finite element techniques, shape functions, triangular elements, Caramanlian (C.), *4198*
- higher order theories, Baluch (M.H.), Voyiadjis (G.Z.), *4378*
- finite element methods (hybrid), higher order theories, hybrid element methods, Spilker (R.L.), Munir (N.I.), *4379*
- boundary conditions, buckling, compression, elliptical bodies, Sato (K.), *4396*
- elastic bodies, vibration (free), Romilly (N.), *4403*
- membranes, vibration (free), Irie (T.), Yamada (G.), (et al.), *4422*
- dynamic fracture, fracture, plastics, polymethyl-methacrylate, strength, Tsai (Y.M.), Chen (Y.T.), *4499*
- compressible flow, lifting surfaces, navier stokes equation, oseen flow, Homentcovschi (D.), *4582*
- boundary layer, heat transfer, oscillatory flow, unsteady state, Ishida (M.), Yamada (T.), *4608*
- elastic bodies, impulse, sound generation, Mackertich (S.S.), Hayek (S.I.), *4766*
- fluid-structure interaction, resonance, vibration (flow induced), Strawderman (W.A.), Ko (S.-H.), (et al.), *4767*
- conformal mapping, cylindrical bodies, Shirakura (M.), *4969*
- boundary value problems, finite amplitude, perturbation methods, series expansion, Kayuk (Ya.F.), Alekseeva (M.K.), *4991*
- membranes, mesh generation, nonlinear characteristics, shells, Jones (R.E.), Vos (R.G.), *5027*
- anisotropic media, elliptical bodies, laminates, Bert (C.W.), *5126*
- eigenvalue problems, Clarlet (P.G.), *5154*
- bending, cosserat solids, plates (annular), Chawla (A.N.), Chaudhary (H.R.), *5159*
- compression, follower forces, nonconservative systems, rods, Leipholz (H.H.E.), *5170*
- acoustic waves, dynamic stresses, flexural waves, reflection, shear, wave equations, Dubbeldav (P.S.), Rudgers (A.J.), *5209*
- cyclic testing, experimental mechanics, vibration, Clarkson (B.L.), Pope (R.J.), *5210*
- bending, finite difference methods, numerical methods, Atkatsh (R.S.), Baron (M.L.), (et al.), *5226*
- impact, shock waves, spherical waves, Yakupov (R.G.), *5249*
- diffraction, residual stresses, x ray techniques, Doi (O.), Ukai (T.), *5323*
- finite difference methods, impingement, inviscid fluid, jets, stagnation point, Rubel (A.), *5354*
- interface phenomena, nonlinear waves, sound fields, vibration, Ginsberg (J.H.), *5781*
- boundary value problems, existence theorems, initial value problems, uniqueness, vibration, Uroev (V.M.), *6073*
- beams, bending, haar functions, stress analysis, Vasarhelyi (A.), *6092*
- bending, dynamic analysis, finite element techniques, Garnet (H.), Crouzet-Pascal (J.), (et al.), *6109*
- boundary elements, elasticity (linear), stress analysis, Sirtori (S.), *6172*
- deformation, dynamic loads, reinforced bodies, slabs, Parker (D.F.), *6196*
- shells, stability theory, stress analysis, vibration, Galimov (K.Z.) eds., Sachenkov (A.V.), *6215, book*
- bending (elastic), large displacement, torsion, Simmonds (J.G.), *6222*
- aluminum alloys, buckling (nonlinear), collapse, nonlinear materials, nonlinear theory, Little (G.H.), *6250*
- dynamic response, vibration (free), Kuttler (J.R.), Sigillito (V.G.), *6292*
- floating bodies, fluid-structure interaction, shear, vibration (forced), Suvorov (A.M.), Cherkesov (L.V.), *6297*
- plastic waves, rate sensitivity, rods, strain rate, Stepanov (G.V.), Serbin (A.A.), *6326*
- cylindrical bodies, penetration, Sagomonyan (A.Ya.), *6362*
- boundary value problems, cracks, Chen (Y.-Z.), Chen (Y.-H.), *6444*
- cracks, elastic behavior, linear systems, nonlinear systems, penalty function, Yagawa (G.), Aizawa (T.), (et al.), *6457*
- design (minimum weight), design (optimum), rupture, De Oliveira (P.), *6505*
- boussinesq equation, heat transfer, oscillatory flow, porous surfaces, Soundalgekar (V.M.), Hiremath (S.B.), *6622*
- impulse, non newtonian flow, rivlin erickson fluid, viscoelastic fluids, Teipel (I.), *6644*
- convection (free), cylindrical bodies, extended surfaces, heat transfer, Sparrow (E.M.), Chrysler (G.M.), *6791*
- finite element techniques, interpolation, splines, Qu (S.-N.), *7204*
- approximation methods, beams (elastic), boundary value problems, elasticity (linear), Karpov (N.I.), *7329*
- bending, contact problems, existence theorems, uniqueness, variational methods, Fortune (D.), Bezine (G.), *7330*
- edge cracks, semi infinite media, stress analysis, Hasebe (N.), Inohara (S.), *7331*
- boundary elements, green function, Irschik (H.), Ziegler (F.), *7347*
- energy methods, finite difference methods, Reipert (Z.), *7350*
- bending, boundary value problems, contact problems, Zelentsov (V.B.), *7351*
- beams (box), eccentric loading, ultimate strength, Rerkshanandana (N.), Usami (T.), (et al.), *7352*
- shells, stability theory, Khoroshun (L.P.), *7357*
- shells, vibration, Soedel (W.), *7388*
- damping, dynamic response, plasticity, Kumar (A.), Hegde (M.), *7426*
- impact, rods, Johnson (W.), Sengupta (A.K.), (et al.), *7435*
- buckling, cracks, fracture, stability, tension, Dyshel (M.Sh.), *7550*
- design (optimum), elastic bodies, Cheng (K.-T.), Olhoff (N.), *7589*
- beams, elastic foundations, soil structure interaction, Wolfer (K.-H.), *7612*
- beams, bellows, design, mechanical design, Chand (S.), Garg (S.B.L.), *7623*
- conformal mapping, free jets, incompleteness, potential flow, streamlines, Van Der Zanden (J.), *7663*
- integral methods, navier stokes equation, rotating disks, viscous flow, Datta (S.), *7670*
- elastic bodies, floating bodies, fluid-structure interaction, gravity waves (finite depth), Bukatov (A.E.), *7770*
- friction (skin), planing surfaces, wakes, Payne (P.R.), *8045*
- bending, strain, Reissner (E.), *8238*
- bending, composite materials, experimental results, mixture theories, Constanda (C.), *8240*
- bifurcation, critical load, Rivlin (R.S.), *8266*
- beams, vibration (free), Chikhladze (E.D.), Kislov (A.G.), *8298*
- panels (flat), solar collectors, vibration (nonlinear), Zak (M.A.), *8300*
- control, dynamic response, elastic bodies, mathematical methods, Leipholz (H.H.E.), *8302*
- vibration, Leissa (A.W.), *8304*
- vibration (free), Leissa (A.W.), *8306*
- dynamic analysis, rotary inertia, shear, vibration (nonlinear), Sathyamoorthy (M.), *8308*
- dynamic analysis, finite element methods, large displacement, vibration (free), Akay (H.U.), *8310*
- concrete, punch problems, reinforced bodies, shear, Godycki-Cwirko (T.), Kosinska (A.), *8379*
- acoustic measurements, echos, flaw detection, nondestructive tests, Golubev (A.S.), Verevkin (V.M.), (et al.), *8435*

- cavitation flow, free boundary, surface tension, Vanden-Broeck (J.-M.), *8515*
- complex variables, cylindrical bodies, inviscid fluid, porous surfaces, Capodanno (P.), *8521*
- complex variables, cylindrical bodies, inviscid fluid, porous surfaces, Petrila (T.), *8522*
- boundary layer, finite difference methods, submerged bodies, turbulence model, Markatos (N.-C.G.), Wills (C.B.), *8537*
- axisymmetric flow, boundary layer, impact jets, impingement, jets, Pamadi (B.N.), Belov (I.A.), *8540*
- conformal mapping, irrotational flow, porous surfaces, walls, Prosnak (W.J.), Rokicki (J.), *8541*
- finite element techniques, stiffness matrix, vibration, Pedersen (P.), Cederkvist (J.), *9136*
- asymptotic methods, biharmonic equation, finite element methods, Destuynder (P.), *9137*
- laminates, mechanical stabilization, rayleigh ritz method, shape factors, temperature, Hyer (M.W.), *9247*
- numerical analysis, shells, He (G.-Q.), Zhang (W.-Y.), *9264*
- hybrid element methods, Spilker (R.L.), Munir (N.I.), *9279*
- mindlin plates, postbuckling behavior, shells (of revolution), shells (shallow), Pica (A.), Wood (R.D.), *9283*
- dynamic analysis, vibration (free), vibration (self excited), Simcak (F.), *9315*
- shells (cylindrical), shells (fluid-filled), wave generation, Bagdoev (A.G.), Movsisyan (L.A.), *9334*
- columns, connections, punch problems, reinforced concrete, Neth (V.W.), De Paiva (H.A.R.), (et al.), *9446*
- reflection, visualization, vortex rings, Schneider (P.E.M.), *9525*
- impact jets, oscillations, reynolds number (small), viscous buckling, Cruickshank (J.O.), Munson (B.R.), *9526*
- singularities, stokes flow, two dimensional flow, velocity profiles, viscous flow, Hasegawa (E.), *9532*
- differential equations (partial), liquid liquid interface, two component flow, viscous flow, Pismen (L.M.), Nir (A.), *9538*
- asymptotic methods, cylindrical bodies, film flow, liquid vapor interface, Salem (A.), Trad (A.), *9542*
- empirical methods, inviscid fluid, virtual mass, Payne (P.R.), *9543*
- boundary layer, flames, jets, Gateau (P.), Puechberty (D.), (et al.), *9758*
- heat addition, magneto fluid dynamics, numerical methods, similarity methods, Soundalgekar (V.M.), Takhar (H.S.), (et al.), *9784*
- concentrated loads, large displacement, plates (nonlinear), shear stress, Banerjee (B.), *10159*
- buckling, dynamic stability, follower forces, lyapunov's functions, Leipholz (H.H.E.), *10175*
- rotating disks, vibration (forced), Sreenivasamurthy (S.), Ramamurti (V.), *10205*
- bending, crack closure, Heming (F.S.) Jr., *10298*
- design (ultimate strength), numerical methods, shells (axisymmetric), strength, Dzygadlo (Z.), Olejnik (A.), *10350*
- bubble dynamics, coalescence, drainage, drops, film flow, Lin (C.-Y.), Slattery (J.C.), *10405*
- analogies, asymptotic behavior, drag, moving surfaces, Burkina (R.S.), Vilyunov (V.I.), *10425*
- heat transfer, laminar flow, mass transfer, mist flow, Trela (M.), Kowalski (J.), *10652*
- convection (forced), frost, White (J.E.), Cremers (C.J.), *10660*
- edge effects, noise, sound generation, Amiet (R.K.), *10804*
- elastic foundations, rings, structural analysis, structural optimization, Makeev (E.M.), Semenenko (V.P.), *11111*
- cosserat solids, micromechanics, shells, Kayuk (Ya.F.), Zhukovskii (A.P.), *11116*
- asymptotic methods, buckling, elasticity (nonlinear), Rudev (A.N.), *11121*
- acoustic emission, elastic waves, Ceranoglu (A.N.), Pao (Y.H.), *11174*
- composite materials, design (optimum), optimization, Bryzgalin (G.I.), *11323*
- flow fields, force, nonlinear theory, singularities, walls, Sozou (C.), Pickering (W.M.), *11388*
- compressible flow, dimensional analysis, impingement, jets, Gerasimov (Yu.I.), *11399*
- aerodynamic coefficients, rarefied gases, Gorelov (S.L.), Erofeev (A.I.), *11447*
- plates (waving), swimming propulsion, viscoelastic fluids, Sturges (L.D.), *11630*
- finite amplitude, fluid-structure interaction, waves, Hasegawa (E.), *11646*
- acoustic waves, axisymmetric flow, fluid-structure interaction, vibration, Woolley (B.L.), *11650*
- submerged bodies, transmission, ultrasonics, Ng (K.W.), Ngoc (T.D.K.), (et al.), *11657*
- fluid-structure interaction, hydraulic shock, transforms, Kiiko (I.A.), Nemkova (L.N.), *11666*
- boundary layer, catalyzed ignition, Trevino (C.), Fernandez-Pello (A.C.), *11781*
- junctions, modes, sound propagation, vibration, Craven (P.G.), Gibbs (B.M.), *11947*
- experimental methods, impulse, sound generation, Nakayama (I.), Nakamura (A.), *11953*
- experimental methods, sound fields, vibration, Vyalyshev (A.I.), Dubinin (A.I.), (et al.), *11954*
- acoustic waves, diffraction, elastic bodies, spherical bodies, Saadat (H.), Filippi (P.), *11989*
- magnetoelasticity, shells (thin), surveys, Ambartsumian (S.A.), *79999*

plates (anisotropic), elasticity (nonhomogeneous), stress analysis, Suzuki (S.), *317*
- plates (holed), plates (perforated), structural stability, Preobrazhenskii (I.), *345*
- dynamic response, plates (holed), vibration (forced), Tyagi (G.C.D.), Chadha (C.C.), *371*
- composite materials, orthotropic materials, stress concentration, stretching, Pelekh (B.L.), Makhnitskii (R.N.), *1180*
- elastic foundations, Toscano (R.), Maceri (A.), *1230*
- airy function, anisotropic media, disks, elasticity (three dimensional), Zastrow (U.), *2226*
- sheet metal, stress strain relationships, yield criteria, Ilahi (M.F.), *2275*
- plates (circular), stress analysis, Zastrow (U.), *2276*
- cellular structures, elastic behavior, shear lag, web openings, Evans (H.R.), Shanmugam (N.E.), *3292*
- finite element techniques, laminates, penalty function, plates (sandwich), Reddy (J.N.), *3308*
- finite element methods, plates (rectangular), plates (sandwich), plates (thick), Reddy (J.N.), Chao (W.C.), *3310*
- boundary value problems, plates (circular), theory, Bresar (F.), *3316*
- beams (anisotropic), beams (flexural), beams (torsional), finite strain, Reissner (E.), *4365*
- bending, theory, Hirashima (K.-I.), Muramatsu (M.), *4366*
- dynamic analysis, plates (sandwich), Ibrahim (I.M.), Farah (A.), (et al.), *5160*
- boundary value problems, elastic foundations, plates (nonhomogeneous), Kaczkowski (Z.), *7332*
- plates (holed), plates (thick), stress concentration, Shaldyrvan (V.A.), *7339*
- plates (holed), stress concentration, Hoff (N.J.), *7340*
- composite materials, laminates, Sharma (S.), Iyengar (N.G.R.), (et al.), *7342*
- dynamic stability, plates (annular), torsion, Tani (J.), *7359*
- design (optimum), panels (stiffened), plates (stiffened), Garmash (L.I.), Olshanskii (V.P.), *8249*
- plates (thick), vibration, Cheung (M.S.), Chan (M.Y.T.), *8253*
- bending, composite materials, laminates, plates (nonlinear), plates (rectangular), plates (thick), Reddy (J.N.), Chao (W.C.), *9273*
- bending, plates (rectangular), plates (sandwich), Kolesnikov (I.Yu.), *9274*
- bending, plates (sandwich), shear stress, Berar (C.), *10158*

plates (annular), structural stability, Tani (J.), Yamaki (N.), *346*
- structural stability, thermoelasticity (transient), Trombski (M.), Wojciech (S.), *930*
- plates (orthotropic), structural optimization, Golovchan (V.T.), Petasyuk (G.A.), *2274*
- elastic behavior, moving loads, plates (circular), winkler foundation, El-Sirafy (I.H.), *3302*
- random loading, vibration (random), Chonan (S.), *3364*
- boundary value problems, plastic behavior, yield condition, Sanguineti (G.), *4354*
- buckling (shear), plates (orthotropic), Durban (D.), Stavsky (Y.), *4395*
- anisotropic media, nonhomogeneous media, rotating disks, thermal stresses, Misra (J.C.), Achari (R.M.), *4815*
- bending, cosserat solids, plates, Chawla (A.N.), Chaudhary (H.R.), *5159*
- chebyshev approximations, plates (orthotropic), postbuckling behavior, Reddy (B.S.), Alwar (R.S.), *5180*
- buckling, compression, plates (orthotropic), Ramaiah (G.K.), *5184*
- edge effects, large displacement, nonlinear theory, Lebrun (M.), Bayada (G.), (et al.), *6231*
- buckling, edge effects, saws, stability theory, vibration (forced), Srinivasan (V.), Ramamurti (V.), *6296*
- dynamic properties, elastic constants, vibration (free), Elek (K.), Granat (J.), (et al.), *6298*
- bifurcation, buckling, thermal instability, vibration, Tani (J.), *7358*
- dynamic stability, plates (anisotropic), torsion, Tani (J.), *7359*
- dynamic analysis, vibration (free), Rangaiah (V.P.), Sadasivan (S.), *9314*
- elastodynamics, elastoplasticity, rotating disks, Weber (H.), Dreher (A.), *10161*
- plates (nonhomogeneous), rotating disks, stress analysis, Bhaduri (S.), *10162*
- vibration (free), Mukhopadhyay (M.), *10202*

plates (circular), contact problems, elastic foundations, singular integral equations, Karasev (S.N.), *252*
- periodic problems, thermal stresses, turbomachinery, viscoelastic materials, Raous (M.), *263*
- anisotropic media, bending, dynamic relaxation, Sherbourne (A.N.), Murphy (D.N.S.), *305*
- thermal effects, vibration (free), Tomar (J.S.), Tiwari (V.S.), *922*
- bending, plastic behavior, shear, Nakamura (Y.), Tatenami (T.), (et al.), *1229*
- analysis, holes, photothermoelasticity, photoviscoelasticity, Demidova (I.I.), *1392*
- collapse, optimization, plates (simply supported), Yang (W.H.), *1423*
- deformation (finite), plasticity, Kondo (K.), Pian (T.H.H.), *2233*
- plates (anisotropic), stress analysis, Zastrow (U.), *2276*
- plates (bimetallic), plates (sandwich), yield criteria, Turvey (G.J.), *2279*
- frequencies, vibration (free), Gelos (R.), Ficcadenti (G.M.), (et al.), *2331*
- frequencies, mindlin plates, vibration (free), Takahashi (S.), Suzuki (K.), (et al.), *2334*

- photoelasticity, thermal stresses, transient, Stanley (P.), Edward (D.C.), *2470*
- anisotropic media, design (optimum), vibration (free), Olhoff (N.), Lurie (K.A.), (et al.), *2506*
- elastic behavior, moving loads, plates (annular), winkler foundation, El-Sirafy (I.H.), *3302*
- impulsive loading, large displacement, viscoplasticity, Idczak (W.), Rymarz (C.), (et al.), *3314*
- boundary value problems, plates (anisotropic), theory, Bresar (F.), *3316*
- floating structures, roofs, tanks, Epstein (H.I.), *3317*
- elastic behavior, vibration, Laura (P.A.A.), Ficcadenti (G.M.), *3366*
- edge effects, plates (thick), singularities, Bulanov (G.S.), Shaldyrvan (V.A.), *4381*
- centrifugal compressors, Grigorenko (Ya.M.), Mitlin (B.I.), (et al.), *4382*
- experimental methods, hybrid techniques, large displacement, Laermann (K.-H.), *4387*
- galerkin method, rotary inertia, shear, vibration (nonlinear), Chia (C.Y.), Sathyamoorthy (M.), *4423*
- finite element methods, large displacement, vibration (nonlinear), Reddy (J.N.), Huang (C.L.), (et al.), *4425*
- elastic foundations, vibration (free), Leissa (A.), Narita (Y.), *4426*
- approximations, mindlin plates, vibration (free), Irretier (H.), *4428*
- elastic foundations, plates (holed), vibration (free), Basu (U.), *4429*
- experimental methods, force, impact, Shibuya (T.), Koizumi (T.), (et al.), *4460*
- cracking, deflections, reinforced concrete, slabs, Desayi (P.), Muthu (K.U.), *4531*
- bending, finite element methods, plates (orthotropic), Pardoen (G.C.), Barton (D.E.), *5163*
- elastoplasticity, thermal loading, welded joints, work hardening, Makhnenko (V.I.), Oleinik (V.A.), (et al.), *5796*
- layered media, plates (sandwich), stability theory, Grigolyuk (E.I.), Magerramova (L.A.), *6251*
- conduction (heat), conductivity, edge effects, thermal measurements, Bode (K.-H.), *6796*
- nonlinear theory, quasilinearization, Kayuk (Ya.F.), Khizhnyak (V.K.), *7345*
- dynamic analysis, flexure, vibration (free), Komissarova (G.L.), *7389*
- dynamic response, inertia, plates (sandwich), vibration (free), Markus (S.), Nanasi (T.), *7391*
- galerkin method, plates (orthotropic), rotary inertia, shear, vibration (nonlinear), Sathyamoorthy (M.), *7393*
- belts, conveyors, shells (cylindrical), De Boer (R.), Kuntzsch (V.), (et al.), *8242*
- large displacement, plates (nonhomogeneous), Benerjee (B.), *8250*
- membranes, plates (holed), vibration (free), wave engines, Lin (W.H.), *8301*
- vibration (free), Rossing (T.D.), *8303*
- experimental results, joints, shells (cylindrical), Szeki (J.), *9272*
- large displacement, plates (holed), Banerjee (B.), *9276*
- finite element methods, plates (nonlinear), Fried (I.), *9278*
- elastic behavior, rayleigh ritz method, vibration, Laura (P.A.A.), Avalos (D.R.), (et al.), *9308*
- dynamic analysis, vibration (free), Lebedeva (N.K.), *9313*
- dynamic analysis, shells (cylindrical), vibration (free), Rott (W.), *9319*
- convection, disks, heat sources, Kolyano (Yu.M.), Semerak (M.M.), (et al.), *9715*
- dynamic behavior, shells (nonlinear), shells (of revolution), shells (viscoelastic), Sullivan (B.J.), Batterman (S.C.), *10154*
- collapse, limit analysis, minimization, plates (weakened), Yang (W.H.), *10164*
- experimental methods, impact, nonlinear characteristics, Dmitrieva (Zh.N.), Efimova (T.A.), (et al.), *10243*
- blast waves, deformation (plastic), impulsive loading, plastic flow, Yakupov (R.G.), *10245*
- elastic foundations, mindlin plates, vibration (free), Tomar (J.S.), Gupta (D.C.), *11129*
- sound generation, vibration, Kojima (N.), Ikoma (K.), (et al.), *11948*
- sound generation, vibration, Czarnecki (S.), *11952*

plates (folded), multistory frames, shear walls, walls, Kristek (V.), *2542*

- beams, finite difference methods, membranes, mesh generation, Mohr (G.A.), *6105*
- buckling, roofs, space frames, structural stability, Subramanian (N.), Ganapathy Chettiar (C.), *6532*
- shells, structural analysis, Srinivasa Rao (P.), Sitapati Rao (P.), *6533*

plates (holed), plates (anisotropic), plates (perforated), structural stability, Preobrazhenskii (I.), *345*

- dynamic response, plates (anisotropic), vibration (forced), Tyagi (G.C.D.), Chadha (C.C.), *371*
- brittle fracture, composite materials, fracture toughness, laminates, Nepershin (R.I.), Klimenov (V.V.), (et al.), *1213*
- complex variables, holes, strips, Hering (J.), Uj (J.), *2214*
- compression, plates (rectangular), structural stability, Volmir (E.A.), Mameeva (E.N.), (et al.), *2301*
- existence theorems, Leko (T.D.), *3236*
- elastic foundations, plates (circular), vibration (free), Basu (U.), *4429*
- cracks, elliptical cracks, energy density, Simmonds (J.G.), Duva (J.), *4490*
- complex variables, thermal stresses, Yamada (K.), *4814*
- complex variables, elasticity (linear), plates (holed), Theocaris (P.S.), Bardzokas (D.), *5086*
- complex variables, elasticity (linear), plates (holed), Theocaris (P.S.), Bardzokas (D.), *5086*
- plates (orthotropic), rotating disks, stress concentration, Genta (G.), Gola (M.), *5167*
- reinforced openings, variational methods, Kurshin (L.M.), Rastorguev (G.I.), *6226*
- plates (rectangular), rayleigh method, vibration (free), Ali (R.), Atwal (S.J.), *6295*
- elliptical cracks, finite element techniques, stress intensity factor, Grandt (A.F.) Jr., *6445*
- holes, photoelasticity, plane strain, strain measurement, stress concentration, Erickson (M.), Durelli (A.J.), *6461*
- beams, boundary conditions, design (optimum), photoelasticity, slots, Durelli (A.J.), Rajaiah (K.), *6504*
- optimization, photoelasticity, plane stress, Durelli (A.J.), Rajaiah (K.), *6506*
- composite structures, finite element techniques, wood structures, Wilkinson (T.L.), Rowlands (R.E.), (et al.), *7214*
- plates (anisotropic), plates (thick), stress concentration, Shaldyrvan (V.A.), *7339*
- plates (anisotropic), stress concentration, Hoff (N.J.), *7340*
- bending (elastic), inclusions, plates (nonhomogeneous), plates (thick), Kosmodamianskii (A.S.), Shaldyrvan (V.A.), *8251, book*
- membranes, plates (circular), vibration (free), wave engines, Lin (W.H.), *8301*
- green function, infinite medium, stress intensity factor, Shivakumar (V.), Forman (R.G.), *8397*
- design (optimum), plane stress, Dhir (S.K.), *8443*
- large displacement, plates (circular), Banerjee (B.), *9276*
- axisymmetric flow, stokes flow, Hasimoto (H.), *9529*
- elasticity (linear), plates (weakened), Kosmodamianskii (A.S.), Chernik (V.I.), *10145*
- analog simulation, tension, vibration (nonlinear), Datta (P.K.), *10206*
- crack growth, cracking, design, holes, pressure vessels, stress intensity factor, Rooke (D.P.), *10332*
- channel flow, finite element techniques, holes, viscoelastic fluids, Richards (G.D.), Townsend (P.), *10445*

plates (isotropic), dynamic analysis, flexure, vibration (free), Voyiadjis (G.Z.), Baluch (M.H.), *368*

- compression, dynamic behavior, vibration (forced), White (R.G.), Teh (C.E.), *369*
- elastic foundations, shear, vibration (free), Volos (N.P.), Dovganich (M.I.), *10203*

plates (nonhomogeneous), plates (thick), shear, torsion, Mukhopadhyay (A.), Mukhopadhyay (J.), *2266*

- inclusions, thermal stresses, thermoelasticity (steady), Shioya (S.), Matsuda (M.), *2965*
- inclusions, thermal stresses, thermoelasticity (steady), Araki (H.), Shioya (S.), (et al.), *2966*
- elasticity (nonhomogeneous), finite element methods, variational methods, Tsybenko (A.S.), Vashchenko (N.G.), (et al.), *3250*
- bending, boundary value problems, infinite medium, theory, Bogdan (K.), *3301*
- inclusions, thermal stresses, Shioya (S.), Matsuda (M.), (et al.), *5794*
- inclusions, plates (rectangular), thermal stresses, Sumi (N.), *6940*
- boundary value problems, elastic foundations, plates (anisotropic), Kaczkowski (Z.), *7332*
- large displacement, plates (circular), Benerjee (B.), *8250*
- bending (elastic), inclusions, plates (holed), plates (thick), Kosmodamianskii (A.S.), Shaldyrvan (V.A.), *8251, book*
- asymptotic behavior, elasticity (nonlinear), Kolos (A.V.), *8252*
- beams, dynamic analysis, wave engines, Reismann (H.), Yamaguchi (T.), *8297*
- plates (annular), rotating disks, stress analysis, Bhaduri (S.), *10162*

plates (nonlinear), bending, plates (rectangular), postbuckling behavior, shear, Walczak (W.), Jakubowski (S.), *332*

- beams (sandwich), design (optimum), large displacement, shear, Gierlinski (J.), Mroz (Z.), *1223*
- nonlinear analysis, shells (nonlinear), structural stability, Wada (H.), Taki (Y.), (et al.), *5162*
- elastoplasticity, finite element techniques, nonlinear theory, Gobetti (A.), *6234*
- bending, composite materials, laminates, plates (anisotropic), plates (rectangular), plates (thick), Reddy (J.N.), Chao (W.C.), *9273*
- finite element methods, plates (circular), Fried (I.), *9278*
- concentrated loads, large displacement, plates, shear stress, Banerjee (B.), *10159*
- contact problems, penalty function, variational methods, Ohtake (K.), Oden (J.T.), (et al.), *11113*

plates (orthotropic), higher order theories, plates laminated, plates orthotropic, shear, stress strain relationships, Ulyashina (A.N.), *319*

- bifurcation, buckling (plastic), wrinkling, Triantafyllidis (N.), Needleman (A.), *350*
- elastic foundations, flexure, plates (rectangular), Prakash (B.G.), *1227*
- plates (annular), structural optimization, Golovchan (V.T.), Petasyuk (G.A.), *2274*
- shells, theory, Galimov (Sh.K.), *2277*

- strain, structural stability, Begin (M.V.), *2302*
- buckling (local), delamination, laminates, Chai (H.), Babcock (C.D.), (et al.), *2312*
- buckling (shear), plates (annular), Durban (D.), Stavsky (Y.), *4395*
- bending, finite element methods, plates (circular), Pardoen (G.C.), Barton (D.E.), *5163*
- plates (holed), rotating disks, stress concentration, Genta (G.), Gola (M.), *5167*
- chebyshev approximations, plates (annular), postbuckling behavior, Reddy (B.S.), Alwar (R.S.), *5180*
- buckling, compression, plates (annular), Ramaiah (G.K.), *5184*
- galerkin method, plates (circular), rotary inertia, shear, vibration (nonlinear), Sathyamoorthy (M.), *7393*
- galerkin method, large displacement, plates (rectangular), vibration (free), Pesotskaya (N.K.), *7395*
- dynamic analysis, impedance methods, vibration (free), Busch-Vishniac (I.J.), *11127*

plates (parallel), convection, heat transfer (combined modes), monte carlo analysis, radiation, Kobiyama (M.), Taniguchi (H.), (et al.), *783*
- radiant interchange, radiation, thermal waves, Baltsevich (Ya.A.), Rubtsov (N.A.), *1707*
- analytical methods, couette flow, magneto fluid dynamics, two dimensional flow, Kishan (H.), Sharma (G.C.), *1772*
- diffusion, dispersion, magneto fluid dynamics, solutions (material), Annapurna (N.), Gupta (A.S.), *2882*
- non newtonian flow, pressure gradient, second order fluids, shear flow, Rajagopal (K.R.), Huilgol (R.R.), *3590*
- boundary layer (thermal), convection, heat transfer, porous media, Merkin (J.H.), *3782*
- cooling, duct flow, heat transfer, roughness, turbulent flow, Ichimiya (K.), Hasegawa (S.), (et al.), *3788*
- heat exchangers, heat exchangers (crossflow), laminar flow, Mori (S.), Kataya (M.), (et al.), *3835*
- numerical methods, squeeze films, viscous flow, Aziz (A.), Na (T.Y.), *4581*
- boundary roughness, channel flow, stokes flow, Phan-Thien (N.), *4583*
- convection (free), friction (skin), unsteady flow, Rath (R.S.), Jena (G.), *4617*
- particle fluid flow, pressure distribution, unsteady flow, Ramana Prasad (V.V.), Pattabhi Ramacharyulu (N.C.), *4620*
- heat addition, heat transfer, peclet number, power law fluids, Dang (V.-D.), *5563*
- immiscible fluids, thermal effects, thermal instability, Gershuni (G.Z.), Zhukhovitskii (E.M.), *6783*
- immiscible fluids, pulsatile flow, rarefied gases, Kant (R.), *7696*
- convection, heat transfer, laminar flow, power law geometrics, solar collectors, Naidu (G.M.), Agarwal (J.P.), *7864*
- channel flow, magneto fluid dynamics, theory, velocity profiles, Belogrivtsev (V.M.), *7895*
- channel flow, incompressible flow, lubrication (hydrodynamic), navier stokes equation, squeeze films, Verma (R.L.), *8057*
- computing techniques, finite element techniques, stress analysis, Zollinger (M.), *8154*
- inertia, lubrication (hydrodynamic), oscillating bodies, squeeze films, viscoelastic fluids, Roy (J.S.), Biswal (B.), *9026*
- augmentation, channel flow, convection (free), extended surfaces, heat transfer, rayleigh number, Sparrow (E.M.), Prakash (C.), *9699*
- casting, channel flow, film flow, non newtonian flow, polymers, squeeze films, Kazankov (Yu.V.), Pervushin (V.E.), *9709*
- disks, electro fluid dynamics, oscillatory flow, theory, Govardhan Reddy (K.), Seshagiri Rao (S.V.), *9783*
- channel flow, convection, heat transfer (combined modes), radiant interchange, solar collectors, Liu (C.H.), Sparrow (E.M.), *10610*
- heat transfer, laminar flow, porous surfaces, Chaudhary (R.C.), Gaur (Y.N.), *10683*
- couette flow, magneto fluid dynamics, porous walls, unsteady flow, Mishra (S.P.), Muduli (J.C.), *10738*
- channel flow, sedimentation, suspensions, Herbolzheimer (E.), Acrivos (A.), *11358*
- heat addition, liquid crystals (nematic), magnetic fluids, thermal instability, Barratt (P.J.), Sloan (D.M.), *11368*
- gases, heat transfer, mixtures, Nosik (V.I.), *11445*
- couette flow, gases, heat transfer, Bishaev (A.M.), Rykov (V.A.), *11450*
- gases, heat transfer, Vestner (H.), *11455*
- couette flow, heat transfer, magneto fluid dynamics, theory, Karimov (I.K.), Ryadno (A.A.), *11810*

plates (perforated), plates (anisotropic), plates (holed), structural stability, Preobrazhenskii (I.), *345*
- cooling, turbulent flow, Glazkov (V.V.), Gusev (M.D.), (et al.), *817*
- boundary layer, magneto fluid dynamics, numerical methods, thermal effects, Drymonitou (M.A.), Geroyannis (V.S.), (et al.), *856*
- convection (free), magneto fluid dynamics, rotating bodies, slip flow, Vidyanidhi (V.), Raju (G.K.), (et al.), *859*
- holes, stress concentration, Sinclair (G.B.), *1179*
- flexure, holes, inclusions, strips, Buryshkin (M.L.), *1182*
- convection (free), laplace transform, magneto fluid dynamics, oscillatory flow, viscous flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *2894*
- stress concentration, strips, Hamada (M.), Mizushima (I.), (et al.), *3234*
- reynolds number (high), sound propagation, turbulent flow, unsteady flow, vortex shedding, Howe (M.S.), *6897*
- anisotropy, yield criteria, Markov (K.Z.), *8202*
- hall effect, magneto plasma dynamics, models, rotating fluids, Shivamoggi (B.K.), *8817*

plates (rectangular), edge effects, Thornton (D.R.), Conway (H.D.), *306*
- rotating bodies, Calvini (P.), *326*
- bending, plates (nonlinear), postbuckling behavior, shear, Walczak (W.), Jakubowski (S.), *332*
- bending, bimodulus materials, composite materials, plates (thick), thermoelasticity (steady), Reddy (J.N.), Bert (C.W.), (et al.), *920*
- elastic foundations, flexure, plates (orthotropic), Prakash (B.G.), *1227*
- bending, slabs, twisting, Nielsen (M.P.), Bach (F.), *1228*
- frequency response, plates (stiffened), vibration (free), Saito (H.), Yamaguchi (H.), *1275*
- frequency response, plates (simply supported), vibration (free), Gupta (R.K.), *1277*
- dynamic analysis, elastoplasticity, plates (plastic), Raghavan (K.S.), Rao (S.S.), *2283*
- compression, plates (holed), structural stability, Volmir (E.A.), Mameeva (E.N.), (et al.), *2301*
- approximation methods, edge effects, plates (stiffened), vibration, Laura (P.A.A.), Gutierrez (R.H.), *2330*
- frequencies, vibration (free), Gottlieb (H.P.W.), *2332*
- rayleigh ritz method, vibration (free), Kakdas (M.M.), Dickinson (S.M.), *2333*
- beams (timoshenko), mindlin plates, vibration (free), Roufaeil (O.L.), Dawe (D.J.), *2335*
- finite element methods, plates (anisotropic), plates (sandwich), plates (thick), Reddy (J.N.), Chao (W.C.), *3310*
- dynamic analysis, vibration (free), Marita (Y.), *3367*
- bending, plates (simply supported), theory, Mukhopadhyay (M.), *4368*
- edge effects, matrix methods, plates (simply supported), Hegedus (I.), *4386*
- plates (reinforced), plates (sandwich), structural stability, Pomazi (L.), *4397*
- flexure, semi infinite media, Ramachandra Rao (B.S.), Prakash (B.G.), *5155*
- buckling, Protte (W.), *5182*
- cracks, plates (weakened), vibration, Hirano (Y.), Okazaki (K.), *5211*
- frequencies, vibration, Irie (T.), Yamada (G.), (et al.), *5212*
- bimodulus materials, displacement, laminates, Bert (C.W.), Sudhakar Reddy (V.), (et al.), *6225*
- collapse, panels, stability theory, Satyamurthy (K.), Khot (N.S.), (et al.), *6252*
- dynamic behavior, imperfections, vibration, Pasic (H.), Herrmann (G.), *6288*
- nonlinear analysis, vibration (forced), Putnick (L.J.), Matkowsky (B.J.), (et al.), *6293*
- plates (holed), rayleigh method, vibration (free), Ali (R.), Atwal (S.J.), *6295*
- eigenvalues, plates (sandwich), vibration (free), Antonenko (V.M.), Piskunov (V.G.), (et al.), *6307*
- inclusions, plates (nonhomogeneous), thermal stresses, Sumi (N.), *6940*
- bending (viscoelastic), elastic foundations, thermoviscoelasticity, viscoelastic materials, Misra (J.C.), Samanta (S.), *6944*
- bending, bimodulus materials, laminates, plates (thick), Bert (C.W.), Reddy (J.N.), (et al.), *7343*
- buckling (local), plates (sandwich), Wrzecioniarz (P.A.), *7364*
- frequency response, vibration (free), Gorman (D.J.), *7390*
- edge effects, elastic foundations, rayleigh ritz method, vibration (free), Laura (P.A.A.), Grossi (R.O.), *7392*
- galerkin method, large displacement, plates (orthotropic), vibration (free), Pesotskaya (N.K.), *7395*
- columns, slabs, structural analysis, waffle construction, Karasudhi (P.), Hovichitr (I.), (et al.), *8241*
- asymptotic behavior, bending (elastic), boundary layer, perturbation methods, Nazarov (S.A.), *8243*
- buckling, plates (simply supported), variational methods, Baker (G.), Pavlovic (M.N.), *8265*
- buckling, rayleigh ritz method, vibration (free), Kakdas (M.M.), Dickinson (S.M.), *8307*
- dynamic response, edge effects, vibration (forced), Mukhopadhyay (M.), *8309*
- bending, composite materials, laminates, plates (anisotropic), plates (nonlinear), plates (thick), Reddy (J.N.), Chao (W.C.), *9273*
- bending, plates (anisotropic), plates (sandwich), Kolesnikov (I.Yu.), *9274*
- buckling (experimental), buckling (nonlinear), elastic bodies, Fok Wing Chau, Yuen Ming Fai, *9288*
- buckling, follower forces, nonconservative systems, simply supported structures, Leipholz (H.H.E.), Waddington (D.), *9289*
- dynamic analysis, vibration (free), Darevskaya (E.V.), *9312*
- buckling (local), thin walled structures, Murray (N.W.), Khoo (P.S.), *10186*
- rayleigh ritz method, vibration (free), Laura (P.A.A.), De Irassar (P.V.), (et al.), *10204*
- dynamic analysis, fluid-structure interaction, gates, vibration, Casacci (S.), Caillot (G.), *10207*
- crack initiation, dynamic fracture, finite difference methods, griffith cracks, Perl (M.), Shmuely (M.), (et al.), *10304*
- buckling, dynamic stability, impact, Ari-Gur (J.), Singer (J.), (et al.), *11125*

- deformation (finite), nonlinear waves, waveguides, Sugimoto (N.), Majima (Y.), *11156*

plates (reinforced), thermal stresses, thermoelasticity (transient), Kolyano (Yu.M.), Kushnir (R.M.), *925*

- corners, crack initiation, cracks, reliability, Brussat (T.R.), Chiu (S.T.), (et al.), *3443*
- plates (rectangular), plates (sandwich), structural stability, Pomazi (L.), *4397*
- dynamic analysis, finite element methods, Miller (R.E.), *5146*
- buckling, Suquet (P.), *5181*
- dynamic properties, vibration (free), Fox (D.W.), Sigillito (V.G.), *9311*
- sound generation, vibration, Evseev (V.N.), Ivanov (V.S.), (et al.), *11949*

plates (sandwich), bonding, delamination, glass fibers, holography, Erdmann-Jesnitzer (F.), Winkler (T.), *483*

- equations of motion, Mindlin (R.D.), *1236*
- buckling, Larsson (S.E.), Bengtsson (H.), (et al.), *1238*
- dynamic response, vibration (random), Ramachandra Reddy (C.V.), Ganesan (N.), (et al.), *1282*
- plates (bimetallic), plates (circular), yield criteria, Turvey (G.J.), *2279*
- finite element techniques, laminates, penalty function, plates (anisotropic), Reddy (J.N.), *3308*
- finite element methods, plates (anisotropic), plates (rectangular), plates (thick), Reddy (J.N.), Chao (W.C.), *3310*
- plates (rectangular), plates (reinforced), structural stability, Pomazi (L.), *4397*
- rotary inertia, vibration (forced), vibration (free), Grover (A.S.), Kapur (A.D.), *4434*
- frequencies, vibration (free), Vestyak (A.V.), *4435*
- dynamic analysis, plates (anisotropic), Ibrahim (I.M.), Farah (A.), (et al.), *5160*
- bended core, theory, Berar (C.), *5165*
- bending, laminates, Seide (P.), *6228*
- layered media, plates (circular), stability theory, Grigolyuk (E.I.), Magerramova (L.A.), *6251*
- eigenvalues, plates (rectangular), vibration (free), Antonenko (V.M.), Piskunov (V.G.), (et al.), *6307*
- buckling (local), plates (rectangular), Wrzecionlarz (P.A.), *7364*
- dynamic response, inertia, plates (circular), vibration (free), Markus (S.), Nanasi (T.), *7391*
- anisotropic structures, rayleigh ritz method, shells, vibration (free), Kuznetsov (N.D.), Kartashov (G.G.), (et al.), *8305*
- anisotropic media, composite materials, laminates, thermal effects, Reddy (J.N.), Hsu (Y.S.), *8888*
- bending, plates (anisotropic), plates (rectangular), Kolesnikov (I.Yu.), *9274*
- dynamic analysis, harmonic waves, shells (sandwich), Khoroshun (L.P.), Ivanov (Yu.A.), *9327*
- composite materials, failure, Turvey (G.J.), *10156*
- bending, plates (anisotropic), shear stress, Berar (C.), *10158*
- dynamic analysis, vibration (free), Shalashilin (V.I.), Kolesnikov (I.Yu.), (et al.), *11149*
- impact, wedges, Rimskii (V.K.), Sabodash (P.F.), *11176*
- panels, sound, transmission, Narayanan (S.), Shanbhag (R.L.), *11935*
- acoustics, elasticity, panels, Narayanan (S.), Shanbhag (R.L.), *11971*

plates (simply supported), frequency response, plates (rectangular), vibration (free), Gupta (R.K.), *1277*

- collapse, optimization, plates (circular), Yang (W.H.), *1423*
- plates (rhombic), Sarna (S.P.), Ali (S.M.J.), *3318*
- bending, plates (rectangular), theory, Mukhopadhyay (M.), *4368*
- edge effects, matrix methods, plates (rectangular), Hegedus (I.), *4396*
- bending (elastic), finite difference methods, Kant (T.), *6233*
- approximation methods, plates (skew), vibration (free), Sakata (T.), *6294*
- galerkin method, plates (triangular), vibration (free), Chaudhuri (S.K.), *7394*
- boundary value problems, contact problems, Keer (L.M.), Mak (A.F.), *8239*
- buckling, plates (rectangular), variational methods, Baker (G.), Pavlovic (M.N.), *8265*

plates (skew), approximation methods, plates (simply supported), vibration (free), Sakata (T.), *6294*

- elastic foundations, transient effects, vibration (free), Bhandari (N.C.), Juneja (B.L.), (et al.), *7396*
- design (ultimate strength), reinforced concrete, slabs, Kwiecinski (M.), Wojewodzki (W.), *7604*
- compressible flow, magneto fluid dynamics, stream function, theory, Chandna (O.P.), Barron (R.M.), *8814*

plates (stiffened), dynamic response, vibration (free), Lesnicheya (V.A.), Manevich (L.I.), *370*

- bridges (highway), finite element techniques, linear theory, Maeda (Y.), Sera (M.), *1136*
- frequency response, plates (rectangular), vibration (free), Saito (H.), Yamaguchi (H.), *1275*
- approximation methods, edge effects, plates (rectangular), vibration, Laura (P.A.A.), Gutierrez (R.H.), *2330*
- buckling, panels (flat), Elsharkawi (K.), Walker (A.C.), *3335*
- design (minimum weight), frames, optimization, Bennett (J.A.), *3518*
- elastic foundations, vibration (free), Singer (J.), Rand (O.), (et al.), *4424*
- elastoplasticity, large displacement, nonlinear theory, Webb (S.E.), Dowling (P.J.), *6227*
- elasticity (linear), plates (corrugated), Lau (J.H.), *6230*
- experimental results, panels (stiffened), postbuckling behavior, Rothwell (A.), *6238*
- buckling (torsional), collapse, thin walled structures, Nordsve (N.T.), Moan (T.), *6261*
- beams (curved), finite element techniques, isoparametric elements, shells (thick), stiffened structures, Jirousek (J.), *7212*
- design (optimum), panels (stiffened), plates (anisotropic), Garmash (L.I.), Olshanskii (V.P.), *8249*
- deformation (finite), elastoplasticity, postbuckling behavior, ship structures, Matthies (H.), Payer (H.G.), *8276*
- dynamic analysis, shells (stiffened), Zhigalko (Yu.P.), Dmitrieva (L.M.), *8311*
- finite element techniques, plane stress, ship structures, Mukhopadhyay (M.), *9140*
- dynamic properties, vibration (free), Aksu (G.), *9310*
- fluid-structure interaction, radiation, sound generation, Mace (B.R.), *11942*

plates (thick), bending, bimodulus materials, composite materials, plates (rectangular), thermoelasticity (steady), Reddy (J.N.), Bert (C.W.), (et al.), *920*

- finite element methods (hybrid), interpolation, stress analysis, Spilker (R.L.), Munir (N.I.), *2072*
- plates (nonhomogeneous), shear, torsion, Mukhopadhyay (A.), Mukhopadhyay (J.), *2266*
- cracks, elasticity (three dimensional), singular integral equations, singularities, Folias (E.S.), *2434*
- bending, fluid-structure interaction, Pierucci (M.), *2709*
- finite element methods, plates (anisotropic), plates (rectangular), plates (sandwich), Reddy (J.N.), Chao (W.C.), *3310*
- edge effects, plates (circular), singularities, Bulanov (G.S.), Shaldyrvan (V.A.), *4381*
- bending, finite element methods (hybrid), mesh generation, Cheung (Y.K.), Wong (P.M.), (et al.), *5029*
- flywheels, rotating disks, stress analysis, Pardoen (G.C.), Nudenberg (R.D.), (et al.), *5168*
- plates (anisotropic), plates (holed), stress concentration, Shaldyrvan (V.A.), *7339*
- bending, bimodulus materials, laminates, plates (rectangular), Bert (C.W.), Reddy (J.N.), (et al.), *7343*
- computing techniques, finite element methods (hybrid), laminates, Spilker (R.L.), *8226*
- bending (elastic), inclusions, plates (holed), plates (nonhomogeneous), Kosmodamianskii (A.S.), Shaldyrvan (V.A.), *8251, book*
- plates (anisotropic), vibration, Cheung (M.S.), Chan (M.Y.T.), *8253*
- dynamic response, vibration (free), Fridman (L.I.), *8315*
- bending, composite materials, laminates, plates (anisotropic), plates (nonlinear), plates (rectangular), Reddy (J.N.), Chao (W.C.), *9273*
- boundary value problems, elasticity (linear), Misicu (M.), *10160*
- cracks, fredholm equations, stress intensity factor, Sladek (J.), Sumec (J.), *10294*

plates (vertical), acceleration, convection (free), magneto fluid dynamics, suction, Raptis (A.A.), Tzivanidis (G.J.), (et al.), *855*

- convection (free), laminar flow, Kundu (K.M.), *1688*
- convection (free), similarity methods, Zolotov (N.L.), *2796*
- convection (free), nusselt number, turbulent flow, Ruckenstein (E.), Felske (J.D.), *3796*
- heat transfer, thermal diffusion, transient effects, Krishan (B.), *3797*
- boundary layer (thermal), convection (free), heat transfer, laminar flow, Sokovishin (Yu.A.), Semenov (A.G.), *3798*
- boundary layer, convection, friction (skin), laminar flow, shear stress, Hunt (R.), Wilks (G.), *4696*
- boundary layer (thermal), convection (free), heat transfer, Sparrow (E.M.), Faghri (M.), *4697*
- convection (free), laplace transform, magneto fluid dynamics, stokes flow, Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *5675*
- convection (free), thermal loading, transient effects, Sammakia (B.), Gebhart (B.), *6763*
- buoyant flow, convection (free), laminar flow, Anderson (R.), Bejan (A.), *6778*
- artificial satellites, convection (free), transition flow, turbulence (transport), turbulent flow, Doan-Kim-Son, Coutanceau (J.), *9696*
- convection, fluid injection, heat transfer (combined modes), injection, Tsuruno (S.), Iguchi (I.), *9697*
- convection (free), critical flow, grashof number, laminar flow, temperature, variable thermal properties, Ghajar (A.J.), Parker (J.D.), *9700*
- convection (free), magneto fluid dynamics, oscillating bodies, unsteady flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10739*
- convection (free), magneto fluid dynamics, oscillating bodies, stokes flow, Soundalgekar (V.M.), Patil (M.R.), (et al.), *10740*
- convection, magneto fluid dynamics, semi infinite media, theory, Soundalgekar (V.M.), Takhar (H.S.), *10750*

plates (weakened), crack opening displacement, cracks, fracture, plastic behavior, Panasyuk (V.V.), Vitvitskii (P.M.), (et al.), *2440*

- anisotropic media, boundary value problems, cracks, Lyubchak (V.A.), Fishtinskii (L.A.), *3249*
- stress strain relationships, theory, Berezhnitskii (L.T.), Mazurak (L.P.), (et al.), *3299*

- complex variables, stress intensity factor, Kuliev (V.D.), *4334*
- cracks, elasticity (linear), singular integral equations, Borshchuk (E.M.), *4336*
- cracks, plates (rectangular), vibration, Hirano (Y.), Okazaki (K.), *5211*
- cracks, magnetoelasticity, thermomagnetic phenomena, Kudriavtsev (B.A.), Parton (V.Z.), (et al.), *7266*
- edge cracks, laminates, viscoelastic materials, Gorelik (A.V.), *7506*
- elasticity (linear), plates (holed), Kosmodamianskii (A.S.), Chernik (V.I.), *10145*
- bending, complex variables, Hasebe (N.), Ueda (M.), *10146*
- collapse, limit analysis, minimization, plates (circular), Yang (W.H.), *10164*
- brittle fracture, cracks, holes, singular integral equations, stress intensity factor, Mirsalimov (V.M.), *10291*

Platonov (A.D.), algorithms, mathematical methods, Trivailo (P.M.), *8134*
Platonov (E.G.), see Baskov (V.B.), *7849*
Platten (J.K.), see Legros (J.C.), *1686*
- see Luijkx (J.M.), *2800*
- boussinesq equation, convection (benard), rayleigh benard instability, rayleigh number, Legros (J.C.), *6786*

Platus (D.H.), lift, optimal control, reentry, spinning bodies, topological techniques, *5709*
Platus (D.J.), ballistics (terminal), dispersion, reentry, rockets, trajectories, *1796*
Platzer (M.), see Schneider (W.) eds., *9547, book*
Platzman (G.W.), barotropic models, finite element techniques, oceanography, rotating fluids, *4872*
- finite element techniques, shallow water, tides, *8972*

Plaut (R.H.), see Holzer (S.M.), *341*
- arches, elastic foundations, vibration (free), Johnson (E.R.), *7406*

Plavita (R.), see Enescu (D.), *1886*
Play (D.), see Floquet (A.), *5983*
- experimental methods, friction (sliding), steel, wear, *7090*

Plee (S.L.), combustors, design, flame holders, gas turbines, vaporization, Mellor (A.M.), *1767*
Pless (L.C.), see Rudolph (L.K.), *5665*
Pletcher (R.H.), see Malik (M.R.), *5467*
Pletnev (V.D.), adiabatic processes, magneto plasma dynamics, nonequilibrium effects, theory, variational methods, Skuridin (G.A.), *2897*
Plevako (V.P.), elasticity (nonhomogeneous), laminates, nonhomogeneous media, stress concentration, *6170*
Plostins (P.), fluid injection, hypersonic flow, shock layer, similarity methods, stagnation point, Rubin (S.G.), *10495*
Plotkin (A.), aerodynamic coefficients, airfoils, ground effect, lift, potential flow, two dimensional flow, Kennell (C.G.), *5490*
- see Strigberger (J.), *6647*
- critical region, heaving, pitching, shallow water, slender bodies, *9942*

Plotkin (A.A.), classification, data analysis, mathematical methods, *3128*
Plumb (O.A.), convection (free), infiltration, porous media, saturation, Huenefeld (J.C.), *958*
Plumbridge (W.J.), creep, life expectancy, thermal fatigue, titanium, *4479*
- alloys, creep, friction stress, life expectancy, Bartlett (R.A.), *10276*

plumes, diffusion, mass transfer, turbulence (transport), Chatwin (P.C.), Sullivan (P.J.), *656*
- buoyant flow, jets, thermal plumes, Ogino (F.), Takeuchi (H.), (et al.), *751*
- cooling, digital simulation, Gaillard (P.), *1574*
- buoyant flow, prandtl number, Yih (C.-S.), Wu (F.), *2671*
- buoyant flow, convection, Afzai (N.), *2674*
- mixing, smoke stacks, Sandroni (S.), Bacci (P.), (et al.), *2679*
- bubble dynamics, two phase flow, Chesters (A.K.), Van Doorn (M.), (et al.), *2988*
- modeling, simulation, wind tunnels, Korst (H.H.), White (R.A.), (et al.), *3681*
- axisymmetric flow, similarity methods, Appalaswamy (A.V.), Jaluria (Y.), *3685*
- buoyant flow, temperature, Shlien (D.J.), Boxman (R.L.), *3693*
- air pollution, dispersion, Sheih (C.M.), *4057*
- bifurcation, cooling towers, drops, vortices, Chen (N.C.J.) Jung (L.), *4058*
- particle size, Sverdrup (G.M.), *4092*
- exhaust gases, jets, numerical methods, shock waves, supersonic flow, Dash (S.M.), Thorpe (R.D.), *4590*
- compressible flow, jets, mathematical models, nozzles, Kraiko (A.N.), Shelomovskii (V.V.), *4591*
- air pollution, contamination, prediction, Bouchardy (A.-M.), *4637*
- models, shape factors, Henderson-Sellers (B.), *5456*
- exhaust gases, particles, rockets, solid propellants, Strand (L.D.), Bowyer (J.M.), (et al.), *5809*
- entrainment, jets, Schneider (W.), *6664*
- jets, turbulent flow, List (E.J.), *6666*
- entrainment, froude number, two dimensional flow, Phillips (W.F.), *6667*
- air pollution, boundary layer (atmospheric), smoke stacks, turbulence (geophysical), Ooms (G.), Mahieu (A.P.), *8028*
- buoyancy, jets, turbulence, Bruyatsku (E.V.), *8616*
- diffusers, jets, mixing, Sorrell (F.Y.), Smith (B.W.), *9593*
- buoyancy, density, water, Mollendorf (J.C.), Johnson (R.S.), (et al.), *9599*
- froude number, rivers, stratified flow, surface tension, Mcclimans (T.A.), Saegrov (S.), *10389*
- nozzles, two dimensional flow, Chu (C.-W.), Der (J.) Jr., (et al.), *10454*
- turbulence model, wind, Green (A.E.S.), Singhal (R.P.), (et al.), *10875*
- measurements, power plants, smoke stacks, Volkov (E.P.), Gribkov (A.M.), *11518*
- air pollution, concentration, dispersion, prediction, Harrison (R.M.), Mccartney (H.A.), *11523*

Plunkett (R.), beams (cantilever), damping, fibers, laminates, reinforced bodies, *4357*
Plunt (J.), hull propeller interaction, hulls, noise (aerodynamic), sound generation, Mcqueen (D.), *9011*
pneumatic components, dynamic analysis, fluidics, pumps, Baz (A.), Khafagy (S.), (et al.), *219*
- flames, measurements, temperature, Kishimoto (K.), *845*
- characteristic methods, compressional waves, pipelines, transient effects, Matsumoto (Y.), Ishibashi (K.), *1597*
- dynamic analysis, frequency response, pipelines, Matsumoto (Y.), Okazaki (M.), *1598*
- dynamics, machine elements, Gogrichiani (G.V.), *4549*
- friction, torque, valves, Lin (F.N.), Moore (W.I.), (et al.), *4571*
- automatic control, balancing, three dimensional flow, velocimeters, Wachter (J.), Heneka (A.), (et al.), *6739*
- actuators, control, design, feedback, position control, Bender (E.), Kotschenreuther (P.), *9194*
- cams, mechanisms, orifices, Lequoc (S.), Cheng (R.M.H.), *9483*
- control, design, fluidics, hydraulic machinery, servomechanisms, Mccloy (D.), Martin (H.R.), *11100, book*

pneumatic transport, pipelines, slug flow, two phase flow, waves, Tomita (Y.), Jotaki (T.), (et al.), *1839*
- conveyors, transport, two phase flow, Kraus (M.N.), *2982, book*
- impact, particles, Ottjes (J.A.), *5810*

Pnueli (D.), air conditioning, air raid shelters, environmental control, environmental tests, *5574*
- closed conduit flow, hydrodynamic stability, rayleigh number, solar ponds, thermal instability, thermohaline stability criteria, *8715*
- see Rozeanu (L.), *9022*

Pobedrya (B.E.), defects, shells (cylindrical), stress strain relationships, Levin (V.D.), *2272*
Pochtman (Yu.M.), see Kosichenko (A.A.), *10763*
- composite materials, design (optimum), shells (cylindrical), stiffened structures, Tugai (O.V.), *11324*

Pochuev (V.P.), axial turbines, blades, heat transfer, rotors, thermal measurements, Shcherbakov (V.F.), *8808*
Pocock (G.), ferrography, wear, Courtney (S.J.), *4893*
Podchukayev (V.A.), filters, kalman filters, stability theory, tikhonov-correct problem, *4293*
Poddubnyak (A.P.), see Grilitskii (D.V.), *6352*
Podgornyi (L.N.), see Amelyanovich (K.K.), *4547*
Podilchuk (Yu.N.), elasticity (linear), shells (anisotropic), shells (cylindrical), *6224*
Podio-Guidugli (P.), see Capriz (G.), *1969*
Podolskii (S.L.), see Borisov (Yu.Ya.), *1569*
Podstrigach (Ya.S.), deformation, diffusion, mathematical models, porous media, Povstenko (Yu.Z.), *1730*
- shells (thin), thermoelasticity, variational methods, Shvets (R.N.), *2963, book*
- acoustic loading, fluid-structure interaction, shells (spherical), transient loading, Galazyuk (V.A.), (et al.), *11678*

Podzimek (J.), see Christman (P.J.), *7812*
Poggi (C.), see Ballio (G.), *7318*
Pogu (M.), see Clavaldini (J.-F.), *6721*
Pohl (J.H.), see Song (Y.H.), *11788*
Pohlandt (K.), cold working, forming, plastic behavior, upset forging, yield condition, *2393*
poiseuille flow, laminar flow, non newtonian flow, Basovich (I.B.), Bernadiner (M.G.), (et al.), *613*
- damping, unsteady flow, vibration, viscous effects, Korner (M.), *616*
- micropolar media, polar fluids, variational methods, Rubi (J.M.), Casas-Vasquez (J.), *1974*
- laminar flow, unsteady flow, Stavitsky (D.), Macagno (E.), *2642*
- friction factor, laminar flow, transition, Barr (D.I.H.), *2643*
- noncircular pipes, variable fluid properties, viscosity, viscosity (temperature dependent), Mikolas (M.), Bardocz (L.), *2648*
- binary flow, convection (benard), galerkin method, thermodynamics (nonequilibrium), Artiz-Cohen (J.A.), Velarde (M.G.), *2801*
- hydrodynamic stability, laminar flow, transition, Scobelev (B.Yu.), Molorodov (Yu.I.), *3664*
- friction (skin), porous surfaces, suction, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *3669*
- hydrodynamic stability, stability theory, three dimensional flow, Itoh (N.), *3701*
- hydrodynamic stability, nonlinear theory, stability curve, Struminskii (V.V.), Skobelev (B.Yu.), *4642*
- jets, non newtonian flow, Naghdi (P.M.), *6665*
- hydrodynamic stability, numerical methods, Takeuchi (D.I.), Jankowski (D.F.), *6677*
- hydrodynamic stability, multiple scales, nonlinear theory, Weinstein (M.), *6678*

- lubrication (hydrodynamic), reynolds number, roughness, stokes flow, surfaces, Phan-Thien (N.), *8063*
- couple stresses, polar fluids, Chaturani (P.), *8497*
- blood flow, couple stresses, Chaturani (P.), Rathod (V.P.), *8577*
- hydrodynamic stability, rotating fluids, Cotton (F.W.), Salwen (H.), *8607*
- finite element techniques, hydrodynamic stability, Li (Y.S.), Kot (S.C.), *9148*
- channel flow, channels (divided), flow obstructions, wedges, Zamir (M.), Camiletti (S.E.), *9575*
- diffusion, mixtures, navier stokes equation, Shavaliev (M.Sh.), *10672*
- fracture, rocks, viscous flow, Neuzil (C.E.), Tracy (J.V.), *10832*
- channel flow, plane flow, rarefied gases, Siewert (C.E.), *11437*

Poissant (G.), chemical reactions, equilibrium, injection, ionization, plasma, Prudhomme (R.), *1779*

Poisson (W.H.), see Quynn (R.G.), *7310*

poisson equation, control-volume methods, finite element techniques, galerkin method, Ramadhyani (S.), Patankar (S.V.), *5013*
- coordinate systems, curved surfaces, generation, two dimensional flow, Visbal (M.), Knight (D.), *7683*
- eigenvalue problems, laplace equation, Kuttler (J.R.), *9105*
- computing techniques, difference equations, relaxation methods, torsion, Banki (I.), *9124*

Pokhvalov (Yu.Ye.), see Subbotin (V.I.), *6978*

Poklonskii (E.V.), channel flow, magneto fluid dynamics, mathematical models, pumps, stability theory, Elkin (A.I.), *11807*

Pokluda (Ya.), creep, cyclic loading, steel, Stanek (P.), *8197*

Pokrovskii (A.D.), flaw detection, harmonic analysis, nondestructive tests, transducers (ultrasonic), *7581*

Pokrovskii (A.V.), see Krasnoselskii (M.A.), *10076*

Pokrovskii (L.D.), see Pavlov (K.B.), *2638*

Pokrovskii (V.V.), see Troshchenko (V.T.), *9431*

Poland (J.), see Kassoy (D.R.), *9824*
- see Kassoy (D.R.), *11893*

Polansky (G.F.), see Lamb (J.P.), *4691*

polar fluids, channel flow, cosserat fluids, hamel flow, micropolar media, Kaloni (P.N.), Kamel (M.T.), *550*
- bifurcation, micropolar media, viscous flow, Russo (R.), Padula (M.), *1491*
- boundary layer (thermal), drag, heat transfer, stagnation point, Subhadra Ramachandran (P.), Mathur (M.N.), *1685*
- micromechanics, rheology, viscous flow, Rajagopal (K.R.), Gupta (A.S.), *1968*
- micropolar media, poiseuille flow, variational methods, Rubi (J.M.), Casas-Vasquez (J.), *1974*
- convection, hydrodynamic stability, micropolar media, Lebon (G.), Perez-Garcia (C.), *1975*
- boundary layer, convection (free), similarity methods, Jena (S.K.), Mathur (M.N.), *1976*
- magneto plasma dynamics, numerical methods, shock waves, similarity methods, Pushkar (E.A.), *2890*
- equations of motion, existence theorems, rheology, viscoelastic fluids, Solonnikov (V.A.), Kazhikhov (A.V.), *3076*
- rheology, stagnation point, Guram (G.S.), Smith (A.C.), *4136*
- magneto fluid dynamics, magnetoelasticity, suspensions, Sulazov (V.M.), *4137*
- continuum mechanics, liquid crystals (nematic), nonlocal theory, Demiray (H.), *4139*
- rheology, statistical continuum mechanics, Lombardero (M.), Lago (S.), *6581*
- rheology, statistical continuum mechanics, thermodynamic properties, Lago (S.), Lombardero (M.), *6582*
- brownian motion, colloids, shear flow, suspensions, Takamura (K.), Van De Ven (T.G.M.), (et al.), *6583*
- hydrodynamic stability, mixtures, waves, Straughan (B.), *7141*
- hydrodynamic stability, micropolar media, Perez-Garcia (C.), Rubi (J.M.), (et al.), *7644*
- dilute solutions, micromechanisms, polymers, Kroner (E.), Takserman-Krozer (R.), *8484*
- couple stresses, micropolar media, rotating bodies, spherical bodies, Lakshmana Rao (S.K.), Iyengar (T.K.V.), *8487*
- couple stresses, poiseuille flow, Chaturani (P.), *8497*
- dilute solutions, suspensions, viscoelastic fluids, Taran (E.Yu.), *8503*
- blood flow, couple stresses, mixture theories, particle fluid flow, Chaturani (P.), Upadhya (V.S.), *9060*
- additives, lubricants (liquid), lubrication (boundary), oil films, Okabe (H.), Kanno (T.), *10893*
- duct flow, non newtonian flow, Sawada (T.), Tanahashi (T.), *11503*

Polasek (J.), see Kozel (K.), *11430*

pole placement, design, observers, Arbel (A.), Tse (E.), *100*
- adaptive systems, regulator problem, Gawthrop (P.J.), *185*
- adaptive systems, control, optimal control, Wellstead (P.E.), Edmunds (J.M.), (et al.), *186*
- multivariable systems, nonlinear systems, time varying systems, Sommer (R.), *385*
- decoupling, frequency domain techniques, multivariable systems, Koussiouris (T.G.), *3152*
- discrete systems, eigenvalues, linear systems, periodic systems, Kono (M.), *3156*
- control, design, linear systems, multivariable systems, observers, process control, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- control, linear systems, multivariable systems, regulator problem, Kimura (H.), *4209*
- design, multivariable systems, pid, Seraji (H.), *4220*
- algorithms, design, multivariable systems, Bogachev (A.V.), Grigorev (V.V.), (et al.), *4276*
- synthesis, time varying systems, Grigorian (F.P.), *5043*
- control, design, feedback, linear systems, multivariable systems, Balestrino (A.), Celentano (G.), *6125*
- control, design, feedback, linear systems, multivariable systems, Seraji (H.), *6126*
- control, feedback, linear systems, Shapiro (E.Y.), Fredricks (D.A.), (et al.), *6141*
- discrete systems, eigenvalues, riccati equation, Mori (Y.), Shimemura (E.), *7228*
- laplace transform, matrix methods, Seraji (H.), *7229*
- feedback, optimal control, Heymann (M.), *7230*
- frequency domain techniques, stability margin, stability theory, state space techniques, Noisser (R.), *9177*
- algorithms, automatic control (optimal), design, linear systems, Lee (G.K.F.), *10084*
- algorithms, guidance, linear systems, pursuit, time varying systems, Solenski (N.), *10092*
- automatic control, feedback, stability, Willems (J.C.), Commault (C.), *11037*
- multivariable systems, nyquist theory, root loci, Brockett (R.W.), Byrnes (C.I.), *11041*

poles, complex variables, distributed parameters, extended complex plane, linear systems, transfer functions, zeros, Ferreira (P.M.G.), *4211*
- matrix methods, transfer functions, Pugh (A.C.), Ratcliffe (P.A.), *11044*

Polesskaya (L.M.), acoustic measurements, defects, nondestructive tests, surface flaws, Grichuk (V.V.), (et al.), *6487*

Polesskii (E.P.), see Puris (B.I.), *5428*

Polezhaev (Yu.V.), erosion, impact, repeated loading, *7498*
- composite materials, erosion, impact, Romanchenkov (V.P.), (et al.), *7499*

Polhamus (G.D.), experimental results, eyes, heat transfer (biological), lasers, thermal effects, *7115*

Polhemus (N.W.), earthquakes, simulation, Cakmak (A.S.), *3012*

Poliakova (I.B.), see Kalinchuk (V.V.), *400*

Polianin (A.D.), chains, diffusion, drops, mass transfer, saturation, *1738*

Poliatzky (N.), see Muschik (W.), *1979*

Policella (H.), see Cailletaud (G.), *7504*

Polikar (M.), see Masliyah (J.H.), *3632*

Polinszky (K.), combustion instability, mathematical models, probability theory, Bator (B.), (et al.), *844*

Polishchuk (D.I.), aluminum, combustion, ignition, particles, Shevchuk (V.G.), (et al.), *5628*
- see Zolotko (A.N.), *10698*

Polizzotto (C.), see Panzeca (T.), *269*
- see Mazzarella (C.), *6513*

Pollack (M.L.), ducts, end effects, noise abatement, orifices, sound fields, *4777*

Pollard (R.T.), currents, inertial waves, ocean air interaction, oceanography, oscillations, thermocline, *10867*

Pollock (H.M.), see Chowdhury (S.K.R.), *1007*

Pollock (J.T.A.), copper alloys, creep, maraging steel, steel, stress relaxation, titanium, Barton (S.G.), (et al.), *6473*

pollution, environmental control, mathematical models, pesticide, Hirata (H.), Kogo (H.), *2192*
- deposition, estimation, Rodhe (H.), *7968*
- boundary layer, oil films, Sundaram (T.R.), *8501*
- boltzmann equation, chemical reactions, diffusion, Muller (K.H.), *11525*

Polotskii (V.N.), algorithms, model reduction, observers, *4213*

Polovnikov (V.I.), see Popov (Yu.A.), *10611*

Polyak (B.T.), adaptive systems, algorithms, gradient techniques, optimization, Tsypkin (Ya.Z.), *4325*

Polyakov (A.F.), boundary layer (turbulent), experimental methods, turbulence, turbulence (structure), Tsypulev (Yu.V.), (et al.), *9606*

Polyakov (V.A.), laminates, material testing, shear rigidity, shear strength, Tanevskii (V.V.), *6193*
- fibers, laminates, material testing, plastics, stretching, Tanevskii (V.V.), *10133*

Polyakov (V.L.), drainage, mathematical models, porous media, soils, *4838*

Polyakov (V.S.), dynamic properties, seismic loading, shock, vibration (forced), *1286*

Polyakova (L.A.), channel flow, diffusion, mass transfer, roughness, Shakhov (V.G.), *11496*

Polyanin (A.D.), see Gupalo (Yu.P.), *816*
- axisymmetric flow, electrical properties, magneto fluid dynamics, mass transfer, solids with liquids, Pryadkin (P.A.), *7897*
- see Gupalo (Yu.P.), *8896*
- bubbly flow, convection, drops, mass transfer, Sergeev (Yu.A.), *10657*
- bubble dynamics, diffusion, solubility, Sergeev (Yu.A.), *10676*
- diffusion, kinetics, particles, stokes flow, Sergeev (Yu.A.), *10680*

Polyanskii (A.F.), bodies of revolution, compressible flow, hypersonic flow, numerical methods, viscid inviscid flow, Skurin (L.I.), (et al.), *5416*

polycrystalline materials, anisotropic media, microstresses, pressure, stresses, Livshits (L.D.), Prishchepov (V.F.), *1877*

- finite element techniques, inhomogeneities, micromechanics, Kuksa (L.V.), Elmanovich (V.I.), *3140*
- copper, elastic constants, lattices, shear, strain, Gairola (B.K.D.), Kroner (E.), *6468*
- acoustic measurements, ferrites, nondestructive tests, ultrasonics, void fraction, Guseva (E.K.), Kovarskaya (E.Z.), (et al.), *6481*
- experimental results, plastic flow, work hardening, Mecking (H.), Kocks (U.F.), *7289*
- ceramics, crystals, flaws, grinding, strength, Rice (R.W.), Mecholsky (J.J.), (et al.), *7469*
- elastoplasticity, functional analyis, Malyi (V.I.), *8208*
- dislocations, indentation, metals, Tanaka (Y.), Ido (M.), (et al.), *8214*

polymers, materials properties, viscoelastic materials, Zezin (Yu.P.), Malinin (N.I.), *262*

- axial loading, creep, torsion, Vilks (U.K.), Tabuns (V.A.), (et al.), *272*
- adhesives, friction (sliding), plastics, Korshak (V.), Gribova (I.A.), *275*
- glass fibers, mechanical properties, West (J.M.), Majumdar (A.J.), (et al.), *291*
- composite materials, crack arrest, crack propagation, Barnes (C.R.), Rosenfield (A.R.), *455*
- closed conduit flow, unsteady flow, viscoelastic fluids, Ryan (M.E.), Dutta (A.), *544*
- cyclic loading, heating, thermal effects, thermal explosions, vibration, Meinkohn (D.), *929*
- cavitation, jets, two phase flow, Hoyt (J.W.), Taylor (J.J.), *946*
- friction, lubricants (solid), roughness, Ainbinder (S.B.), *1003*
- friction (sliding), lubricants (solid), wear, Sviridenok (A.I.), Savkin (V.G.), *1004*
- elastomers, friction (sliding), space, vacuum, Silin (A.A.), *1005*
- additives, bearings (journal), graphite, wear, Korshak (V.V.), Gribova (I.A.), (et al.), *1023*
- combined loading, experimental results, viscoelastic materials, Nishitani (T.), Murayama (Y.), *1189*
- creep, dynamic viscoelasticity, stress strain relationships, Bruller (O.S.), Kleinemeier (B.), *1191*
- materials properties, strain rate, viscoelasticity (dynamic), Kokoshvili (S.M.), Kalnin (P.P.), *1193*
- composite materials, shells (anisotropic), structural stability, Tomashevskii (V.T.), Yakovlev (V.S.), *1257*
- composite materials, creep rupture, laminates, plasticity, Brinson (H.F.), Griffith (W.I.), (et al.), *1356*
- aging, elastic constants, Baum (J.S.), Schultz (J.M.), *1403*
- creep, material testing, relaxation, Hayashi (K.), Gozu (K.), (et al.), *1412*
- jets, thin films, viscoelastic fluids, Entov (V.M.), Kestenboim (Kh.S.), (et al.), *1487*
- shear flow, viscometry, Kulicke (W.-M.), Porter (R.S.), *1488*
- deformation, heat, thermoelasticity, Persoz (B.), Rosso (J.C.), *1837*
- roughness, surface profiles, wear, Ryzhov (E.V.), *1933*
- bearings (journal), non newtonian flow, turbulence, Fukayama (H.), Tanaka (M.), (et al.), *1938*
- composite materials, creep, plastics, Sokolov (E.A.), Maksimov (R.D.), *2228*
- deformation (plastic), material testing, yield criteria, G'Sell (C.), Jonas (J.J.), *2235*
- cold working, constitutive equations, forming, survey, yield condition, Shaw (M.T.), *2396*
- birefringence, cyclic loading, elastoviscoplasticity, photoelasticity, Nishitani (T.), Koike (Y.), *2466*
- drawing, photoelasticity, viscoplasticity, Nishitani (T.), *2471*
- dynamic properties, elastic constants, mechanical properties, vibration, Mertz (K.), *2490*
- flow, plastics, rheology, Cogswell (F.N.), *2573, book*
- material testing, recoil, thermoplasticity, viscoelastic fluids, Apicella (A.), Niccodemo (L.), (et al.), *2576*
- flow measurement, stresses (normal), viscoelastic fluids, Roger (D.V.), Denn (M.M.), *2579*
- boiling, coatings, nucleate boiling, surface effect, thin films, Hinrichs (T.), Hennecke (E.), (et al.), *2732*
- anisotropic media, cooling, shells (cylindrical), shells (thick), thermal stresses, Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- elastic constants, thermal properties, Golik (A.Z.), Zabashta (Yu.F.), (et al.), *2978*
- composite materials, copper, friction, Savitskii (A.I.), *3046*
- biomaterials, bonded joints, dentistry, Amin (W.M.), Fletcher (A.M.), (et al.), *3070*
- accelerated testing, relaxing media, viscoelastic materials, Askadskii (A.A.), Todadze (T.V.), *3256*
- crack propagation, fractography, macroscopic characterization, moisture, Bretz (P.E.), Hertzberg (R.W.), (et al.), *3434*
- crack growth, fatigue, foam, material testing, Noble (F.W.), Lilley (J.), *3437*
- dynamic properties, pendulums, ropes, torsion, transducers (displacement), Rind (E.), Bryant (E.L.), *3510*
- viscoelastic fluids, viscoelastic materials, Marin (G.), Montfort (J.P.), (et al.), *3591*
- additives, permeability, porous media, water, Bakhitov (G.G.), Ogandzhanyants (V.G.), (et al.), *4022*
- creep, experimental results, tension, Dixon-Stubbs (P.J.), *4349*
- diffusion, mass transfer, rotating disks, Lal (P.), Mishra (P.), (et al.), *4729*
- composite materials, crack propagation, micromechanics, Theocaris (P.S.), Stassinakis (C.A.), *5292*
- birefringence, experimental methods, extension, Van Aken (J.A.), Janeschitz-Kriegl (H.), *5384*
- micromechanisms, rheology, viscoelastic fluids, Johnson (M.W.) Jr., Segalman (D.), *5386*
- additives, drag, spherical bodies, structure, velocity profiles, Puris (B.I.), Polesskii (E.P.), (et al.), *5428*
- friction (sliding), heat transfer (direct contact), wear, Kar (M.K.), Bahadur (S.), *5973*
- electron microscopy, friction (sliding), particles, wear, Belin (M.), Mansot (J.L.), (et al.), *5975*
- dies, films, materials processing, melting, Cheng (C.Y.), *6407*
- fracture, life expectancy, Narzullaev (B.N.), Karimov (S.N.), (et al.), *6426*
- fracture criteria, low cycle fatigue, probability, rubber, Valanis (K.C.), Yilmazer (U.), *6456*
- constitutive equations, shear flow, viscoelastic fluids, Leonov (A.I.), Prokunin (A.N.), *6571*
- micromechanisms, viscosity, Budtov (V.P.), Romanovskii (G.K.), *6578*
- dilute solutions, viscosity, viscous flow, Geisler (H.), Muller (H.G.), *6579*
- dilute solutions, drag reduction, hot film, Piau (J.-M.), *6590*
- drag reduction, non newtonian flow, transition, Tandon (P.N.), Kulshreshtha (A.K.), *6652*
- channel flow, cooling, injection molding, two dimensional flow, viscoelastic fluids, Isayev (A.I.), Hieber (C.A.), *6655*
- jets, lubricants (liquid), non newtonian flow, squeeze films, Oliver (D.R.), Shahidullah (M.), *7103*
- impact, materials properties, viscoelasticity (dynamic), Matsumoto (H.), Nakahara (I.), (et al.), *7279*
- elastic constants, fibers, high strength, organic fibers, Black (W.B.), *7280*
- composite materials, elliptical bodies, thermal expansion, Takahashi (K.), Harakawa (K.), (et al.), *7297*
- crack growth, dugdale model, films, micromechanics, optical techniques, Donald (A.M.), Kramer (E.J.), *7500*
- aluminum alloys, bonded joints, crack propagation, Mijovic (J.), *7536*
- fracture, notch tests, torsion, yield condition, Truss (R.W.), Duckett (R.A.), (et al.), *7564*
- anisotropic media, composite materials, mathematical programming, optimization, shells (of revolution), Tomashevskii (V.T.), Nikolaev (B.A.), (et al.), *7594*
- chemically reactive flow, dilute solutions, Kwack (E.Y.), Hartnett (J.P.), (et al.), *7640*
- dilute solutions, viscometry, viscosity, Nikonov (N.T.), *7641*
- constitutive equations, particulate flow, viscoelastic fluids, White (J.L.), Tanaka (H.), *7645*
- drag reduction, jets, slots, viscoelasticity, Fruman (D.H.), Galivel (P.), *7667*
- drag reduction, laminar flow, laser doppler velocimeters, rotating disks, Ulbrecht (J.J.), Gasparetto (C.A.), *7675*
- composite materials, thermal stresses, Korotkov (V.N.), Turusov (R.A.), (et al.), *7952*
- composite materials, fatigue, plastics, Furue (H.), Shimamura (S.), *7958*
- composite materials, cylindrical bodies, elastic constants, strength, textiles, Dumont (J.P.), *8220*
- crack propagation, fatigue, Sandt (A.), Hornbogen (E.), *8371*
- crack growth, fatigue, Radon (J.C.), *8375*
- crack initiation, crack propagation, cyclic loading, fatigue, micromechanics, Sauer (J.A.), Richardson (G.C.), *8377*
- crack growth, dugdale model, viscoelastic materials, Kaminskii (A.A.), *8410*
- dilute solutions, micromechanisms, polar fluids, Kroner (E.), Takserman-Krozer (R.), *8484*
- drops, shear flow, Chin (H.B.), Han (C.D.), *8492*
- birefringence, secondary flow, Han (C.D.), Yoo (H.J.), *8493*
- dies, extrusion, Weill (A.), *8495*
- birefringent materials, viscometry, Van Aken (J.A.), Gortemaker (F.H.), (et al.), *8498*
- boundary layer, dilute solutions, Kiya (M.), Arie (M.), (et al.), *8499*
- fluctuations, laminar flow, strain rate, two dimensional flow, Abernathy (F.H.), Bertschy (J.R.), (et al.), *8508*
- moving media, plane flow, porous walls, Kalita (W.), Lubonski (J.), *8561*
- dilute solutions, drag reduction, pipe flow, pressure drop, Loca (A.), Hubert (I.), (et al.), *8578*
- dilute solutions, linear systems, lyapunov's functions, stability theory, turbulent flow, Phan-Thien (N.), Atkinson (J.D.), *9094*
- composite materials, cracks, delamination, Tomashevskii (V.T.), Shalygin (V.N.), (et al.), *9246*
- composite materials, fibers, fracture, tension, Protasov (V.D.), Ermolenko (A.F.), (et al.), *9251*
- creep, deformation, polymer concrete, Khristova (Ya.), *9451*
- drag reduction, pipes, sewerage, Sellin (R.H.J.), Ollis (M.), *9504*
- casting, channel flow, film flow, non newtonian flow, plates (parallel), squeeze films, Kazankov (Yu.V.), Pervushin (V.E.), *9709*

- bubble dynamics, damping, dilute solutions, Mccomb (W.D.), Ayyash (S.), *5884*
- casting, rheomolding, vibration (electromechanical), vibration (forced), Ibar (J.P.), Solomat (S.A.), *10266*
- crack initiation, crack propagation, fatigue, impact, Takemori (M.T.), *10331*
- dilute solutions, inlets, laminar flow, pitot tube, Bistagnino (C.), Cancelli (C.), (et al.), *10444*
- creep, equations of state, molecular theory, thermophysical properties, Ainbinder (S.B.), Tyunina (E.L.), (et al.), *10556*
- anisotropic media, conductivity, thermophysical properties, thin films, Voronkov (V.A.), Sukhareva (L.A.), (et al.), *10559*
- couette flow, dilute solutions, hydrodynamic stability, Lhuillier (D.), *11502*

polytropic processes, discontinuities, shock waves, waves, Ruggeri (T.), *679*
- steam, thermodynamic processes, two phase flow, Bayer (Z.), *1651*

Polyzakis (M.), see Jami (A.), *6103*

Pomazi (L.), plates (rectangular), plates (reinforced), plates (sandwich), structural stability, *4397*

Pomianowski (A.), see Adamczyk (Z.), *4822*

Pond (S.), see Large (W.G.), *10872*

Ponnuswamy (V.), finite difference methods, laplace equation, relaxation methods, *8138*

Ponomarenko (V.S.), optimization, power generation, water, water supply systems, Boychuk (L.M.), *2184*

Ponomarev (K.K.), buckling, shells (cylindrical), *353*

Pons (J.C.), see Fras (G.), *8951*

Pontikos (N.), pressure measurement, shear stress, surface flow, turbulent flow, Bradshaw (P.), *712*

Pontius (P.E.), calibration, force, measurements, thermoelasticity (transient), transducers (load), Mitchell (R.A.), *10313*

pool boiling, critical heat flux, nuclear reactors, nucleate boiling, Theofanous (T.G.), *738*
- magneto fluid dynamics, Wagner (L.Y.), Lykoudis (P.S.), *741*
- boiling, heat transfer, liquid nitrogen, nucleate boiling, Trepp (C.), V. Hoffmann (T.), *1670*
- bubble dynamics, heat transfer, Burow (P.), Beer (H.), *1865*
- boiling, critical heat flux, Tolubinskii (V.I.), Kichigin (A.M.), (et al.), *2795*
- film boiling, nucleate boiling, thermal instability, transition boiling, Zhukov (S.A.), Barelko (V.V.), (et al.), *6772*
- contamination, nucleate boiling, Joudi (K.A.), James (D.D.), *7828*

Poole (H.W.), see Barker (R.L.), *5139*

Poole (W.), additives, aluminum alloys, corrosion, lubrication (boundary), wear, Sullivan (J.L.), *3041*

Pop (I.), buoyant flow, convection (free), laminar flow, stokes flow, transient effects, Soundalgekar (V.M.), *752*
- see Soundalgekar (V.M.), *2804*
- see Katagiri (M.), *3800*
- see Borkakati (A.K.), *11815*

Pop (J.J.), acceleration waves, dynamic analysis, mathematical methods, membranes, Wang (C.-C.), *4421*

Popa (V.), free boundary, nonhomogeneous media, nonlinear theory, porous media, *7976*

Pope (C.W.), see Woods (W.A.), *3629*

Pope (G.A.), flood flow, oil removal, petroleum, recovery systems, *12066*

Pope (R.J.), see Clarkson (B.L.), *5210*

Pope (S.B.), chemically reactive flow, monte carlo analysis, real gas effects, turbulence model, turbulent flow, *10479*

Popelar (C.H.), crack arrest, dynamic fracture, impact, shells (cylindrical), surface flaws, Gehlen (P.C.), (et al.), *1383*
- crack propagation, stress intensity factor, strips, viscoelasticity (dynamic), wiener-hopf technique, Atkinson (C.), *3468*

Popescu (D.), see Poterasu (V-F.), *3209*

Popiel (C.O.), combustion (turbulent), convection (forced), impact jets, impingement, isothermal processes, jets, thermal measurements, Van Der Meer (T.H.), (et al.), *727*

Popkov (Yu.S.), see Baibatshaev (M.Sh.), *3189*

Poplawsky (C.J.), energy storage, solar energy, solar ponds, thermal diffusion, Incropera (F.P.), (et al.), *4723*

Popov (A.A.), see Parvatov (G.N.), *6486*

Popov (A.P.), see Makhmudov (A.A.), *1613*

Popov (E.P.), cyclic testing, frames, inelasticity, offshore structures, seismic loading, Mahin (S.A.), (et al.), *2535*

Popov (G.Ya.), boundary value problems, elliptic equations, green function, layered media, sturm-liouville problem, Gribnyak (S.T.), *7303*

Popov (N.N.), beams, deformation (plastic), dynamic loads, materials properties, reinforced concrete, Rastorguev (B.S.), (et al.), *6521*

Popov (O.M.), see Sergeev (S.I.), *5532*

Popov (S.B.), compressible flow, finite difference methods, Popov (Yu.P.), *11435*

Popov (S.P.), compressible flow, mathematical models, thermodynamics (nonequilibrium), two dimensional flow, Romashkevich (Yu.I.), *6631*

Popov (V.A.), see Chashechkin (Yu.D.), *577*
- mixing layers, shear flow, stratified flow, Chashechkin (Yu.D.), *2667*

Popov (Ye.P.), see Krutko (P.D.), *213*
- see Krutko (P.D.), *4257*

Popov (Yu.A.), drops, reflection, scattered light, water, *5583*
- channel flow, convection, heat transfer (combined modes), radiant interchange, scattering, turbulent flow, Polovnikov (V.I.), *10611*
- combustion products, gas surface interaction, heat transfer, radiant interchange, Melman (M.M.), (et al.), *10707*

Popov (Yu.P.), see Kosovichev (A.G.), *11418*
- see Popov (S.B.), *11435*

Popovich (V.E.), see Marin (V.A.), *3991*

Popovics (C.), see Benattar (R.), *5683*

Popovics (S.), concrete, strength, *9448*

Popovskii (V.I.), estimation, obsolete data, prediction, stochastic processes, Chizhenkov (Yu.Ya.), *164*

Popp (I.), see Gupta (A.S.), *1667*

Popp (K.), magnetic suspension, rails, vehicles, vibration (random), *3386*

Poppe (W.), inviscid fluid, unsteady flow, vortex rings, *3615*

Popperling (R.), cracking, hydrogen embrittlement, stress corrosion, Schwenk (W.), *7490*

Popplewell (N.), displacement, dynamic analysis, structural response, transient loading, vibration, Scarth (D.A.), (et al.), *8277*

Porat (B.), see Bar-Itzhack (I.Y.), *2165*

pore pressure, dissipation, modeling, soils, Verruijt (A.), *411*
- field tests, river beds, sedimentation, soils, Bennett (R.H.), Faris (R.), *423*
- deformation, pressure, rocks, Blanton (T.L.) III, *432*
- deformation, fracture, joints, rocks, Dhowian (A.W.), *5264*
- cavities, clay, stress analysis, Carter (J.P.), Randolph (M.F.), (et al.), *6383*
- experimental methods, soil mechanics, Premchitt (J.), Brand (E.W.), *9352*
- cyclic loading, ocean bed, soils, Martin (G.R.), Lam (I.), (et al.), *10253*
- attenuation, friction (sliding), seismic waves, Winkler (K.W.), Nur (A.), *10644*

Poritskii (V.Ya.), see Gabovich (M.D.), *2889*

Porotskii (S.M.), see Kitovich (V.V.), *2107*

porous media, continuum theory, mixture theories, Vodak (F.), *6*
- buried structures, ocean bed, pipelines, potential flow, wave loads, Macpherson (H.), *562*
- boundary layer (turbulent), fluid injection, heat transfer, turbulence, Mamonov (V.N.), *655*
- concentration, gases, impurities, Zyabrev (N.B.), Kudryashov (N.A.), (et al.), *823*
- dispersion, mass transfer, stagnation zones, Golubev (V.S.), *831*
- charged particles, electro-osmosis, fluid mechanics, Auriault (J.L.), Strzelecki (T.), *949*
- fluid mechanics, mathematical methods, Rudnicki (J.W.), *950*
- moisture, transport phenomena, Faghri (M.), Eckert (E.R.G.), *951*
- permeability, two phase flow, El-Khatib (N.A.F.), *954*
- convection, permeability, Tewari (P.K.), Torrance (K.E.), *955*
- boundary layer, heat transfer, Bejan (A.), *957*
- convection (free), infiltration, saturation, Plumb (O.A.), Huenefeld (J.C.), *958*
- fluid conveyance, heat transfer, Sophocleous (M.), *959*
- granular media, groundwater, infiltration, river beds, Van'T Woudt (B.D.), Nicolle (K.), *976*
- fracture, pressure, rocks, Gowd (T.N.), Rummel (F.), *1336*
- aluminum alloys, fracture toughness, porosity, welded joints, Mccarthy (W.A.) Jr., Lamba (H.), (et al.), *1476*
- cavities, cylindrical bodies, diffusion, mass transportation, Gipson (G.S.), Thoms (R.L.), *1729*
- deformation, diffusion, mathematical models, Podstrigach (Ya.S.), Povstenko (Yu.Z.), *1730*
- combustion, hydrogen, injection, Hubbartt (J.E.), Strahle (W.C.), (et al.), *1751*
- boundary layer, combustion, heat transfer, hydrocarbons, mass transfer, Batievskii (V.L.), Sergeev (G.T.), *1753*
- elliptical bodies, magneto fluid dynamics, pressure gradient, tubes, Gupta (G.D.), *1773*
- finite element techniques, upset forging, Petrosian (G.L.), Nersisian (G.G.), (et al.), *1875*
- metals, plasticity, yield criteria, Gadala (M.S.), Mullins (M.L.), (et al.), *2243*
- load transfer, loads, piles, saturation, soils, Niumpradit (B.), Karasudhi (P.), *2385*
- explosive loading, microcracks, rocks, shock waves, Siegfried (R.W.), Mcqueen (R.G.), (et al.), *2388*
- anisotropic media, rocks, Smith (M.B.), Cheatham (J.B.) Jr., *2390*
- ductile fracture, fracture, plasticity, Oyane (M.), Sato (T.), (et al.), *2446*
- absorption, cavities, ducts, silencers, sound propagation, Yoshida (H.), *2934*
- absorption, acoustic measurements, reflection, Nakamura (T.), Nakamura (A.), (et al.), *2954*
- darcy flow, multiphase flow, Wright (R.J.), Dawe (R.A.), *2997*
- elastic waves, granular media, saturation, Berryman (J.G.), *3000*
- free boundary, numerical methods, Alt (H.W.), *3002*
- integral methods, soil consolidation, Sukharev (B.V.), *3401*
- boundary layer (thermal), convection, heat transfer, plates (parallel), Merkin (J.H.), *3782*
- capillary flow, diffusion, drying, evaporation, Molnar (K.), *3845*
- mathematical models, sublimation, Lin (S.), *3846*
- additives, permeability, polymers, water, Bakhitov (G.G.), Ogandzhanyants (V.G.), (et al.), *4022*
- immiscible fluids, two phase flow, Anderson (R.M.), Ford (W.T.), *4023*

- permeability, rocks, Brace (W.F.), *4024*
- non newtonian flow, power law fluids, Odeh (A.S.), Yang (H.T.), *4026*
- channel flow, permeability, Kubik (J.), *4027*
- heat transfer, perturbation methods, Lu (P.-C.), *4029*
- conical bodies, penetration, rocks, Forrestal (M.J.), Longcope (D.B.), (et al.), *4457*
- elastic constants, elastic waves, liquid gas mixture, Vodak (F.), *4837*
- drainage, mathematical models, soils, Polyakov (V.L.), *4838*
- convection (forced), rotating bodies, Chakrabarti (A.), Gupta (A.S.), *4840*
- experimental methods, hydraulic instruments, mercury, Van Brakel (J.) ed., *4843, book*
- anisotropy, hardening, rocks, Celle (C.C.), Cheatham (J.B.), *5265*
- permeability, rocks, Neuzil (C.E.), Cooley (C.), (et al.), *5266*
- boundary layer, friction (skin), suction, unsteady state, Lal (K.), *5435*
- filtration, laminar flow, resistance, tube bundles, Kolodziej (J.A.), *5437*
- evaporation, liquid metals, mass transfer, Prosvetov (V.V.), *5608*
- heat transfer, mass transfer, moisture, Eckert (E.R.G.), Faghri (M.), *5623*
- capillary flow, inhomogeneities, magneto fluid dynamics, mass transfer, Panasyuk (A.L.), Panchenko (M.S.), (et al.), *5677*
- attenuation, sand, saturation, sound propagation, viscosity, Hovem (J.M.), Ingram (G.D.), *5733*
- attenuation, ocean bed, sedimentation, underwater acoustics, Hovem (J.M.), *5753*
- multiphase flow, transport phenomena, Veziroglu (T.N.) ed., *5827, book*
- anisotropic media, incompressible flow, Kosterin (A.V.), *5828*
- mixtures, powders, Tikhomolova (K.P.), Shishkanova (L.A.), *5830*
- infiltration, nonequilibrium flow, Kosterin (A.V.), *5831*
- dissociation, gases, unsteady flow, Lippy (D.), Evans (R.D.), *5832*
- adsorption, dispersion, rocks, transport phenomena, Satter (A.), Shum (Y.M.), (et al.), *5834*
- free boundary, infiltration, nonlinear mechanics, variational methods, Quarteroni (A.), Visintin (A.), *5835*
- compressional waves, fluid mechanics, sand, saturation, Allen (N.F.), Richart (F.E.) Jr., (et al.), *5836*
- variational methods, waves, Bedford (A.), *5837*
- fluid mechanics, infiltration, Yamagami (K.), Kurashige (M.), *5838*
- infiltration, soil mechanics, Reeder (J.W.), *5839*
- elastic waves, fluid injection, Dziecielak (R.), *5850*
- macroscopic characterization, micromechanics, Burridge (R.), *5851*
- heat transfer, mass transfer, moving media, saturation, Verigin (N.N.), Khabibullin (I.L.), (et al.), *5853*
- infiltration, moisture, Dinulescu (H.A.), Eckert (E.R.G.), *5854*
- convection, heat transfer, Simpkins (P.G.), Blythe (P.A.), *5855*
- multiphase flow, reservoirs, Leventhal (S.H.), *5860*
- finite difference methods, infiltration, Orasanu (M.), *5861*
- convection, thermal instability, Sharma (R.C.), *5883*
- groundwater, soils, Kalyuzhnyi (I.L.), Pavlova (K.K.), *5899*
- filtration, Danilov (V.L.), *5900*
- aquifers, groundwater, Gupta (S.K.), Lal (D.), (et al.), *5902*
- aquifers, Brutsaert (W.), Corapcioglu (M.Y.), *5907*
- pressure measurement, snow, Wankiewicz (A.), *5908*
- aquifers, Motz (L.H.), *5909*
- conical bodies, penetration, rocks, Longcope (D.B.), Forrestal (M.J.), *6358*
- boundary value problems, diffusion, mathematical models, nonlinear analysis, Alikakos (N.D.), Rostamian (R.), *6831*
- combustion, kinetics, oxidation, Chernenko (E.V.), Ivleva (T.A.), (et al.), *6841*
- half space, layered media, sound propagation, Attenborough (K.), Hayek (S.I.), (et al.), *6919*
- asymptotic behavior, transition flow, Nilson (R.H.), *7004*
- chemical reactors, filtration, Ngoc (D.M.), *7006*
- experimental methods, holes, permeability, Dees (P.J.), Tjan (T.G.), (et al.), *7007*
- constitutive equations, viscous flow, Williams (W.O.), *7008*
- constitutive equations, elastoplasticity, rocks, Yamada (S.E.), Schatz (J.F.), (et al.), *7017*
- complex variables, fluid mechanics, Orasanu (M.), *7019*
- composite materials, finite element techniques, heat transfer, mass transfer, Strada (M.), Lewis (R.W.), *7224*
- elastic constants, rocks, Digby (P.J.), *7448*
- deformation, models, rocks, saturation, Abey (A.E.), *7450*
- duct flow, flow reversal, hydrodynamic stability, unsteady flow, Bau (H.H.), Torrance (K.E.), *7840*
- kelvin-helmholtz instability, magneto fluid dynamics, streams, Sharma (R.C.), Singh (H.), (et al.), *7901*
- anisotropy, concentration, dispersion, mixed flow, Routaboul (F.), Quintard (M.), *7973*
- absorption, mixed flow, Tsabek (L.K.), *7974*
- free boundary, nonhomogeneous media, nonlinear theory, Popa (V.), *7976*
- non newtonian flow, power law fluids, transient effects, Ikoku (C.U.), Ramey (H.J.) Jr., *7977*
- mathematical models, saturation, two component flow, Kowalski (S.J.), *7978*
- half space, vortex flow, Vaisman (A.M.), *7980*
- finite element techniques, fluid mechanics, streamlines, Christian (J.T.), *7981*
- acoustic waves, permeability, Nur (A.M.), Walls (J.D.), (et al.), *7969*
- experimental methods, permeability, rocks, Batycky (J.P.), Mccaffery (F.G.), (et al.), *7990*
- convection (free), diffusion, layered media, Griffiths (R.W.), *7991*
- conduction (heat), continuum mechanics, Hlavacek (M.), *7993*
- diffusion, elastic bodies, finite element techniques, Kanok-Nukulchai (W.), Suaris (V.W.), *7997*
- biomechanics, composite materials, continuum theory, discrete systems, mixtures, Brulin (O.) eds., Hsieh (R.K.T.), *8090, book*
- nonlinear materials, viscoelastic materials, wedges, Kolokolchikov (V.V.), *8194*
- boundary layer (thermal), bounded media, convection, hydrodynamic stability, stagnation point, vortex flow, Hsu (C.T.), Cheng (P.), *8711*
- darcy flow, heat transfer, mass transfer, Vafai (K.), Tien (C.L.), *8782*
- heat transfer, mass transfer, nonlinear analysis, Thomas (H.R.), Morgan (K.), (et al.), *8783*
- boussinesq equation, convection (free), heat transfer, insulation, Brailovskaya (V.A.), Kogan (V.R.), (et al.), *8784*
- cylindrical bodies, mass transfer, permeability, Swarup (S.), *8785*
- convection, magneto fluid dynamics, oscillatory flow, theory, Sharma (R.C.), Sharma (K.N.), *8824*
- chemical kinetics, mixtures, Liu (I.-S.), *8897*
- dispersion, stratification, taylor instability, Lake (L.W.), Hirasaki (G.J.), *8919*
- free boundary, unsteady flow, Rasmussen (H.), Salhani (D.), *8920*
- electro fluid dynamics, fluid mechanics, permeability, rocks, Kormiltsev (V.V.), Khachay (O.A.), *8921*
- petroleum deposits, reservoir engineering, Da Prat (G.), Cinco-Ley (H.), (et al.), *8922*
- filtration, mass flow, Vasilev (L.L.), Maiorov (V.A.), *8924*
- non newtonian flow, power law fluids, transient effects, Ikoku (C.U.), Ramey (H.J.) Jr., *8926*
- compressible flow, consolidation, Singh (S.R.), Sagar (B.), *8927*
- interface phenomena, rotational flow, Verruijt (A.), *8928*
- interface phenomena, permeability, Bardon (C.), Longeron (D.G), *8929*
- geophysics, tectonics, viscous flow, Karakin (A.V.), Lobkovskii (L.I.), *8931*
- deformable bodies, mass flow, Beavers (G.S.), Hajji (A.), (et al.), *8938*
- deformable bodies, experimental results, mass flow, Beavers (G.S.), Wittenberg (K.), (et al.), *8939*
- convection (free), heat transfer, layered media, Masuoka (T.), Yokota (Y.), (et al.), *8940*
- chemically reactive flow, numerical methods, Chin (R.C.Y.), Braun (R.L.), *8941*
- convection (forced), mixed flow, stability theory, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *8942*
- convection (free), finite element techniques, Diersch (H.-J.), *8945*
- boussinesq equation, differential equations (ordinary), differential equations (partial), hydrology, similarity methods, Bhutani (O.P.), Sharma (N.L.), *8969*
- groundwater, infiltration, Batu (V.), *8970*
- aquifers, coasts, finite element techniques, infiltration, Das Gupta (A.), Arbhabhirama (A.), *8971*
- capillary flow, closed conduit flow, convection (free), heat transfer, thermal instability, vortex flow, Catton (I.) eds., Smith (R.N.), *9682, book*
- combustion, filtration, Aldushin (A.P.), Seplyarskii (B.S.), (et al.), *9757*
- combustion instability, filtration, oxidizers, Sukhov (G.S.), Yarin (L.P.), *9763*
- compaction, explosions, impulsive loading, transient loading, underground, Bovt (A.N.), Kobets (V.I.), (et al.), *9838*
- emulsions, fluid mechanics, permeability, shear, surface profiles, surfactants, Kalpakci (B.), Klaus (E.E.), (et al.), *9887*
- filtration, mathematical models, Golden (J.M.), *9888*
- fissures, fluid mechanics, rock mechanics, Davis (G.B.), Hill (J.M.), *9889*
- mathematical methods, seepage, Orasanu (M.T.), *9891*
- fluid injection, immiscible fluids, two phase flow, Mishra (S.K.), Verma (S.P.), *9894*
- dynamic properties, elastic waves, stratification, waves, Barzam (V.A.), *9897*
- cavities, convection (forced), heat transfer, viscous effects, Blythe (P.A.), Simpkins (P.G.), *9898*
- freezing, heat transfer, mass transfer, Jame (Y.-W.), Norum (D.I.), *9900*
- asymptotic behavior, convection (free), corners, Liu (C.Y.), Ismail (K.A.R.), *9901*
- galerkin method, mixed flow, Ewing (R.E.), Wheeler (M.F.), *9904*
- darcy flow, singularities, Lafe (O.E.), Montes (J.S.), (et al.), *9905*
- brittle materials, crack initiation, cracks, failure, powders, Barinov (S.M.), Krasulin (Yu.L.), *10308*
- crossflow, darcy flow, freezing, packed beds, tubes, Okada (M.), *10597*
- convection (free), mass transfer, packed beds, Gabitto (J.F.), Bohm (E.), *10689*
- adsorption, convection, dispersion, surfactants, Ramirez (W.F.), Shuler (P.J.), (et al.), *10690*
- dissociation, fluid mechanics, gases, moving surfaces, Verigin (N.N.), Khabibullin (I.L.), (et al.), *10691*
- evaporation, heat transfer, mass transfer, Iodko (E.A.), *10692*
- contamination, convection (free), diffusion, fracture, Nuttall (H.E.), Ray (A.K.), *10829*
- darcy flow, ekman layer, Verma (A.K.), *10830*
- boundary value problems, potential flow, two dimensional flow, Orasanu (M.T.), *10833*

- one dimensional flow, saturation, travelling waves, Nakano (Y.), *10834*
- convection, immiscible fluids, nonlinear theory, Gagneux (G.), *10835*
- anisotropic media, unsteady flow, Falade (G.K.), *10836*
- darcy flow, filtration, immiscible fluids, Mircea (O.T.), *10837*
- taylor instability, two component flow, Sharma (R.C.), Sharma (K.N.), *10839*
- elastic waves, propagation, saturation, Berryman (J.G.), *10841*
- electro fluid dynamics, thermodynamics (nonequilibrium), Blokhra (R.L.), Kohli (S.), *10843*
- convection, heat addition, hydrodynamic stability, rayleigh number, saturation, Straus (J.M.), Schubert (G.), *11367*
- convection (free), heat addition, rayleigh number, thermal instability, Horne (R.N.), Caltagirone (J.-P.), *11369*
- asymptotic methods, cylindrical bodies, drag, viscous flow, Verma (P.D.), Vyas (H.K.), *11390*
- fickian model, layered media, transport phenomena, Matheron (G.), De Marsily (G.), *11776*
- film cooling, fluid injection, mass transfer, turbulence (freestream), Mironov (B.P.), Lugovskiy (P.P.), (et al.), *11778*
- boiling, Bau (H.H.), *11779*
- burning rate, flame propagation, inert gases, oxidizers, Lebedev (A.D.), Sokolov (A.S.), *11791*
- carbon, char particles, combustion, mass transfer, particles, Simons (G.A.), *11793*
- acoustic waves, cavities, elastic bodies, propagation, Junger (M.C.), *11922*
- dispersion, sound speed, ultrasonics, Sayers (C.M.), *11925*
- boundary value problems, radiation, sound, Oie (S.), Takeuchi (R.), *11981*
- boundary value problems, radiation, sound, Oie (S.), Takeuchi (R.), *11982*
- boundary value problems, radiation, sound, Oie (S.), Takeuchi (R.), *11983*
- interfaces, numerical methods, two phase flow, Glimm (J.), Marchesin (D.), (et al.), *12026*
- travelling waves, two phase flow, Nakano (Y.), *12065*
- evaporation, resistance, two phase flow, Maiorov (V.A.), *12067*
- convection (forced), large displacement, nonlinear characteristics, saturation, Rudraiah (N.), Srimani (P.K.), *12069*

porous surfaces, evaporation, heat transfer, Rannenberg (M.), Beer (H.), *1873*
- boundary layer (turbulent), fences, separated flow, two dimensional flow, Perera (M.D.A.E.S.), *2628*
- boundary layer, heat transfer, mass transfer, Pavlov (K.B.), Pokrovskii (L.D.), (et al.), *2638*
- blades, layered media, multilayer, temperature, turbomachinery, Lokai (V.I.), Zhuikov (V.V.), (et al.), *2822*
- condensers, mass transfer, tube bundles, Aly (S.), Cunningham (J.), *2857*
- burners, flames, Bystrova (T.V.), Librovich (V.B.), *2862*
- drag coefficient, reynolds number (small), spherical bodies, Masliyah (J.H.), Polikar (M.), *3632*
- friction (skin), poiseuille flow, suction, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *3669*
- membranes, rotating bodies, Mikhlin (J.A.), Tanny (G.B.), *3852*
- creeping flow, drag, non newtonian flow, power law fluids, Kawase (Y.), Ulbrecht (J.J.), *4567*
- boundary layer, friction (skin), supersonic flow, three dimensional flow, Brykina (I.G.), Gershbein (E.A.), (et al.), *4606*
- ducts (curved), laminar flow, secondary flow, unsteady flow, Zapryanov (Z.), Matakiev (V.), *4618*
- diffusion, rarefied gases, Mingle (J.O.), *5425*
- boiling, capillary flow, cryogenics, gasification, Orlov (V.K.), Savelev (V.N.), *5543*
- boussinesq equation, heat transfer, oscillatory flow, plates, Soundalgekar (V.M.), Hiremath (S.B.), *6622*
- magnetic field, non newtonian flow, suction, Abdel-Gaid (M.A.), Khider (M.A.), (et al.), *6645*
- fluid injection, laminar flow, Sadhna Khare (K.), *7709*
- boiling, film boiling, thermal effects, Strikovich (M.A.), Malyshenko (S.P.), (et al.), *7835*
- numerical methods, seepage, Karadi (G.M.), De Miguel (E.), (et al.), *7982*
- blood flow, lungs, pulsatile flow, Gopalan (N.P.), *8076*
- complex variables, cylindrical bodies, inviscid fluid, plates, Capodanno (P.), *8521*
- complex variables, cylindrical bodies, inviscid fluid, plates, Petrila (T.), *8522*
- conformal mapping, irrotational flow, plates, walls, Prosnak (W.J.), Rokicki (J.), *8541*
- fourier transform, incompressible flow, suction, two dimensional flow, Nayfeh (A.H.), Reed (H.L.), (et al.), *8663*
- convection (free), decomposition, exothermic reactions, Seatdjian (E.), Caltagirone (J.P.), *8721*
- acceleration, hall effect, laplace transform, magneto fluid dynamics, Kant (R.), *8819*
- boiling, capillary flow, Afanasev (B.A.), Smirnov (G.F.), *9687*
- heat transfer, laminar flow, plates (parallel), Chaudhary (R.C.), Gaur (Y.N.), *10683*
- combustion, Sergeev (G.T.), *10684*
- conduction (heat), drainage, Girol (A.P.), Mizyuk (V.G.), (et al.), *10688*
- couette flow, heat transfer, kinetic theory, rarefied gases, Khidr (M.A.), Abdel-Gaid (M.A.), *11454*
- channel flow, heat transfer, pulsatile flow, viscoelastic fluids, Roy (J.S.), Nayak (P.), (et al.), *11509*
- laplace transform, magneto fluid dynamics, rotating fluids, unsteady flow, Seth (G.S.), Jana (R.N.), (et al.), *11812*
- acoustic properties, layered media, Ingard (K.U.), *11992*

porous walls, channel flow, laminar flow, unsteady flow, Bhattacharyya (P.), *620*
- numerical methods, transonic flow, wind tunnels, Karlsson (K.R.), Sedin (Y.C.-J.), *1520*
- interference, three dimensional flow, transonic flow, wall effects, wind tunnels, Parker (R.L.) Jr., Sickles (W.L.), *1647*
- convection, jets, Soundalgekar (V.M.), Vighnesam (N.V.), (et al.), *1676*
- boundary layer (thermal), convection (free), nusselt number, perturbation methods, Cheng (P.), Chang (I.-D.), *1680*
- flight tests, vortices, wakes, wings, Smith (H.C.), *2730*
- airfoils, lift, two dimensional flow, wind tunnels, Sawada (H.), *2769*
- convection (free), rotating disks, rotating fluids, Soundalgekar (V.M.), Pop (I.), *2804*
- entrance region, laminar flow, pipe flow, Masuzawa (J.), Tanahashi (T.), (et al.), *3672*
- channel flow, convection, viscoelastic fluids, Mohapatra (P.), Devi (P.), *3806*
- aeration, channels, particles, two phase flow, Ishida (M.), Hatano (H.), (et al.), *4006*
- fluid injection, pipe flow, transpiration, turbulent flow, Eroshenko (V.M.), Ershov (A.V.), (et al.), *4622*
- differential equations (ordinary), filtration, heat transfer, injection, Sergeev (G.T.), *4732*
- holes, infiltration, unsteady flow, Raichenko (L.M.), *4839*
- airfoils, compressible flow, transonic flow, wind tunnels, Blynskaya (A.A.), Lifhits (Yu.B.), *6628*
- drag, ducts, laminar flow, variable fluid properties, Eroshenko (V.M.), Zaichik (L.I.), (et al.), *6658*
- airfoils, compressible flow, Ciavaldini (J.-F.), Pogu (M.), (et al.), *6721*
- cylindrical bodies, heat addition, heat transfer, injection, suction, Patnaik (A.), *6760*
- flexible walls, pipe flow, unsteady flow, Ohki (M.), *7719*
- moving media, plane flow, polymers, Kalita (W.), Lubonski (J.), *8561*
- boiling, convection (free), critical heat flux, tube bundles, Fokin (B.S.), Goldberg (E.N.), *8694*
- annuli, laminar flow, moving surfaces, Kalita (W.), Szaniawski (A.), *9584*
- film boiling, spherical bodies, thermal contact resistance, Kuzma-Kichta (Yu.A.), Lenkov (V.A.), (et al.), *9686*
- channels, pressure gradient, unsteady flow, Sai (K.S.), *10446*
- channel flow, fluid injection, heat transfer, nusselt number, suction, Yeroshenko (V.M.), Zaichik (L.I.), (et al.), *10572*
- diffusion, impurities, pipe flow, Eroshenko (V.M.), Zaichik (L.I.), *10669*
- annular flow, magneto fluid dynamics, numerical methods, pipe flow, Verma (P.D.S.), Singh (M.), *10732*
- couette flow, magneto fluid dynamics, plates (parallel), unsteady flow, Mishra (S.P.), Muduli (J.C.), *10738*
- arcs, experimental methods, performance, plasma jets, Gonopolskii (A.M.), Slobodkina (F.A.), *10761*
- heat transfer, magneto fluid dynamics, rotating disks, Sarojamma (G.), Krishna (D.V.), *11508*
- condensation (filmwise), laminar flow, similarity methods, velocity profiles, Liu (C.Y.), Ismail (K.A.R.), (et al.), *11762*
- boiling, heat exchangers, hydrocarbons, Ing, natural gas, Dvoiris (A.D.), Sirotin (A.G.), (et al.), *11770*

Porsching (T.A.), see Amit (R.), *11421*

portal frames, design (optimum), nonlinear programming, roofs, Crawford (A.B.), Jenkins (W.M.), *503*
- nonlinear analysis, postbuckling behavior, Simitses (G.J.), Giri (J.), (et al.), *2534*
- stability theory, structural stability, Davini (C.), *3319*
- buckling, dynamic stability, hinged bodies, moving loads, Zaslavsky (A.), *3541*
- design (optimum), precast concrete, Andam (K.A.), Knapton (J.), *10353*

Porter (B.), see Grujic (I.T.), *3159*

Porter (R.S.), see Kulicke (W.-M.), *1488*

Porter (R.W.), see Chaturvedi (S.K.), *10642*

Porthouse (D.T.C.), diffusion, finite difference methods, separated flow, two dimensional flow, unsteady flow, vorticity, Lewis (R.I.), *7678*

Portnov (G.G.), composite structures, energy storage, flywheels, optimization, Kulakov (V.L.), *6196*

Poruchikov (V.B.), acoustic waves, barriers, diffraction, wedges, *3936*

positive displacement pumps, noise, noise abatement, piston driven flow, sound generation, Lechner (E.), Stich (B.), *10721*
- bearings (hydrostatic), friction, leaks, piston driven flow, Bakhin (I.I.), (et al.), *11752*

Poskas (P.), crossflow, drag, heat exchangers, pressure drop, Survila (V.), (et al.), *796*

Posmentier (E.S.), heat transfer, mixing layers, oceanography, thermal diffusion, thermocline, *8993*

Posselt (M.), see Schultrich (B.), *10306*

Post (D.), see Basehore (M.L.), *2472*

postbuckling behavior, bending, plates (nonlinear), plates (rectangular), shear, Walczak (W.), Jakubowski (S.), *332*
- frames, Rizzi (N.), Di Carlo (A.), (et al.), *342*
- beams, buckling, frames, hinged bodies, Pignataro (M.), Rizzi (N.), (et al.), *343*
- beam columns, tubes, Supple (W.J.), Collins (I.), *1246*
- collapse, large displacement, plastic behavior, rings, Kyriakides (S.), Babcock (C.D.), *1249*
- composite structures, panels (stiffened), shear webs, Agarwal (B.L.), *2288*
- shells (conical), shells (sandwich), Magnucki (K.), *2289*
- arches, hinged bodies, Schmidt (R.), *2298*
- collapse, compression, shells (cylindrical), Foster (C.G.), *2305*
- nonlinear analysis, portal frames, Simitses (G.J.), Giri (J.), (et al.), *2534*
- beam columns, buckling (experimental), Di Carlo (A.), Pignataro (M.), (et al.), *3321*
- buckling, compression, imperfections, mode interaction, shells (cylindrical), shells (stiffened), Byskov (E.), Hansen (J.C.), *3323*
- beam columns, beams (thin section), beams (variable cross section), buckling (torsional), Szymczak (C.), *4391*
- buckling, shells (cylindrical), Babenko (V.I.), *4392*
- arches, finite element methods, large displacement, Lazarov (L.), *5179*
- chebyshev approximations, plates (annular), plates (orthotropic), Reddy (B.S.), Alwar (R.S.), *5180*
- experimental results, panels (stiffened), plates (stiffened), Rothwell (A.), *6238*
- girders (plate), plastic behavior, shear loading, Niinobe (Y.), *6239*
- finite element techniques, nonlinear structures, Wellford (L.C.) Jr., Dib (G.M.), *6240*
- beams (curved), beams (elastic), buckling, columns, James (R.D.), *6243*
- experimental results, girders (plate), ultimate strength, Narayanan (R.), Rockey (K.C.), *7322*
- buckling (torsional), pressurized pipes, shells (cylindrical), Kodama (S.), Otomo (K.), (et al.), *8258*
- deformation (finite), elastoplasticity, plates (stiffened), ship structures, Mathies (H.), Payer (H.G.), *8276*
- buckling, frames, Pignataro (M.), Di Carlo (A.), (et al.), *9281*
- imperfection sensitivity, pressure, rings, Schmidt (R.), *9282*
- mindlin plates, plates, shells (of revolution), shells (shallow), Pica (A.), Wood (R.D.), *9283*
- buckling, imperfection sensitivity, shells (shallow), Srubshchik (L.S.), *9284*
- buckling (nonlinear), frames, limit analysis, Vlachinos (A.S.), Kounadis (A.N.), *9287*
- columns, design (minimum weight), design (optimum), optimization, Venkateswara Rao (G.), Narayanaswami (R.), *10351*

postbuckling theory, nonlinear structures, structural stability, viscous buckling, Kroplin (B.-H.), *6237*
- strips, thin walled structures, Sridharan (S.), Graves Smith (T.R.), *6271*
- existence theorems, shells (shallow), Kubrusly (R.S.), *10165*
- numerical methods, structural analysis, structural stability, Papadrakakis (M.), *10166*
- arches, structural stability, Schmidt (R.), *10172*

Postlethwaite (I.), frequency domain techniques, linear systems, multivariable systems, nyquist theory, stability theory, Edmunds (J.M.), (et al.), *4225*

Potapkin (V.S.), bottom irregularities, existence theorems, gravity waves (surface), nonlinear waves, *2703*

Potapov (V.D.), panels (curved), shells (viscoelastic), structural stability, *2313*

Potapova (T.P.), discrete systems, prediction, process control, regression rate, time delay systems, *8164*

Potemkin (A.E.), dynamic analysis, error, gyrocompasses, gyroscopes, identification, mathematical models, *1989*

Potemkin (V.F.), boundary layer (turbulent), eddies, pressure gradient, *594*

potential flow, buried structures, ocean bed, pipelines, porous media, wave loads, Macpherson (H.), *562*
- boundary conditions, free boundary, time dependence, two dimensional flow, Longuet-Higgins (M.S.), *567*
- airplanes, lift, sprays, streamlines, trajectories, vortices, Wickens (R.H.), *1620*
- conformal mapping, existence theorems, flow obstructions, wakes, Hilbig (H.), *2008*
- cascades, fluid mechanics, turbomachinery, Keck (H.), *2077*
- free boundary, spherical bodies, Khabarov (G.S.), *3634*
- airfoil theory, numerical methods, transonic flow, Fort (J.), Kozel (K.), *3726*
- airfoils, flaps, incompressible flow, vortex sheets, Zaitsev (A.A.), Komarov (A.M.), *3728*
- discharges, flow measurement, mathematical models, swirl flow, Murakami (M.), Kito (O.), *3756*
- fredholm equations, three dimensional flow, Groh (G.), *4166*
- blades, conformal mapping, three dimensional flow, turbomachinery, Agarwal (P.K.), Viktorov (G.V.), *4677*
- linear theory, three dimensional flow, vorticity, Hart (R.W.), *5402*
- compressible flow, euler equations, finite difference methods, transonic flow, Caughey (D.A.), *5420*
- aerodynamic coefficients, airfoils, ground effect, lift, two dimensional flow, Plotkin (A.), Kennell (C.G.), *5490*
- fluid mechanics, fredholm equations, incompressible flow, Pelant (J.), *6076*
- compressible flow, finite difference methods, transonic flow, Luo (S.J.), Zheng (Y.W.), (et al.), *6627*
- conformal mapping, free jets, incompleteness, plates, streamlines, Van Der Zanden (J.), *7663*
- airfoil characteristics, complex variables, incompressible flow, two dimensional flow, White (J.W.), *7785*
- airfoil theory, deformation, lift, oscillations, Laporte (R.), *7787*
- corrections, green function, inviscid fluid, wall effects, walls, Barche (J.), *8523*
- deformable bodies, force, inviscid fluid, three dimensional flow, Vilkhovchenko (S.D.), Yakimov (Yu.L.), *8524*
- gravity waves (surface), separation, ships, stern waves, Vanden-Broeck (J.-M.), *8622*
- airfoil theory, nonconservative systems, transonic flow, Baker (T.J.), *9545*
- aerodynamics, compressible flow, subsonic flow, turrets, Laderman (A.J.), De Jonckheere (R.), *9548*
- design, three dimensional flow, transonic flow, wings, Henne (P.A.), *9653*
- airfoils, boundary layer, velocity profiles, Dutt (H.N.V.), Sreekanth (A.K.), *9654*
- fredholm equations, gravity waves, green function, hulls, wave trains, Noblesse (F.), *9944*
- finite element techniques, interpolation10067
- boundary layer, hydrodynamic stability, turbulence, Van Atta (C.W.), Sokolov (M.), (et al.), *10471*
- boundary value problems, porous media, two dimensional flow, Orasanu (M.T.), *10833*
- bubble dynamics, fluidized beds, particle dynamics, tubes, unsteady flow, Adams (R.L.), *12036*

potential theory, boundary value problems, cracks, elasticity (linear), three dimensional formulation, England (A.H.), *38*
- continuum mechanics, differential equations (partial), integration, micropolar media, Constanda (C.), *43*
- cylindrical bodies, fourier series, neumann problem, semi infinite media, Beliaev (S.Iu.), Kuzmin (Iu.N.), *44*
- complex variables, contact problems, elasticity (linear), Guz (A.N.), *1175*
- coordinate systems, inverse problems, orbit mechanics, synodic systems, Szebehely (V.), Broucke (R.), *1785*
- geomechanics, gravimetrics, green theorem, Powell (C.), *2914*
- gravitational prospecting, hydrodynamics, inverse problems, Danilov (V.L.), Shulman (I.I.), *2995*
- oblateness, planetary theory, torque, two body problem, Schutz (B.E.), *3914*
- boundary conditions, cylindrical bodies, fredholm equations, perturbation methods, Rosenfeld (A.M.), Timsit (R.S.), *4957*
- boundary value problems, geodesy, uniqueness, Witsch (K.J.), *4965*
- eigenvalue problems, green function, image methods, Terras (R.), Swanson (R.), *6077*
- gravimetrics, mars, planetary theory, Christensen (E.J.), Williams (B.G.), *6887*
- boundary value problems, elasticity (linear), Ton Tran-Cong, *7262*
- orbit mechanics, trajectories, Vjuga (A.A.), *7912*
- circumnavigation, fluid mechanics, gravity waves, planetary theory, Demin (V.G.), Barkin (Yu.V.), *7913*
- artificial satellites, orbit mechanics, perturbation methods, Roth (E.A.), *7915*
- compressible flow, liftingline, swept wings, vortex lines, vortex sheets, Cheng (H.K.), Chow (R.), (et al.), *9649*
- bodies of revolution, circumnavigation, gravimetrics, Fomin (V.N.), *9907*

Poterasu (V.F.), controllability, distributed parameters, optimal control, sensitivity, synthesis, temperature, thermal stresses, *178*
- controllability, optimal control, sensitivity, synthesis, *179*

Poterasu (V-F.), algorithms, gradient techniques, optimal control, vibration, vibration isolation, Popescu (D.), *3209*

Potra (F.A.), approximations, computing techniques, convergence, newton method, *1123*

Potseluyev (A.V.), dynamic analysis, nonlinear systems, statistical theory, Topilskiy (S.V.), *122*

Potttate space techniques, Anderson (B.D.O.), (et al.), 6128
- combustion, convection (free), numerical methods, spherical bodies, Riley (N.), *8793*

Potter (S.), see Fricker (A.J.), *7209*

Pouget (J.), see Maugin (G.A.), *1054*

Poulos (H.G.), design, piles, Davis (E.H.), *10250, book*

Pouyet (J.M.), dynamic response, rotating shafts, vibration (torsional), Lataillade (J.L.), *379*
- see Signoret (C.), *4507*

Poveshchenko (G.P.), dispersion, dispersive layers, heat exchangers, *2830*

Povkh (I.L.), drag reduction, non newtonian flow, surfactants, suspensions, Serdyuk (A.I.), (et al.), *3595*
- boussinesq equation, convection, liquid solid interface, melting, solidification, Zavgorodnii (P.F.), (et al.), *3819*

Povolo (F.), alloys, data analysis, relaxing media, stress relaxation, viscoelastic materials, *2230*

Povstenko (Yu.Z.), see Podstrigach (Ya.S.), *1730*

powder metallurgy, compression, cycles, dies, tableting, Carstensen (J.T.), Toure (P.), *2404*

- cracks, fatigue, fracture mechanics, gas turbines, Sheldon (G.P.), Cook (T.S.), (et al.), *2416*
- bending, scale effects, strength, Fridman (V.M.), Shcherban (N.I.), *3480*
- composite materials, liquid metals, mass transfer, sintered materials, Lisovskii (A.F.), *5624*
- compaction, dies, friction (rolling), materials properties, Lammens (R.F.), Struyk (C.), (et al.), *7463*
- compaction, crackling, materials properties, powders, Gerritsen (A.H.), Stemerding (S.), *7464*
- compaction, dies, friction, powders, punch problems, Lammens (R.F.), Liem (T.B.), (et al.), *7465*
- aluminum alloys, corrosion fatigue, high strength, Pickens (J.R.), *8368*

powdered fuels, flame propagation, suspensions, Shevchuk (V.G.), Goroshin (S.V.), (et al.), *836*

powders, diffusion, mixing, Hwang (C.L.), Hogg (R.), *4007*
- explosive forming, metals, Roman (O.V.), Nesterenko (V.F.), (et al.), *4474*
- filtration, mixing, Cardew (P.T.), *4836*
- combustion, metals, self ignition, Chernenko (E.V.), Rozenband (V.I.), *5627*
- mixtures, separation, Lai (F.), Hersey (J.A.), (et al.), *5824*
- mixtures, porous media, Tikhomolova (K.P.), Shishkanova (L.A.), *5830*
- filtration, granular media, hoppers, Murfitt (P.G.), Bransby (P.L.), *6959*
- bubbly flow, particulate flow, Simone (S.), Harriott (P.), *7012*
- bubbly flow, fluidized beds, Abrahamsen (A.R.), Geldart (D.), *7014*
- compaction, crackling, materials properties, powder metallurgy, Gerritsen (A.H.), Stemerding (S.), *7464*
- compaction, dies, friction, powder metallurgy, punch problems, Lammens (R.F.), Liem (T.B.), (et al.), *7465*
- compression, cyclic testing, tablets, Toure (P.), Puisieux (F.), (et al.), *7466*
- ceramics, compaction, Broese Van Groenou (A.), *9379*
- combustion, surface temperature, temperature, Chernov (Yu.V.), *9760*
- brittle materials, crack initiation, cracks, failure, porous media, Barinov (S.M.), Krasulin (Yu.L.), *10308*
- combustion (unsteady), models, Zarko (V.E.), Kiskin (A.B.), *10706*
- explosions, propagation, Brinza (V.N.), Babaitsev (I.V.), (et al.), *10714*
- particles, scattering, Sakhnovskii (M.Yu.), Kunetskii (M.G.), *12059*

Powe (R.E.), convection (free), heat transfer, rayleigh number, shells (fluid-filled), Warrington (R.O.), (et al.), *755*

Powell (C.), geomechanics, gravimetrics, green theorem, potential theory, *2914*
- ionic flow, three dimensional flow, unsteady flow, *11804*

Powell (J.A.), see Strazisar (A.J.), *6742*
- axial compressors, laser doppler velocimeters, transonic flow, turbomachinery, velocity profiles, Strazisar (A.J.), (et al.), *10537*

Powell (J.D.), see Randall (D.W.), *5653*

Powell (M.J.), computer aided design, packed beds, random media, *12057*

Powell (R.L.), constitutive equations, extension, non newtonian flow, viscous flow, Schwarz (W.H.), *8486*

power generation, coherent structure, perturbation methods, power plants, Sastry (S.), Varaiya (P.), *124*
- boilers, control, design, mathematical models, Lin (Y.-H.), Nielsen (R.S.), (et al.), *218*
- heat transfer, multiphase flow, two phase flow, Bergles (A.E.), Collier (J.G.), (et al.), *934, book*
- dynamic response, electrodynamics, ferroelectric devices, Hodgdon (M.L.), *1256*
- cables, dynamic response, shock, transmission lines, vibration, Dubey (R.N.), Sahay (C.), *1272*
- laser plasma interaction, materials properties, nuclear fusion, thermal loading, Jaeger (T.A.) eds., Boley (B.A.), *1781, book*
- control, design, nuclear power, Frogner (B.), Rao (H.S.), *2176*
- optimization, water, water supply systems, Ponomarenko (V.S.), Boychuk (L.M.), *2184*
- gas turbines, injection, steam, Brown (D.H.), Cohn (A.), *2749*
- lyapunov's functions, stability theory, transient effects, transient stability, Ohsawa (Y.), Hayashi (M.), *3170*
- control, design, regulator problem, turbomachinery, Taiwo (O.), *3217*
- energy, thermodynamic functions, thermodynamics (irreversible), Kotas (T.J.), *3769*
- noise, two phase flow, water hammer, Papadakis (C.) eds., Scarton (H.), *5476, book*
- cycles, helium, solar energy, turbomachinery, Duban (P.), *5603*
- analysis, currents, experimental results, magneto fluid dynamics, Pan (Y.-C.), Doss (E.D.), *6863*
- ocean waves, tides, Harrison (R.), Smith (K.G.), (et al.), *8021*
- combined cycles, combustors, gas turbines, reheat, Mori (K.), Kitajima (J.), (et al.), *8806*
- wind power, wind turbines, Howell (W.E.), Todd (C.J.), *9001*
- control, large scale systems, multivariable systems, optimal control, Ikeda (M.), Siljak (D.D.), (et al.), *9175*
- irrigation, pumps, wind turbines, Clark (R.N.), Nelson (V.), (et al.), *9667*
- cooling, cooling ponds, energy storage, transient effects, Adams (E.E.), Koussis (A.D.), *9741*
- channel flow, coolers, cooling, spray canals, sprays, Chaturvedi (S.K.), Porter (R.W.), *10642*
- ionic flow, magneto fluid dynamics, steam, unsteady flow, Pozwolski (A.E.), *10751*

power law fluids, filaments, fluid injection, viscoelastic fluids, Kase (S.), Nakajima (T.), *548*
- heat transfer, non newtonian flow, stagnation point, transient effects, Gorla (R.S.R.), *759*
- non newtonian flow, separation, thermal diffusion, Tubin (A.A.), Sorokin (Yu.S.), *822*
- constitutive equations, plastic flow, thixotropic media, Kembłowski (Z.), Petera (J.), *1483*
- boundary value problems, nonlinear analysis, variational methods, Anderson (N.), Arthurs (A.M.), *1533*
- laminar flow, pipe flow, pressure drop, thermal effects, Nowak (Z.), Grygiaszewski (P.), (et al.), *3903*
- laminar flow, pipe flow, pressure drop, thermal effects, viscous effects, Grygiaszewski (P.), Nowak (Z.), (et al.), *3904*
- cylindrical bodies, mass transfer, spherical bodies, Kumar (S.), Tripathi (P.K.), (et al.), *3957*
- non newtonian flow, porous media, Odeh (A.S.), Yang (H.T.), *4026*
- creeping flow, drag, non newtonian flow, porous surfaces, Kawase (Y.), Ulbrecht (J.J.), *4567*
- inlet flow, laminar flow, non newtonian flow, Gupta (R.C.), *5441*
- heat addition, heat transfer, peclet number, plates (parallel), Dang (V.-D.), *5563*
- non newtonian flow, porous media, transient effects, Ikoku (C.U.), Ramey (H.J.) Jr., *7977*
- non newtonian flow, porous media, transient effects, Ikoku (C.U.), Ramey (H.J.) Jr., *8926*
- channel flow, heat transfer, non newtonian flow, shear stress, viscoelastic fluids, Shulman (Z.P.), Khusid (B.M.), (et al.), *9708*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), squeeze films, viscosity, Shukla (J.B.), Prasad (K.R.), (et al.), *9952*
- channel flow, ducts (curved), non newtonian flow, screw machinery, slip flow, Pervadchuk (V.P.), Yankov (V.I.), (et al.), *10442*
- convergence, developing flow, ducts (variable area), velocity profiles, Jarzebski (A.B.), Wilkinson (W.L.), *10443*
- heat transfer, laminar flow, non newtonian flow, nusselt number, pipe flow, rheology, Joshi (S.D.), Bergles (A.E.), *10582*
- fluidized beds, mass transfer, Kumar (S.), *10695*
- non newtonian flow, pipe flow, unsteady flow, velocity profiles, Bakmor (R.T.), Fiorina (M.A.), *11497*
- micromeritics, particle fluid flow, reynolds number (high), Hua (T.N.), Ishii (T.), *12017*

power law geometrics, adsorption, liquid vapor interface, plane surfaces, Philip (J.R.), *3850*
- creep, internal stresses, metals, micromechanisms, Argon (A.S.), Takeuchi (S.), *5101*
- convection, heat transfer, laminar flow, plates (parallel), solar collectors, Naidu (G.M.), Agarwal (J.P.), *7864*

power plants, coherent structure, perturbation methods, power generation, Sastry (S.), Varaiya (P.), *124*
- control, lyapunov's functions, optimization, Yamashita (K.), Taniguchi (T.), *173*
- multiphase flow, prediction, Spalding (D.B.), *1851*
- rivers, thermal diffusion, Maruta (A.), Stere (C.), (et al.), *1894*
- piping systems, vibration, Iotti (R.C.) eds., Bernstein (M.D.), *2327, book*
- design, helium, nuclear reactors, turbomachinery, Mcdonald (C.F.), Smith (M.J.), *2750*
- design (optimum), energy conservation, generators, heat exchangers, Aminov (R.Z.), Radchenko (E.V.), *3837*
- coherent structure, noise, noise abatement, Ying (S.P.), Dennison (E.E.), *3978*
- energy conversion, ocean, solar energy, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *4718*
- cooling, cooling ponds, thermal effects, Kvon (V.I.), *5595*
- energy conversion, heat exchangers, ocean, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *5954*
- experimental results, thermal shock, thermal stresses, Guitton (J.), *7955*
- heat transfer, processing, two phase flow, Rothe (P.H.) eds., Lahey (R.T.) Jr., *8901, book*
- deaerators, dynamic stability, liquid gas mixture, storage, tanks, Cranfield (R.R.), Wilkinson (D.H.), *9625*
- experimental methods, fatigue, finite element methods, fracture mechanics, strain gages, stress analysis, Takhar (J.S.), Fryzel (R.A.), *10320*
- measurements, plumes, smoke stacks, Volkov (E.P.), Gribkov (A.M.), *11518*

Powers (S.A.), airplane performance, design criteria, engine failure, runway (critical length), runways, *1625*

Powers (W.F.), optimal control, optimization, singular control, switching, *4992*

Poza (F.), see Kryter (K.D.), *3072*

Pozhuev (V.I.), moving loads, response, shells (cylindrical), underground, *6327*
- dynamic response, moving loads, shells (cylindrical), shells (sandwich), *6344*

Poznyak (A.S.), see Kolmans (G.K.), *4324*

Poznyak (E.L.), see Kravtsova (E.V.), *2356*

Pozwolski (A.E.), ionic flow, magneto fluid dynamics, power generation, steam, unsteady flow, *10751*

Prabha (S.), see Jain (R.K.), *7961*

Prabhu (B.S.), bearings (journal), dynamic response, rotating shafts, Rao (B.V.A.), *10218*

Prabhu (T.J.), bearings (thrust), damping, film thickness, inertia, lubrication (hydrostatic), stiffness, Ganesan (N.), *9956*

Prachuktam (S.), dynamic analysis, nonlinear analysis, piping systems, Bezier (P.), (et al.), *2548*

Praeger (M.), see Fortner (E.) eds., *6476, book*

Prager (W.), optimization, structural optimization, *2509*

Prakash (B.G.), beams (cantilever), bonding, *297*

- elastic foundations, flexure, plates (orthotropic), plates (rectangular), *1227*
- see Ramachandra Rao (B.S.), *5155*

Prakash (C.), see Sparrow (E.M.), *1681*

- field tests, piles, sand, uplift, *3411*
- see Sparrow (E.M.), *9699*

Prakash (J.), bearings (porous metal), lubrication (hydrodynamic), roughness, squeeze films, surfaces, Tiwari (K.), *10889*

Prakash (R.), acoustic emission, composite materials, laminates, material testing, nondestructive tests, *4360*

Prakash (S.), see Gupta (M.K.), *9923*

Pramanik (A.K.), capillary waves, gravity waves, interface waves, liquid gas mixture, *7763*

- acceleration, gravity waves (surface), pressure distribution, wave generation, *11599*

Pranckevicius (G.), brittle fracture, crack initiation, energy methods, fracture toughness, inhomogeneities, *1369*

Pranckevicius (G.A.), fracture, plastic behavior, *9410*

prandtl number, mercury, pipe flow, prandtl number (low), turbulence (structure), Eyler (L.L.), Sesonske (A.), *1556*

- buoyant flow, plumes, Yih (C.-S.), Wu (F.), *2671*
- blunt bodies, reattachment, separated flow, turbulence (transport), Ota (T.), Kon (N.), *4602*
- cavities, closed conduit flow, convection (free), oseen technique, Graebel (W.P.), *5550*
- annuli, convection (free), heat transfer, pipe flow, Kuehn (T.H.), Goldstein (R.J.), *5551*
- convection, heat transfer, mass transfer, Riahi (N.), *5616*
- convection, magneto fluid dynamics, nonlinear materials, Riahi (N.), *10584*

Prasad (A.), analytical methods, biot method, melting, radiation, *812*

- see Kamotani (Y.), *2606*

Prasad (B.), see Haftka (R.T.), *3516*

- see Haftka (R.T.), *6544*
- abrasion, design (optimum), grinding, grinding wheels, optimization, Haftka (R.T.), (et al.), *6552*

Prasad (K.R.), see Shukla (J.B.), *9952*

Prasad (M.G.), acoustics, attenuation, automobiles, ducts, exhaust gases, silencers, Crocker (M.J.), *1813*

Prasad (N.K.), ducts, ducts (constant area), pipe flow, two phase flow, Chand (P.), (et al.), *1841*

Prasad (S.), filters, processing, seismic waves, Mahalanabis (A.K.), *5865*

Prasad (U.R.), see Rajan (N.), *1157*

Prasada Rao (D.R.V.), see Krishna (D.V.), *2883*

- bounded media, linearization, magneto fluid dynamics, rotating fluids, stratified flow, Krishna (D.V.), *3891*

Prassianakis (J.), see Theocaris (P.S.), *3233*

Prassianakis (J.N.), caustics, notch sensitivity, stress intensity factor, Theocaris (P.S.), *8393*

Prathap (G.), see Mohan (R.), *6356*

- see Bhashyam (G.R.), *9304*

Pratt (D.J.), bones, braces, fracture, human body, injuries, Bowker (P.), (et al.), *3068*

Pratt (P.L.), see Willoughby (A.A.), *8401*

Pratt (T.K.), casting, numerical methods, solidification, Landis (F.), (et al.), *6801*

prebuckling behavior, buckling, shells (cylindrical), structural stability, Brush (D.O.), *2308*

precast concrete, design (optimum), portal frames, Andam (K.A.), Knapton (J.), *10353*

precipitation, charged particles, fog, jets, nozzles, survey, Frost (W.), Collins (F.G.), (et al.), *3893*

- flood flow, probability theory, Rao (D.V.), *4044*
- cloud physics, rainfall, Shiino (J.), *4079*
- corrosion, fouling, heat exchangers, heat transfer, microbial fouling, solidification, Somerscales (E.F.C.) eds., Knudsen (J.G.), *5697, book*
- carbides, creep, dislocations, electron microscopy, high temperature, steel, Orlova (A.), Milicka (K.), (et al.), *6472*
- heat transfer, liquid liquid interface, solidification, Moresco (L.L.), Marschall (E.), *8737*
- gages, particle fluid flow, snow, wind tunnels (environmental), Haasz (A.A.), Raimondo (S.), *9002*
- cloud physics, clouds, Imyanitov (I.M.), *12078*
- forecasting, meteorology, weather forecasting, Kenzhibaev (A.T.), Petrichenko (I.A.), *12082*

Precupanu (T.), approximation theory, duality, mathematical methods, *4176*

Predeleanu (M.), anisotropic media, contact problems, indentation, viscoelastic materials, Dahan (M.), *4348*

Prediger (H.), continuum mechanics, matrix methods, tensor methods, *18*

Predtechensky (A.A.), see Lvov (V.S.), *11487*

Preece (C.M.), aluminum alloys, erosion, impact, Brunton (J.H.), (et al.), *7091*

Preece (C.M.) ed., abrasion, cavitation, erosion, impact, wear, *3038, book*

Prem (A.), brownian motion, charged particles, diffusion, Pilat (M.J.), *7001*

Premchitt (J.), experimental methods, pore pressure, soil mechanics, Brand (E.W.), *9352*

Premet (E.I.), see Spiridonov (Yu.A.), *5637*

premixed fuel air, flames (turbulent), models, Libby (P.A.), *1747*

- flames (turbulent), models, Ballal (D.R.), *3862*
- combustion, flame propagation, flow measurement, Gololobov (I.M.), Granovskii (E.A.), (et al.), *9749*
- chemical kinetics, detonation (two phase), explosions, Vasilev (V.M.), Volpert (A.I.), (et al.), *9828*

Prenosil (J.E.), see Pedersen (H.), *10678*

Preobrazhenskaya (A.M.), see Neymark (Yu.I.), *4277*

Preobrazhenskii (I.), plates (anisotropic), plates (holed), plates (perforated), structural stability, *345*

Prepelita (V.), distributed parameters, dynamic analysis, matrix methods, state space techniques, *110*

Prescott (W.H.), displacement, earth, faults, *7998*

Presley (J.A.) Jr., see Tuteur (F.B.), *4811*

Presser (C.), see Greenberg (J.B.), *3874*

pressure, deformation, pore pressure, rocks, Blanton (T.L.) III, *432*

- bifurcation, cracks, griffith cracks, Aoki (S.), Sakata (M.), *464*
- fracture, porous media, rocks, Gowd (T.N.), Rummel (F.), *1336*
- anisotropic media, microstresses, polycrystalline materials, stresses, Livshits (L.D.), Prishchepov (V.F.), *1877*
- arches, buckling, hinged bodies, Schmidt (R.), *2297*
- blunt bodies, fluctuations, surfaces, turbulence, Durbin (P.A.), Hunt (J.C.R.), *2694*
- experimental methods, manometers, Taborek (P.), Goodstein (D.), *3777*
- lubricants (liquid), viscosity, So (B.Y.C.), Klaus (E.E.), *5989*
- fluid injection, fracture, rocks, Nolte (K.G.), Smith (M.B.), *6398*
- bubble dynamics, impulsive loading, Ida (T.), Sugiya (T.), *6993*
- creep, material testing, materials processing, Gorev (B.V.), Klopotov (I.D.), (et al.), *7457*
- boundary integral methods, computing techniques, fracture, Hungr (O.), Morgenstern (N.R.), *7538*
- boltzmann equation, conduction, enskog fluid, kinetic theory, viscoelasticity (dynamic), viscosity, Schmidt (G.), Kohler (W.E.), (et al.), *7819*
- deformation (plastic), heat treatment, void closure, void fraction, Keife (H.), Stahlberg (U.), *8369*
- diesel engines, leaks, piston rings, Ruddy (B.L.), Dowson (D.), (et al.), *8801*
- fluidized beds, high viscosity, King (D.F.), Mitchell (F.R.G.), (et al.), *8934*
- biodynamics, gait, human body, Cavanagh (P.R.), Lafortune (M.A.), *9068*
- imperfection sensitivity, postbuckling behavior, rings, Schmidt (R.), *9282*
- axial loading, shells (cylindrical), shells (stiffened), Harding (J.E.), *9294*
- channels, hinged bodies, moment coefficient, wavemakers, Hudspeth (R.T.), Leonard (J.W.), (et al.), *9511*
- dams, earthquake effects, finite element techniques, reservoirs, Saini (S.S.), *9514*
- optimization, strings, Wang (C.-Y.), *10148*
- anisotropic structures, axial loading, reinforced bodies, tubes, Highton (J.), Soden (P.D.W.), *10325*
- channel flow, kinetic theory, Chernyak (V.G.), Kalinin (V.V.), (et al.), *11443*
- containment, equilibrium, plasma (toroidal), stability theory, Kovrizhnykh (L.M.), Shchepetov (S.V.), *11838*
- cavitation, dynamic stresses, Overton (G.D.N.), Trevena (D.H.), *12034*
- gravity waves (surface), ocean air interaction, surface waves, turbulence (geophysical), Snyder (R.L.), Dobson (F.W.), (et al.), *12080*

pressure change, field tests, soils, Clough (G.W.), Denby (G.M.), *421*

- oil wells, transient effects, transmission, unsteady flow, Hoberock (L.L.), Stanbery (S.R.), *2706*
- dispersion, fast fourier transform, tubes, waves, Moodie (T.B.), Haddow (J.B.), *6913*
- blood, bubble dynamics, oscillatory flow, Tsujino (T.), Shima (A.), *7119*
- axial compressors, blades, stalling, Koch (C.C.), *7806*
- phase changes, wells, Fair (W.B.) Jr., *7985*
- corners, modeling, vortices, Conlisk (A.T.), Rockwell (D.), *8536*
- experimental methods, fracture criteria, reservoirs, Lee (W.J.), Holditch (S.A.), *8944*
- cavities, compressible flow, heating, jets, resonance, supersonic flow, Kuptsov (V.M.), Filippov (K.N.), *10417*

pressure distribution, soil structure interaction, vehicles, vehicles (tracked), Garber (M.), Wong (J.Y.), *531*

- boundary integral methods, free boundary, nonlinear analysis, two dimensional flow, Schwartz (L.W.), *566*
- gravity waves, oscillations, wave generation, Chee-Seng (L.), *672*
- channel flow, numerical analysis, separation, Ghia (U.), Ghia (K.N.), (et al.), *1554*

- plane waves, stratified flow, wave generation, Dotsenko (S.F.), *1600*
- airfoil characteristics, incompressible flow, stagnation point, trailing edge, Baskaran (V.), Holla (V.S.), *1616*
- roughness, slots, stokes flow, Phan-Thien (N.), *2649*
- blades, cascades, friction, trailing edge, Ribaut (M.), Niessner (H.), *2654*
- aerodynamic performance, cascades, endwall profiling, turbines, Kopper (F.C.), Milano (R.), (et al.), *2655*
- hypersonic flow, wings, Golubkin (V.N.), *2728*
- delta wings, subsonic flow, swept wings, visualization, Nekrasova (M.N.), *2732*
- airfoil characteristics, airfoils, oscillating bodies, schlieren methods, shock waves, Benetka (J.), Pernica (Z.), *2733*
- airplane structures, design, forebodies, geometrical properties, Barger (R.L.), *2738*
- panels, transonic flow, wing body combinations, Jain (R.K.), Redeker (G.), (et al.), *2741*
- airfoils, oscillating bodies, transonic flow, wind tunnels, Benetka (J.), Pernica (Z.), *2771*
- aeroelasticity, gust loads, separated flow, structural response, Forsching (H.), *2912*
- dynamic response, vehicles, vehicles (tracked), Garber (M.), Wong (J.Y.), *3561*
- aerodynamic performance, cascades, numerical analysis, Meauze (G.), *3677*
- airfoil characteristics, flaps, Wentz (W.H.) Jr., Fiscko (K.A.), *3730*
- aerodynamic loads, computer programming, missiles, supersonic flow, vortices, wing body combinations, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- conical bodies, deformation, flexible bodies, supersonic flow, wedges, Belyaev (N.M.), Khrushch (V.K.), *4585*
- particle fluid flow, plates (parallel), unsteady flow, Ramana Prasad (V.V.), Pattabhi Ramacharyulu (N.C.), *4620*
- separated flow, vortex shedding, wings, Bublitz (P.), *4682*
- finite element techniques, oil wells, Bennett (C.O.), Reynolds (A.C.) Jr., (et al.), *4841*
- cylindrical bodies, shear flow, transition flow, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *5453*
- drops, impact, solid boundaries, Yakovlev (V.Ya.), *5484*
- aerodynamic loads, buildings, geometrical properties, unsteady flow, Sockel (H.), Taucher (R.), *5698*
- bodies of revolution, wind tunnels, Smits (A.J.), Lee (S.P.), (et al.), *6624*
- buildings, buildings (tall), probability theory, wind, Holmes (J.D.), *7069*
- nozzles, supersonic flow, unsteady flow, Melnikov (D.A.), Tutushkin (A.S.), *7727*
- blockage, boundary layer, centrifugal compressors, rotors, Pampreen (R.C.), *7803*
- buildings, field tests, multistory frames, wind loads, wind tunnels, Lam (R.P.), Lam (L.C.H.), *7908*
- nozzles, nozzles (underexpanded), viscid inviscid flow, Volchkov (E.P.), Kozmenko (V.K.), (et al.), *8587*
- delta wings, leading edge, supersonic flow, Ter-Minasyants (S.M.), *8641*
- aerodynamics, axial compressors, blades, rotors, three dimensional flow, Dring (R.P.), Joslyn (H.D.), (et al.), *8656*
- axial compressors, blades, strain gages, surge, velocity measurement, Shatakov (I.K.), *8657*
- bearings (porous metal), bearings (thrust), lubrication (hydrostatic), temperature, viscosity, Yadav (J.S.), Kapur (V.K.), *9030*
- bearings (thrust), film thickness, friction, lubrication (hydrodynamic), Safar (Z.S.), *9043*
- buildings, unsteady flow, wind loads, wind tunnels (environmental), Holmes (J.D.), Best (R.J.), *9663*
- blades, helicopters, numerical methods, transonic flow, unsteady flow, Chattot (J.-J.), Philippe (J.-J.), *9666*
- flame propagation, mathematical models, Deshaies (B.), Leyer (J.C.), *9752*
- airfoils, separated flow, shock waves, transonic flow, unsteady flow, Roos (F.W.), *9805*
- bearings (gas lubricated), deformation, diaphragms, Wernerowski (K.), *9967*
- delta wings, hypersonic flow, Golubinskiy (A.I.), Schchedrin (A.I.), *10603*
- aerodynamic interference, fins, hypersonic flow, projectiles, sabot discard, wind tunnels, Schmidt (E.M.), *10517*
- film flow, velocity profiles, vortex flow, Kiskykh (V.I.), Smulski (I.I.), *10543*
- internal flow, temperature, turbofan engines, Braithwaite (W.M.), Soeder (R.H.), *10730*
- ocean waves, oceanography, Mondal (S.K.), Chaudhuri (K.S.), *10873*
- friction, rotating bodies, roughness, surfaces, Sansonov (V.A.), *10885*
- acceleration, gravity waves (surface), wave generation, Pramanik (A.K.), *11599*
- fluid-structure interaction, shells (spherical), submerged bodies, transient effects, transient loading, Neilson (H.C.), Everstine (G.C.), (et al.), *11635*
- impact, ships, sloshing, tanks, Gran (S.), *11667*
- bubbly flow, nozzles, Thang (N.T.), Davis (M.R.), *12029*

pressure drop, critical heat flux, flashing, friction (internal), pipe flow, thermodynamics (nonequilibrium), void fraction, Miropolskiy (Z.L.), Shneyerova (R.I.), (et al.), *747*

- annular flow, friction (internal), heat transfer, laminar flow, rotating disks, Mochizuki (S.), Yang (W.-J.), *761*
- crossflow, drag, heat exchangers, Poskas (P.), Survila (V.), (et al.), *786*
- ducts (curved), heat exchangers, swirl flow, Dzyubenko (B.V.), Dreitser (G.A.), *787*
- convection (forced), finite difference methods, oscillations, two phase flow, Akyuzlu (K.), Veziroglu (T.N.), (et al.), *947*
- holdup, liquid liquid interface, oil-water flow, pipe flow, Mukherjee (H.), Brill (J.P.), (et al.), *1558*
- boilers, critical heat flux, dryout, helical flow, pipe flow, tubes, two phase flow, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
- prediction, tube sheets, two phase flow, Ishihara (K.), Palen (J.W.), (et al.), *1849*
- augmentation, energy transport, entropy, heat exchangers, heat transfer, viscous effects, Bejan (A.), Pfister (P.A.) Jr., *2828*
- particle fluid flow, pipes, sediment transport, slurries, Morikawa (Y.), *3607*
- granular media, particles, particulate flow, surfaces, Mulhaupt (B.), Kampfen (Y.), *3772*
- laminar flow, pipe flow, power law fluids, thermal effects, Nowak (Z.), Gryglaszewski (P.), (et al.), *3803*
- laminar flow, pipe flow, power law fluids, thermal effects, viscous effects, Gryglaszewski (P.), Nowak (Z.), (et al.), *3804*
- mixtures, tube sheets, two phase flow, Grant (I.D.R.), Chisholm (D.), *4021*
- granular media, particle fluid flow, pipelines, Ochi (M.), Nakajima (H.), (et al.), *4619*
- extended surfaces, fins, heat exchangers, tube bundles, Rabas (T.J.), Eckels (P.W.), (et al.), *4719*
- channel flow, flow irregularities, flow obstructions, reynolds number (high), Unger (J.), *5439*
- particle fluid flow, reynolds equation, Tozeren (H.), Skalak (R.), *5965*
- convection (forced), coolers, forced systems, heat exchangers, heat transfer, Gianolio (E.), Cuti (F.), *6813*
- filters, pulsejets, Leith (D.), Ellenbecker (M.J.), *6995*
- fluidized beds, frequencies, Sadasivan (N.), Barreteau (D.), (et al.), *7011*
- channel flow, laminar flow, runge kutta method, viscous flow, wavy walls, Vajravelu (K.), Nayfeh (A.H.), *7714*
- evaporation, fins, heat exchangers (crossflow), otec evaporator, transient loading, Chapman (M.C.), Heydt (G.T.), *7867*
- dilute solutions, drag reduction, pipe flow, polymers, Leca (A.), Hubert (I.), (et al.), *8578*
- concentration, discharges, friction (skin), slurries, Carstens (M.R.), Addie (G.), *10398*
- capsules, hydraulic transport, particle fluid flow, pipe flow, Tachibana (M.), Matsumoto (Y.), *10447*
- condensation, freezing, heat exchangers, tube bundles, Berg (W.F.), Berg (J.L.), *10626*
- flow irregularities, pipe flow, two phase flow, unsteady flow, vibration (flow induced), Fokin (B.S.), Goldberg (Ye.N.), *11495*
- aerodynamic performance, blades, film cooling, gas turbines, Ito (S.), Eckert (E.R.G.), (et al.), *11743*
- compressible flow, diffusers, geometrical properties, incompressible flow, mixing, Labendik (V.P.), Dantsyg (A.Ya.), (et al.), *11799*

pressure gradient, boundary layer (turbulent), eddies, Potemkin (V.F.), *594*

- flow enhancement, non newtonian flow, pulsatile flow, shear thinning, Phan-Thien (N.), *618*
- hydrocarbons, reservoirs, Tiab (D.), Crichlow (H.B.), *960*
- non newtonian flow, pipe flow, vibration, PhanThien (N.), *1559*
- elliptical bodies, magneto fluid dynamics, porous media, tubes, Gupta (G.D.), *1773*
- boundary layer, transition flow, turbulence, Abu-Ghannam (B.J.), Shaw (R.), *2633*
- non newtonian flow, plates (parallel), second order fluids, shear flow, Rajagopal (K.R.), Huilgol (R.R.), *3590*
- boundary layer (turbulent), flow measurement, Schofield (W.H.), *3650*
- asymptotic behavior, boundary layer, computing techniques, laminar flow, separation, Curle (N.), *3653*
- buoyancy, couette flow, unsteady flow, velocity profiles, Andreichenko (K.P.), Smarun (A.B.), *3668*
- boundary layer (turbulent), flow measurement, roughness, Aswatha Narayana (P.A.), *4601*
- afterbodies, separation, trailing edge, turbulence, Solignac (J.-L.), *4610*
- afterbodies, separation, trailing edge, turbulence, Solignac (J.-L.), *4611*
- jets, wakes, Antonia (R.A.), Phan-Thien (N.), *4635*
- ducts (constant area), fourier series, magneto fluid dynamics, viscoelastic fluids, Sengupta (P.R.), Bhattacharyya (S.K.), *4746*
- boundary layer (turbulent), friction, Nesterenko (B.N.), Fedorov (A.V.), (et al.), *5429*
- conical flow, ducts (variable area), flow reversal, swirl flow, Gogolev (I.G.), Korolev (P.V.), *6654*
- turbulence, turbulence (structure), turbulent flow, Azad (R.S.), Hummel (R.H.), *6883*
- aerodynamic interference, thermal effects, wakes, wings, Peacock (R.E.), Hashem (A.A.F.), *6720*
- cylindrical bodies, equilibrium, magneto fluid dynamics, modes, Lortz (D.), Nuhrenberg (J.), *6960*
- boundary layer (turbulent), integral methods, two dimensional flow, Yeung (W.-S.), Yang (R.-J.), *7697*
- boundary layer (turbulent), two dimensional flow, Schofield (W.H.), *7702*
- laminar flow, particle fluid flow, turbulent flow, Stan (A.D.), Oana (S.), *7716*

- noncircular pipes, oldroyd fluid, viscoelastic fluids, Rukmangadachari (E.), *7722*
- cylindrical bodies, magneto fluid dynamics, suspensions, transforms, Gupta (S.C.), Agarwal (M.C.), *7896*
- fluid injection, magneto fluid dynamics, non newtonian flow, stream function, Cobble (M.H.), *8820*
- reservoirs, simulation, Watts (J.W.) III, *8946*
- boundary layer (three dimensional), cylindrical bodies, measurements, turbulence, Fernholz (H.H.), Vagt (J.-D.), *9563*
- asymptotic behavior, boundary layer (three dimensional), unsteady state, Ryzhov (O.S.), *9566*
- boundary layer, boundary layer (turbulent), equilibrium, Schofield (W.H.), *10426*
- channels, porous walls, unsteady flow, Sai (K.S.), *10446*
- attenuation, pipelines, water hammer, Thielen (H.), Burmann (W.), *10487*
- biomechanics, ducts (curved), flow reversal, pulsatile flow, vortex flow, Chandran (K.B.), Yearwood (T.L.), *11485*
- film flow, hydrodynamic stability, thin films, Mikielewicz (J.), Ihnatowicz (E.), (et al.), *11533*

pressure measurement, shear stress, surface flow, turbulent flow, Pontikos (N.), Bradshaw (P.), *712*
- cylindrical bodies, ducts, wave loads, wavemakers, Knott (G.F.), Flower (J.O.), *1636*
- measurements (dynamic), velocity measurement, Adler (D.), Taylor (P.M.), *1639*
- flow measurement, meters, water tunnels, yawing, Takamatsu (Y.), Takahara (H.), (et al.), *1641*
- compressible flow, jets, noise, Hoglund (L.E.), Siddon (T.E.), *1649*
- cavities, vortex flow, Rockwell (D.), Knisely (C.), *2683*
- aerodynamic performance, airplanes, subsonic flow, Larson (T.J.), Siemers (P.M.) III, *3753*
- calibration, nozzles, swirl flow, velocity measurement, Murakami (M.), Kito (O.), *3755*
- friction, internal combustion engines, thermodynamic processes, Vogt (R.), *3882*
- arteries, blood flow, pulsatile flow, Mauck (G.W.), Smith (C.R.), (et al.), *4120*
- biomechanics, gait, human body, Arvikar (R.), Seireg (A.), *4908*
- aorta, elastic constants, flexible walls, heart, pulsatile flow, Gross (D.R.), Hunter (J.F.), (et al.), *4916*
- delta wings, shock waves, supersonic flow, Squire (L.C.), *5489*
- combustion, doppler effect, solid propellants, Strand (L.D.), Magiawala (K.R.), (et al.), *5638*
- frequency domain techniques, internal combustion engines, vibration, Arques (P.), *5649*
- control, internal combustion engines, knocking, spark ignition, Randall (D.W.), Powell (J.D.), *5653*
- porous media, snow, Wankiewicz (A.), *5908*
- diagnostics, head, human body, Viernstein (L.J.), *6028*
- arteries, blood flow, compressional waves, pulsatile flow, Li (J.F-J.), Melbin (J.), (et al.), *7118*
- deformation, towers, wind loads, Neuerburg (W.), *7909*
- aerodynamic interference, channel flow, walls, Heikal (H.), *10538*
- jets, pulsatile flow, spherical bodies, unsteady flow, Kovasznay (L.S.G.), Tani (I.), (et al.), *11381*
- axial turbines, blades, heat transfer, walls, Dunn (M.G.), Hause (A.), *11798*

pressure recovery, annuli, diffusers, swirl, Kumar (D.S.), Kumar (K.L.), *1570*

pressure vessels, holes, shells (axisymmetric), stress analysis, Reuss (P.), *241*
- deformation, elastoplasticity, shells (cylindrical), shells (plastic), Ohashi (Y.), Okouchi (T.), *312*
- shells (anisotropic), shells (of revolution), shells (sandwich), underwater structures, Palaninathan (R.), Montague (P.), *320*
- design (optimum), shells (of revolution), Mansfield (E.G.), *1231*
- acoustic emission, crack growth, nondestructive tests, rupture, Ohtsuka (N.), Nakano (M.), (et al.), *1398*
- boiling, steam, two phase flow, Pitts (J.H.), *1856*
- buckling (plastic), shells (ellipsoidal), Bushnell (D.), *2310*
- crack growth, environmental tests, fatigue, steel, Ritchie (R.O.), Suresh (S.), (et al.), *2414*
- design (optimum), shells (ellipsoidal), shells (toroidal), stress analysis, Smith (C.O.), *2547*
- acoustic emission, crack propagation, fracture, shear, Finkel (V.M.), Muravin (G.B.), (et al.), *3506*
- cracks, flaw detection, nondestructive tests, radiography, welded joints, x ray techniques, Ruescher (E.H.), Graber (H.C.), *3507*
- forming, materials properties, nuclear reactors, structural materials, welding, Nichols (R.W.) ed., *3564, book*
- fluid-structure interaction, mechanics, nuclear reactors, vibration (forced), Jaeger (T.A.) eds., Boley (B.A.), *3565, book*
- finite element methods, shells, stress analysis, Aggarwal (S.K.), Nayak (G.C.), (et al.), *3566*
- design criteria, flanges, machine elements, Waters (E.O.), Schneider (R.W.), *3570*
- high pressure, thermal measurements, Bock (W.J.), *3810*
- elasticity, energy methods, fracture, fracture mechanics, steel, Rosenfield (A.R.), Shetty (D.K.), *4518*
- elastoplasticity, fracture mechanics, nuclear radiation, nuclear reactors, radiation effects, Khan (M.A.), Shoji (T.), (et al.), *5370*
- axisymmetric flow, convection (free), thermal loading, Wung (P.M.), Tauchert (T.R.), *5576*
- conductivity, laminates, thermal properties, Armstrong (W.P.), Jawad (M.H.), *5805*
- crack tip geometry, fracture toughness, plastic flow, steel, Kotilainen (H.), *6479*
- boundary integral methods, condensation, dynamic response, reactor structures, shells (spherical), steam, Krieg (R.), Goller (B.), (et al.), *6549*
- buckling (experimental), experimental mechanics, shells (toroidal), thin walled structures, Stanley (P.), Campbell (T.D.), *7622*
- constitutive equations, cyclic loading, stress strain relationships, Drucker (D.C.), Palgen (L.), *8212*
- creep, elastoplasticity, finite strain, Betten (J.), *8254*
- crack arrest, fracture criteria, fracture toughness, material testing, pipelines, Hahn (G.T.) eds., Kanninen (M.F.), *8415, book*
- bolted joints, flanges, pipes, Blach (A.E.), Bazergui (A.), *8464*
- buckling, deformation, strain, thin walled structures, Stanley (P.), Campbell (T.D.), *8468*
- cracks, flaws, fracture mechanics, nozzles, reactor structures, Atluri (S.N.), Kathiresan (K.), *9463*
- shells (anisotropic), shells (of revolution), stress analysis, tanks, wirewound vessels, Timonin (A.M.), *9464*
- crack growth, cracking, design, holes, plates (holed), stress intensity factor, Rooke (D.P.), *10332*
- creep, prestressed concrete, thermal effects, Smith (I.G.), *10357*
- deformation, plastics, reinforced bodies, shells (torispherical), strength, Barton (D.C.), Soden (P.D.), (et al.), *10367*
- cylindrical bodies, elastoplasticity, Aggarwal (S.K.), Nayak (G.C.), *10368*
- design, failure, fatigue, fracture, materials properties, piping systems, safety, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- collapse, cylindrical bodies, shakedown structures, Tooth (A.S.), Jones (N.), *11336*

pressurized components, inclusions, shells (cylindrical), Bonde (D.H.), Rao (K.P.), *253*
- combined loading, creep, shells (cylindrical), Lau (J.H.), Listvinsky (G.K.), *3252*
- aluminum alloys, anisotropic media, diaphragms, plasticity, Ilahi (M.F.), Parmar (A.), (et al.), *5112*
- shells (cylindrical), shells (stiffened), Hwang (K.C.), Zheng (Z.-C.), *6253*
- buckling, elastoplasticity, large displacement, shells, Galletly (G.D.), *10185*
- shells (cylindrical), shells (nonlinear), stability theory, Kabanov (V.V.), Zheleznov (L.P.), *11112*

pressurized pipes, fatigue, steel, Hale (D.A.), Wilson (S.A.), (et al.), *535*
- high temperature, reactor structures, structural analysis, Kraus (H.), *1206*
- composite pressure vessels, hose, hydraulics, tubes, Entwistle (K.M.), *6205*
- bending (elastic), bends, shells (cylindrical), shells (thin), Whatham (J.F.), *6220*
- cracks, failure, shells (cylindrical), Kitching (R.), Zarrabi (K.), *6221*
- bending, buckling (plastic), elastoplasticity, tubes, Fabian (O.), *6255*
- composite materials, creep, cylindrical bodies, Hulsurkar (S.), *7283*
- cylindrical bodies, elastoplasticity, forming, Riedel (D.), *7344*
- constitutive equations, elastoviscoplasticity, thermal stresses, Inoue (T.), Nagaki (S.), (et al.), *7951*
- boundary elements, plasticity, stress concentration, Oliveira Faria (L.M.), Mota Soares (C.A.), (et al.), *8215*
- buckling (torsional), postbuckling behavior, shells (cylindrical), Kodama (S.), Otomo (K.), (et al.), *8258*
- buckling, buried structures, pipes, soil structure interaction, Boumazel (C.), *9293*
- bends, creep, plane strain, Zverkov (B.V.), Danyushevskii (A.I.), *10153*
- design (optimum), dynamic loads, reinforced bodies, reinforced concrete, Heinloo (M.), Kaliszky (S.), *10349*

preston tubes, boundary layer (turbulent), channel flow, shear stress, walls, Kiska (S.), Vasanta Ram (V.), (et al.), *4599*
- boundary layer, calibration, friction (skin), shear, Nitsche (W.), *5507*

prestressed concrete, beams (prestressed), shear strength, Rangan (B.V.), *511*
- composite vessels, conduction (heat), conductivity, nuclear reactors, Bangash (Y.), *774*
- buildings, earthquake effects, seismic waves, Thompson (K.J.), Park (R.), *1883*
- bending, girders, shear, torsion, Taylor (G.), Warwaruk (J.), *2523*
- beams (prestressed), dynamic behavior, Srinivasulu (P.), Sharma (P.C.), *2524*
- bridges, elastic behavior, slabs, waffle slabs, Kennedy (J.B.), ElSebakhy (I.S.), *2530*
- reinforced concrete, viscoelasticity, Temnov (I.I.), Khlopovskii (Yu.N.), *3536*
- bridges, creep, deformation, repair, Takafuji (T.), Seki (S.), *3537*
- beams, stress concentration, Ficker (M.), *4535*
- design (optimum), ultimate strength, Lo Bianco (M.), Mazzarella (C.), *10341*
- creep, pressure vessels, thermal effects, Smith (I.G.), *10357*
- beams, crack initiation, crack propagation, cracking, Labib (F.), Edwards (A.D.), *10361*

prestressed structures, elastic waves, layered media, Kalinchuk (V.V.), Poliakova (I.B.), *400*
- bridges (suspension), design (minimum weight), optimization, shape factors, Sofronie (R.), *2533*

- bridges (suspension), deflections, Sofronie (R.), *5358*
- axial waves, cylindrical bodies, fluid-structure interaction, Bagno (A.M.), *6709*
- elasticity (linear), membranes, Turvey (G.J.), *7335*
- dynamic analysis, shells (cylindrical), vibration (free), Kukudzhanov (S.N.), *9322*
- lattices, structural response, vibration (free), Anderson (M.S.), *9326*
- half space, interface phenomena, love waves, viscoelastic materials, Chattopadhyay (A.), De (R.K.), *9342*
- bridges (suspension), design (optimum), Sofronie (R.), *9455*
- bifurcation, buckling, rods, Vielsack (P.), *10170*

Preuss (H.-P.), design, feedback, state feedback, state space techniques, *125*
- control, feedback, multivariable systems, state space techniques, *9159*

Prewo (K.M.), composite materials, glass fibers, high strength, Brennan (J.J.), *291*
- see Strife (J.R.), *8218*

Pribylov (V.N.), chemical reactions, dielectrics, electro fluid dynamics, liquids, tubes, Chernyi (L.T.), *2879*

Pribytkova (K.V.), catalyzed ignition, combustion waves, convection (free), ignition, Khudyaev (S.I.), (et al.), *8705*

Price (H.G.), cooling, liquid fuels, rockets, *3884*

Price (N.J.), see Ladeira (F.L.), *9371*

Price (R.K.), computer programming, discharges, hydraulics, rivers, Samuels (P.G.), *3613*

Price (W.G.), see Bishop (R.E.D.), *4105*
- see Inglis (R.B.), *8037*
- see Bishop (R.E.D.), *12084*

Priddy (W.J.), see Bayley (F.J.), *5504*

Priemskii (N.D.), see Vladimirov (V.I.), *8217*

Priest (R.H.), creep, deformation maps, fatigue, life expectancy, Ellison (E.G.), *4477*

Priest (S.D.), excavation, prediction, rocks, sliding, stability, walls, *4467*

Priestley (M.J.N.), see Thurston (S.J.), *11328*

Prihoda (J.), boundary layer (turbulent), friction (skin), turbulence (freestream), *597*

Prikarpatskii (A.K.), backlund transformations, evolution equations, inverse problems, korteweg de vries equation, scattering, *6072*

Prikhodko (N.A.), see Siryi (V.S.), *4627*

Prikhodko (N.K.), see Shurchkov (A.V.), *5858*

Prikhodko (V.N.), corrosion, grain boundaries, stainless steels, ultrasonics, *6493*

Primose (E.J.F.), see Freudenstein (F.), *6049*

Priolo (P.), see Dessi (M.), *7197*

Priscu (R.), dams, earthquake effects, finite element methods, Stematiu (D.), (et al.), *972*

Prishchepov (V.F.), see Livshits (L.D.), *1877*

Pritz (T.), elastic constants, rods, vibration (viscoelastic), viscoelastic waves, *4447*
- elastic constants, insulating materials (acoustical), materials properties, transfer functions, *9676*

Privalov (N.P.), see Zeigarnik (Yu.A.), *7834*

Privarnikov (A.K.), layered media, moving loads, viscoelasticity (dynamic), Radovskii (B.S.), *11160*

Prlymak (V.G.), see Rozhdestvensky (B.L.), *8569*

probabilistic design, fatigue, high cycle fatigue, linear theory, Wirsching (P.H.), Hsieh (S.), *446*
- mechanical components, reliability, safety, Moss (T.R.) ed., *1434, book*
- approximations, first-passage approximations, oscillators, probability theory, Lutes (L.D.), Chen (Y.-T.T.), (et al.), *2019*
- crack growth, fatigue, Tsurui (A.), Igarashi (A.), *2415*
- probability theory, random loading, Rzhanitsyn (A.R.), *2513, book*
- ice mechanics, loads, offshore structures, Wheeler (J.D.), *3524*
- design criteria, hydraulic structures, risk, Tung (Y.-K.), Mays (L.W.), *4530*
- modeling, reliability, structural analysis, Frangopol (D.), *5350*
- cyclic loading, reliability analysis, springs, My Dao Thien, Massoud (M.), *6518*
- limit analysis, random loading, safety, structural design, Murzewski (J.), *7588*
- limit analysis, random loading, reinforced concrete, Mascarenhas (A.T.), *7606*
- reliability, risk, stochastic processes, vibration (random), Shinozuka (M.) eds., Yao (J.T.P.), *8447, book*
- bridges, loads, random loading, Buckland (P.G.), Navin (F.P.D.), (et al.), *8454*
- reliability analysis, safety, structural design, Hohenbichler (M.), Rackwitz (R.), *8456*

probability, algorithms, constraints, optimization, quadratic programming, Lepp (R.), *49*
- life expectancy, machine design, optimization, tools, Sheikh (A.K.), Kendall (L.A.), (et al.), *1346*
- intermittency, reliability analysis, Schneeweiss (W.G.), *2515*
- filters, nonlinear analysis, stochastic systems, Hempel (P.R.), *3106*
- ocean waves, simulation, stochastic processes, Flower (J.O.), *3108*
- stochastic processes, weibull statistics, wind loads, Simiu (E.), Filliben (J.J.), *4171*
- ergodic process, stochastic processes, Attia (F.A.-S.), *4172*
- crack growth, fatigue, random loading, Kozin (F.), Bogdanoff (J.L.), *4481*
- computing techniques, convergence, fibers, Harlow (D.G.), Phoenix (S.L.), *5138*
- coatings, fatigue, iron, life expectancy, Kalmutskii (V.S.), Frunze (I.P.), *5285*
- anisotropic media, fibers, void fraction, Komori (T.), Makishima (K.), *6201*
- slopes, soil stability, Vanmarcke (E.H.), *6393*
- beams, brittle fracture, failure, weibull statistics, Kittl (P.), Camilo (G.M.), *6443*
- fracture criteria, low cycle fatigue, polymers, rubber, Valanis (K.C.), Yilmazer (U.), *6456*
- collision models, geosynchronous orbits, mission analysis, Hechler (M.), Van Der Ha (J.C.), *6882*
- fracture, life expectancy, random loading, reliability analysis, Bolotin (V.V.), *7468*
- earthquakes, markov processes, prediction, Nishioka (T.), Shah (H.C.), *8962*
- acoustic measurements, brittle fracture, ceramics, life expectancy, risk, Richardson (J.M.), Evans (A.G.), *9437*
- crack growth, statistical theory, Schultrich (B.), Posselt (M.), *10306*
- wind loads, wind pressure, Stathopoulos (T.), *11326*

probability theory, convolution integrals, estimation, optimization, reliability analysis, Grigoriu (M.), Lind (N.C.), *48*
- beam columns, columns (variable cross section), safety, Frangopol (D.), Nguyen Dang Hung, *335*
- combustion instability, mathematical models, Polinszky (K.), Bator (B.), (et al.), *844*
- identification, order statistics, statistical theory, Efimov (A.N.), Kuteev (V.M.), *1098*
- algorithms, empirical methods, graphical methods, stochastics, Borodkin (L.I.), *1099*
- nuclear reactors, seismic loading, soil structure interaction, Jaeger (T.A.) eds., Boley (B.A.), *1325, book*
- approximations, first-passage approximations, oscillators, probabilistic design, Lutes (L.D.), Chen (Y.-T.T.), (et al.), *2019*
- reliability analysis, statistical theory, Roizman (V.P.), Vaingortin (L.D.), *2021*
- ergodic properties, markov processes, mathematical methods, Bezhaeva (Z.I.), *2023*
- control, reliability analysis, Umrikhin (Yu.D.), *2097*
- probabilistic design, random loading, Rzhanitsyn (A.R.), *2513, book*
- mechanical systems, stochastic processes, Friedrich (H.), Hennig (K.), *3526*
- decision theory, floods, Bernier (J.), Miquel (J.), *4041*
- flood flow, precipitation, Rao (D.V.), *4044*
- breakers, ocean waves, surface waves, Tayfun (M.A.), *4048*
- oceanography, surface waves, wind-wave interaction, Matushevskii (G.V.), *4855*
- cell-to-cell mapping, computer programming, dynamics, nonlinear mechanics, Hsu (C.S.), *4984*
- reynolds number (high), stochastic processes, turbulence, Barndorff-Nielsen (O.), *4986*
- stochastic control, synthesis, Andreev (N.I.), *5051*
- markov processes, mathematical models, stochastic processes, Yushkevic (A.A.), Fainberg (E.A.), *5053*
- radiant interchange, real gas effects, vibration (thermally excited), Kruglov (V.I.), Katkovskii (L.V.), (et al.), *5588*
- controllability, identification, nonlinear systems, subjective variance functions, Varlaky (P.), Raibman (N.S.), *6137*
- reliability analysis, strength, Ditlevsen (O.), *6515*
- reliability analysis, safety, structural design, Baba (S.), Nakagawa (K.), (et al.), *6516*
- kepler orbits, mean anomaly, orbit mechanics, Serafin (R.A.), *6875*
- buildings, buildings (tall), pressure distribution, wind, Holmes (J.D.), *7069*
- statistical design, statistical theory, Bereanu (B.) eds., Grigorescu (S.), (et al.), *7226, book*
- dynamic analysis, random excitation, Spanos (P.-T.D.), Lutes (L.D.), *7374*
- bimetallic materials, coatings, machine elements, reliability, strength, Kalmutskii (V.S.), *7600*
- collision models, offshore structures, simulation, Thoft-Christensen (P.), *7615*
- failure, matrix methods, reliability analysis, trusses, Murotsu (Y.), Okada (H.), (et al.), *8448*
- circumnavigation, damage, solar system, tides, Ziglina (I.N.), *8838*
- ocean waves, offshore structures, wave height, Van Heteren (J.), Bruinsma (J.), *8981*
- diesel engines, prediction, wear, Lausch (W.), Biemann (W.), (et al.), *9024*
- finite element techniques, galerkin method, weighted residual methods, Bergman (L.A.), Heinrich (J.C.), *10033*
- algorithms, mathematical models, simulation, Malyshev (I.A.), Palagin (Yu.I.), *10060*

process control, algorithms, identification, modeling, Stone (R.), Ivakhnenko (A.G.), (et al.), *149*
- digital control, frequency domain techniques, multivariable systems, state space techniques, Seborg (D.E.), Fisher (D.G.), *205*
- adaptive systems, digital control, furnaces, glass furnace, identification, Keviczky (L.), Haber (R.), (et al.), *206*
- control, optimization, rolling, rolling, Dobronravov (D.N.), Kun (L.A.), (et al.), *207*
- chatter, digital control, turning, Eman (K.), Wu (S.M.), *437*
- algorithms, dynamic programming, maintenance, operations research, Berzilovich (Ye.Yu.), Pavlenko (M.I.), (et al.), *1149*
- design, heat exchangers, multivariable systems, regulator problem, Davison (E.J.), Taylor (P.A.), (et al.), *1163*

- nonlinear systems, observers, Wallman (P.H.), *1164*
- dynamic analysis, linear systems, observers, reliability analysis, Mironovskii (L.A.), *2082*
- linear systems, mathematical models, range model, Zenkov (V.V.), *2110*
- design, diagnostics, reliability analysis, Davydovskaya (N.I.), *2114*
- algorithms, model reduction, multivariable systems, Mishra (R.N.), Wilson (D.A.), *2145*
- design, optimization, Timofeyev (B.B.), Litvinov (A.M.), (et al.), *2146*
- algorithms, identification, minimax techniques, optimization, Bakan (G.M.), Strashko (V.T.), *2154*
- design, regulator problem, time lag, Khasmamedov (F.I.), *2169*
- algorithms, mathematical models, model reduction, Minsker (I.N.), *2175*
- control, design, linear systems, multivariable systems, observers, pole placement, Shah (S.L.), Seborg (D.E.), (et al.), *3186*
- distributed parameters, heat exchangers, heat transfer, mass transfer, optimal control, sliding optimization, Dubrovin (O.F.), Gaichinskiy (L.Yu.), *3190*
- computer aided manufacturing, mathematical models, queue theory, stochastic systems, Hitomi (K.), Nakajima (M.), (et al.), *3214*
- computer aided manufacturing, operations research, optimization, White (C.C.) III, *3216*
- inverse problems, linear systems, time invariant systems, time lag, Borukhov (V.T.), *4228*
- adaptive systems, design, linear systems, multivariable systems, tracking, Davison (E.J.), *4236*
- algorithms, nonlinear systems, optimization, Kolmans (G.K.), Poznyak (A.S.), (et al.), *4324*
- design, model reduction, sampled data systems, Atluri (R.), Kao (Y.K.), *5044*
- mathematical models, stochastic systems, wastewater treatment, water pollution, Tanthapanichakoon (W.), Himmelblau (D.M.), *5046*
- discrete systems, prediction, regression rate, time delay systems, Potapova (T.P.), *8164*
- man machine systems, mathematical models, simulation, stochastic systems, Hajnal (M.), Revesz (G.), *8172*
- computer aided manufacturing, mathematical models, modeling, robotics, Devries (W.R.) ed., *8173, book*
- design, feedback, frequency domain techniques, multivariable systems, state space techniques, Bar (W.), *9163*

processes, mixing, suspensions, two phase flow, Einenkel (W.-D.), *6963*

processing, computer programming, fast fourier transform, real time solution, Kuno (A.Ya.), *71*
- ocean bed, seismic waves, Salisbury (J.I.), *3008*
- filters, seismic waves, Prasad (S.), Mahalanabis (A.K.), *5965*
- earth, gravity, magnetic field, Antonov (Yu.), *5871*
- field tests, inverse problems, seismic waves, Alekseyev (A.S.), Dobrinskiy (V.I.), (et al.), *5875*
- interpolation, seismic waves, Savaryenskiy (Ye.F.), Kendzera (A.V.), *7021*
- multiple waves, seismic waves, Kozlov (Ye.A.), *7024*
- plane surfaces, seismic waves, Nikolayev (I.V.), Leontyeva (T.N.), *7025*
- refraction, seismic waves, Palmer (D.), *8003*
- heat transfer, power plants, two phase flow, Rothe (P.H.) eds., Lahey (R.T.) Jr., *8901, book*
- deconvolution, seismic waves, Arya (V.K.) eds., Aggarwal (J.K.), *9907, book*
- deconvolution, inversion, seismic waves, Kikuchi (M.), Kanamori (H.), *9908*

Proctor (M.R.E.), see Chapman (C.J.), *2607*
- see Knobloch (E.), *8531*
- conductivity, convection (benard), convection (free), heat addition, slabs, thermal instability, *11763*

programmed loading, composite materials, fatigue, life expectancy, stochastics, Yang (J.N.), Jones (D.L.), *6197*

programming, computing techniques, corrections, design, Guk (K.N.), *68*
- coding, computer programming, finite element methods, finite element techniques, modal analysis, nastran, Schaeffer (H.G.), *75, book*
- computing techniques, finite element methods, mesh generation, Imafuku (I.), Kodera (Y.), (et al.), *79*
- algorithms, design, Aladzhev (B.M.), Kokotov (V.M.), *2144*
- algorithms, parallel computations, Shcherbakov (E.V.), *3180*
- algorithms, discrete programming problem, optimization, Redkovskaya (M.N.), Yaremchuk (T.G.), *4283*
- coding, computer programming, parallel programming, Valkovskiy (V.A.), *10056*

projectiles, ballistics (interior), heat transfer, thermal explosions, Grewal (B.S.), *5716*
- ballistics (interior), blast effects, launching, solid fuels, Taylor (T.D.), Lin (T.C.), *6891*
- control stability, trajectories, Murphy (C.H.), *7792*
- compression, explosive forming, materials processing, plasma, Kirko (V.I.), *7903*
- aerodynamic interference, fins, hypersonic flow, pressure distribution, sabot discard, wind tunnels, Schmidt (E.M.), *10517*
- aerodynamic interference, fins, launching, trajectories, Schmidt (E.M.), *10519*
- impact, net, networks, ropes, submerged bodies, Wortman (A.), *10691*

Prokhorenko (P.P.), see Dezhkunov (N.V.), *6588*

Prokofev (V.A.), compressible flow, heat transfer, perturbations, *11415*

Prokopenko (A.V.), see Troshchenko (V.T.), *2421*

Prokopev (V.P.), see Vorotnikov (V.I.), *4159*

Prokopov (B.I.), see Kopysov (O.Yu.), *3210*

Prokopov (V.G.), conduction (unsteady), heat transfer, variational methods, Bespalova (E.I.), (et al.), *50*

Prokulevich (L.A.), see Karpov (V.S.), *9973*

Prokunin (A.N.), capillary flow, extrusion, viscoelastic fluids, Sevruk (V.D.), *545*
- see Leonov (A.I.), *6571*

propagation, gravity waves (surface), laplace transform, viscous flow, waves, Tkachenko (V.A.), *670*
- failure, radiation, seismic waves, Barker (T.G.), Minster (J.B.), *961*
- inhomogeneities, phase velocity, scattering, second order analysis, Gray (S.H.), *1085*
- interface cracks, semi infinite media, viscoelasticity, wiener-hopf technique, Sills (L.B.), Benveniste (Y.), *1376*
- dynamic stresses, impact, photoviscoelasticity, time dependence, Arenz (R.J.), Soltesz (U.), *1391*
- nonlinear theory, shock waves, Rogers (P.H.), Weiner (A.M.), *1614*
- acoustic waves, ocean, Blodgett (M.L.), Palmer (D.R.), *1801*
- in-plane displacement, measurements, moire methods, photoelasticity, waves, Basehore (M.L.), Post (D.), *2472*
- channel flow, gravity waves (surface), rivers, saint venants equation, tides, Chatterjee (A.K.), *2707*
- focusing, laser plasma interaction, theory, wave absorbers, Sodha (M.S.), Sinha (S.K.), (et al.), *2904*
- integro differential equations, perturbation methods, plasma, variational methods, wkb method, Berk (H.L.), Pfirsch (D.), *3105*
- gravity waves (stratified), liquid liquid interface, Gabov (S.A.), Castro (R.), *3712*
- boussinesq equation, dispersion relation, gravity waves, magneto fluid dynamics, El Sawi (M.), Eltayeb (I.A.), *3892*
- fluid-structure interaction, gravity waves (finite depth), half space, unsteady flow, Tkachenko (V.A.), *4663*
- flow irregularities, gravity waves (surface), trenches, Lee (J.-J.), Ayer (R.M.), *5472*
- boron, fibers, torsion, ultrasonics, vibration, Kaplan (M.D.), Veremeenko (S.V.), *6482*
- bottom irregularities, ocean, ocean waves, Brink (K.H.), *6610*
- capillary waves, gravity waves (finite depth), Scott (J.C.), *6698*
- slurries, transient, two phase flow, Thorley (A.R.D.), *6962*
- quenching, wiener-hopf technique, Caflisch (R.E.), Keller (J.B.), *6973*
- buckling (local), experimental mechanics, pipes, Kyriakides (S.), Babcock (C.D.), *8465*
- aerothermochemistry, bifurcation, combustion, thermal waves, Sivashinsky (G.), *8789*
- combustion, exothermic reactions, thermal waves, Leibenzon (A.S.), *8795*
- collision models, heat transfer, plasma, waves, Namikawa (T.), Hamabata (H.), *8828*
- detonation (two phase), explosions, ignition, Smirnov (N.N.), *8853*
- detonation (two phase), detonative ignition, explosions, Terentev (E.D.), *8854*
- ballistics (interior), detonation, heat transfer, particle dynamics, turbulent flow, Buckingham (A.C.), *8855*
- acoustic emission, generation, nondestructive tests, Kolerus (J.), *9424*
- astrophysics, planetary atmospheres, shock waves, similarity methods, Pai (S.I.), Menon (S.), (et al.), *9537*
- approximations, discontinuities, liquid metals, magneto fluid dynamics, Patsegon (N.F.), *9797*
- blast waves, chemical kinetics, detonation, explosions, Levin (V.A.), Svalov (A.M.), *9831*
- computer programming, computing techniques, finite element techniques, wave equations, Okrouhlik (M.), *10069*
- edge effects, harmonic waves, waveguides, wedges, Grinchenko (V.T.), Meleshko (V.V.), *10228*
- half space, nonhomogeneous media, sh waves, Kielczynski (P.), *10230*
- composite materials, elastic waves, random media, shear waves, Kinra (V.K.), Anand (A.), *10235*
- explosions, powders, Brinza (V.N.), Babaitsev (I.V.), (et al.), *10714*
- elastic waves, porous media, saturation, Berryman (J.G.), *10941*
- elastic waves, shells (cylindrical), vibration, Guz (A.N.), *11138*
- anisotropic media, elastic waves, half space, Musgrave (M.J.P.), Payton (R.G.), *11164*
- anisotropic media, elastic waves, half space, vibration, Osipov (I.O.), *11166*
- anisotropic media, damping capacity, elastic waves, Tarabrin (G.T.), *11167*
- capillary waves, experimental methods, experimental results, Byrne (D.), Earnshaw (J.C.), *11594*
- acoustic waves, channel flow, ionized gases, shock waves, Levin (V.A.), *11811*
- discontinuities, magneto plasma dynamics, radiating flow, shock waves, Shankar (R.), Jain (S.K.), *11826*
- random media, underwater acoustics, Broek (H.W.), Lawlor (J.E.), *11902*
- random media, underwater acoustics, Worcester (P.F.), Williams (G.O.), (et al.), *11903*
- acoustic waves, cavities, elastic bodies, porous media, Junger (M.C.), *11922*
- acoustic waves, arrays, nonhomogeneous media, Komissarova (N.N.), *11924*

propagation velocity, crystallography, ultrasonics, Yatsyk (S.I.), Krasavin (V.V.), *500*
- compressional waves, duct flow, flexible walls, Amenzade (R.Yu.), *11631*

propellants, hydrodynamics, modeling, pumps, rockets, Kalnin (V.M.), Sherstiannikov (V.A.), *2872*
- ballistics (interior), burning rate, deflagration, detonation, Goliger (J.), Lucotte (J.-P.), *2928*
- ballistics, launching, shock waves, Taylor (T.D.), Lin (T.C.), *2929*
- orifices, space vehicles, spinning bodies, vortices, Pasley (G.F.), *5404*
- combustion products, contamination, exhaust gases, interferometry, optical techniques, spectral analysis, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- burning rate, combustion (unsteady), depressurization, Suhas (H.K.), Bose (T.K.), *9762*

propellers, control, wind turbines, Cheney (M.C.), *713*
- noise (aerodynamic), noise abatement, Succi (G.P.), *904*
- interaction, thrust, unsteady flow, wing body combinations, Mccormick (B.W.), Aljabri (A.S.), (et al.), *2759*
- aerodynamics, airplanes, engines, Larrabee (E.E.), *3750*
- aerodynamic interference, airplanes, noise abatement, Muller (J.), Rouha (L.), *4680*
- noise (aerodynamic), Tanna (H.K.), Burrin (R.H.), (et al.), *4771*
- blades, design, lifting surfaces, mathematical models, turbomachinery, Brockett (T.E.), *6738*
- design, wind power, wind turbines, Moretti (P.M.), Thresher (R.W.), *6855*
- free boundary, induced drag, magneto fluid dynamics, theory, Yakovlev (V.I.), *6864*
- blades, spectra, vibration (forced), wind turbines, Akesson (B.), Sandstrom (S.), *6870*
- experimental mechanics, vibration (forced), Crandall (S.H.), Dugundji (J.), *7401*
- deflections, moire methods, propellers (marine), Sikora (J.P.), *8423*
- aerodynamic interference, transonic flow, wakes, wings, Rizk (M.H.), *9656*
- airplane performance, flight, Laitone (E.V.), *10508*
- helicopters, rotors, sound generation, Farassat (F.), *11944*

propellers (marine), bubble dynamics, cavitation flow, damage, leading edge, modeling, Stinebring (D.R.), Holl (J.W.), (et al.), *706*
- models, ships, wakes, Zborowski (A.), Nginh (N.M.), *1921*
- diesel engines, propulsion, ship design, Ono (R.), Yoshida (O.), *1923*
- blades, cavitation inception, models, Kuiper (G.), *3749, book*
- control, controllable pitch propeller, mathematical models, Geway (R.P.), De Mulder (E.P.H.M.), (et al.), *5966*
- finite element techniques, ships, vibration (flow induced), Skaar (K.T.), Carlsen (C.A.), *5970*
- hulls, propulsion, roughness, surfaces, Schenzle (P.), *7072*
- cavitation, hulls, rudders, towing tanks, water tunnels, Rutgersson (O.), *8044*
- deflections, moire methods, propellers, Sikora (J.P.), *8423*
- cavitation, models, noise measurements, vortices, Latorre (R.), *8518*
- design, hull propeller interaction, vibration (flow induced), Johnsson (C.-A.), *9009*
- cavitation, hull propeller interaction, wakes, water tunnels, Rutgersson (O.), *10880*

propulsion, crossflow, fans, modeling, Harloff (G.J.), Wilson (D.R.), *1634*
- diesel engines, propellers (marine), ship design, Ono (R.), Yoshida (O.), *1923*
- two dimensional flow, unsteady flow, wing body combinations, Couchet (G.), *2740*
- aerodynamic performance, nozzles, swept wings, Capone (F.J.), *3885*
- energy conversion, lasers, radiation, solar energy, space, Billman (K.W.) ed., *5664, book*
- electric power, motors, ship performance, Rains (D.A.), Vanlandingham (D.J.), (et al.), *5965*
- nozzles, rockets, space vehicles, supersonic flow, Ellis (R.A.), Hammond (R.N.), (et al.), *6851*
- control, design, space vehicles, Finston (R.), Spicer (L.M.), *6853*
- hulls, propellers (marine), roughness, surfaces, Schenzle (P.), *7072*
- aerodynamic performance, attitude control, fans, Betzina (M.D.), Kita (R.), *7790*
- hypersonic flow, missiles, ramjets, rockets, Billig (F.S.), Waltrup (P.J.), (et al.), *8810*
- engines, magneto fluid dynamics, marine engineering, superfluids, Khonichev (V.I.), Yakovlev (V.I.), *9787*
- orbit transfer, space shuttle, space vehicles, Martin (J.A.), *10724*
- design, space shuttle, systems, Sackheim (R.L.), Fritz (D.E.), (et al.), *10725*
- launching, space vehicles, systems, Kayama (A.), Takenaka (Y.), *10728*
- airplane performance, design, stol, turbofan engines, vtol, Glasgow (E.R.), Skarshaug (R.E.), *11742*

Proshkovets (I.), fatigue, life expectancy, loads, Voitishek (Ya.), *6948*
- damage (cumulative), design, fatigue, machine elements, Voitishek (Ya.), *7634*

Proshutinskii (A.P.), cooling, heat exchangers, nuclear reactors, thermal instability, Lobachev (A.G.), *1713*

Proskuryakov (A.P.), lyapunov's functions, nonlinear mechanics, oscillations, periodic orbits, poincare method, *4945, book*

Prosnak (W.J.), conformal mapping, irrotational flow, plates, porous surfaces, walls, Rokicki (J.), *8541*
- airfoil theory, conformal mapping, inviscid fluid, two dimensional flow, Rokicki (J.), *9640*

Prosperetti (A.), hydrodynamic stability, initial value problems, interface waves, liquid liquid interface, viscous flow, *6701*
- bubble dynamics, drops, initial value problems, oscillations, *12046*

prosthetic devices, biomechanics, blood flow, human engineering, Mow (V.C.) ed., *1945, book*
- knees, mechanical design, Judge (G.W.), Fisher (L.), *1957*
- biomaterials, dental prostheses, transducers (pressure), Turner (C.H.), Gross (M.J.), *1959*
- aortic valve, blood, damage, shear stress, Figliola (R.S.), Mueller (T.J.), *1960*
- bones, human body, spine, Banks (A.J.), Dervin (E.), *3071*
- biocontrol, design, myoelectric control, Shannon (G.F.), *3227*
- knees, plasticity, wear, Walker (P.S.), Ben-Dov (M.), (et al.), *4921*
- bones, fracture, injuries, Banks (A.J.), Dervin (E.), *4922*
- bones, fracture, stress analysis, Carter (D.R.), Vasu (R.), *6005*
- bones, fracture, strain measurement, Carter (D.R.), Vasu (R.), (et al.), *6006*
- blood, circulatory systems, hemolysis, pumps, Fumero (R.), *6022*
- human engineering, respiratory system, Nouh (A.), *6029*
- biocontrol, blood flow, temperature control, Efremov (A.A.), Andrushchenko (L.I.), *6033*
- feedback, gait, simulation, Hirokawa (S.), Sugiyama (H.), (et al.), *6150*
- man machine systems, manipulators, robotics, Rovetta (A.), *7121*
- blood, circulatory systems, oxygen, Arunachalam (V.M.), Shettigar (U.R.), *7126*
- biological joints, injuries, spine, Ghista (D.N.) ed., *8069, book*
- composite materials, hips, Roberts (J.C.), Ling (F.F.), *8079*
- biological joints, hips, Gatti (A.M.), *9067*
- biological joints, friction, tribology, wear, Dumbleton (J.H.), *10882*

Prosvetov (V.V.), evaporation, liquid metals, mass transfer, porous media, *5608*

Protasov (V.D.), composite materials, fibers, fracture, polymers, tension, Ermolenko (A.F.), (et al.), *9251*

Protosenya (A.G.), equilibrium, failure, soil mechanics, Chernikov (A.K.), *6397*

Protsenko (A.M.), asymptotic methods, shells (cylindrical), waves, *2360*

Protsenko (O.P.), see Kilchinskaya (G.A.), *11920*

Protte (W.), buckling, plates (rectangular), *5182*

Provan (J.W.), see Bamiro (O.A.), *10299*

Prudhomme (R.), see Poissant (G.), *1779*

Prudnikov (A.S.), nondestructive tests, transducers, Chernyshev (K.V.), *3511*

Prussing (J.E.), linear systems, linear theory, noise (random), stability theory, stochastic systems, *11057*

Pryadkin (P.A.), see Polyanin (A.D.), *7897*

Pryadko (A.A.), see Palchevskii (A.S.), *375*

Pryakhin (V.A.), alloys, bending, cyclic loading, iron, shape factors, testing equipment, thermal fatigue, Ivanova (L.P.), *6474*

pseudoplastic fluids, two phase flow, void fraction, Srivastava (R.P.S.), Narasimhamurthy (G.S.R.), *5814*
- heat transfer, laminar flow, pipe flow, Joshi (S.D.), Bergles (A.E.), *7826*

Pshenichnikov (A.F.), see Pinyagin (A.Yu.), *8706*

Pshenichnyi (B.N.), differential inclusion, optimal control, optimization, time delay systems, Yakovleva (A.P.), *8166*

Ptetsov (S.N.), see Kats (S.A.), *4034*

Ptitsyn (G.A.), see Druzhinin (A.A.), *5612*

Puechberty (D.), see Garo (A.), *1757*
- see Gateau (P.), *9758*

Pugachev (A.T.), conductivity, metals, thermal diffusion, thermophysical properties, thin films, Volkov (Yu.A.), (et al.), *10557*

Pugh (A.C.), matrix methods, poles, transfer functions, Ratcliffe (P.A.), *11044*

Puisieux (F.), see Toure (P.), *7466*

Pukhnachev (V.V.), see Voinov (O.V.), *6968*

pulsatile flow, flow enhancement, non newtonian flow, pressure gradient, shear thinning, Phan-Thien (N.), *618*
- liquid metals, magneto fluid dynamics, numerical analysis, pipe flow, Sudou (K.), Tomita (Y.), (et al.), *864*
- aorta, blood flow, flexible walls, shock waves, Forbes (L.K.), *1041*
- arteries, stenoses, Padmanabhan (N.), *1955*
- spectral density, two phase flow, Krokovnyi (P.M.), *2678*
- blood flow, blood vessels, Hyman (W.A.), Brewer (M.A.), *3066*
- laminar flow, pipelines, unsteady flow, visualization, Muto (T.), Nakane (K.), *3566*
- arteries, blood flow, pressure measurement, Mauck (G.W.), Smith (C.R.), (et al.), *4120*
- aneurysms, arteries, blood flow, viscous flow, Wille (S.O.), *4912*
- bifurcation, blood flow, modeling, Stettler (J.C.), Niederer (P.), (et al.), *4913*
- bifurcation, blood flow, experimental results, modeling, Stettler (J.C.), Niederer (P.), (et al.), *4914*
- aorta, bifurcation, blood flow, Walburn (F.J.), Stein (P.D.), *4915*
- aorta, elastic constants, flexible walls, heart, pressure measurement, Gross (D.R.), Hunter (J.F.), (et al.), *4916*
- design, floating bodies, flow measurement, unsteady flow, Maki (H.), Ikeda (Y.), *5508*
- biomechanics, constitutive equations, deformation, diagnostics, heart, Ghista (D.N.), Ray (G.), (et al.), *6014*
- arteries, blood flow, compressional waves, Smit (C.H.), *6018*
- blood flow, compressional waves, flexible walls, viscoelastic fluids, Kaimal (M.R.), *6020*

- eigenvalues, group velocity, ray theory, shallow water, Tindle (C.T.), Bold (G.E.J.), *6612*
- circulation, duct flow, two dimensional flow, Sasaki (Y.K.), Reddy (J.N.), *6659*
- magneto fluid dynamics, permeability, theory, two dimensional flow, Varshney (C.L.), *6859*
- drops, entrainment, liquid fuels, two phase flow, Low (S.C.), Baruah (P.C.), *6967*
- arteries, blood flow, compressional waves, pressure measurement, Li (J.F-J.), Melbin (J.), (et al.), *7118*
- immiscible fluids, plates (parallel), rarefied gases, Kant (R.), *7696*
- conduction (heat), duct flow, thermal loading, Baskov (V.B.), Platonov (E.G.), (et al.), *7849*
- thermal excitation, thermal loading, transient effects, Goloveiko (A.G.), Martynikhina (V.I.), *7851*
- hypervelocity, interaction, magneto plasma dynamics, shock waves, Oliver (D.A.), Swean (T.F.) Jr., (et al.), *7898*
- blood flow, lungs, porous surfaces, Gopalan (N.P.), *8076*
- axisymmetric flow, constrictions, ducts (variable area), unsteady flow, Latinopoulos (P.), Ganoulis (J.), *8582*
- heat transfer, pipe flow, turbulent flow, unsteady flow, Creff (R.), Andre (P.), (et al.), *8615*
- condensation, particles, stochastics, two phase flow, Butov (V.G.), Vasenin (I.M.), (et al.), *8898*
- self excitation, tanks, valves, Meier (G.E.A.), Szumowski (A.P.), *9503*
- pipelines, slurries, Round (G.F.), *10822*
- jets, pressure measurement, spherical bodies, unsteady flow, Kovasznay (L.S.G.), Tani (I.), (et al.), *11381*
- biomechanics, ducts (curved), flow reversal, pressure gradient, vortex flow, Chandran (K.B.), Yearwood (T.L.), *11485*
- channel flow, heat transfer, porous surfaces, viscoelastic fluids, Roy (J.S.), Nayak (P.), (et al.), *11509*
- axial waves, compressional waves, flexible walls, Bauer (H.F.), Metten (S.), (et al.), *11607*
- mass transfer, particle fluid flow, Akselrud (G.A.), Fiklistov (N.I.), (et al.), *12019*

pulsejets, free jets, jets, Lai (J.C.S.), Simmons (J.M.), *628*
- filters, pressure drop, Leith (D.), Ellenbecker (M.J.), *6995*
- nozzles, relaxation, supersonic flow, Belavin (V.A.), Golub (V.V.), (et al.), *11515*

pumps, groundwater, optimal control, Gisser (M.), Sanchez (D.A.), *172*
- dynamic analysis, fluidics, pneumatic components, Baz (A.), Khafagy (S.), (et al.), *219*
- amplification, jet pumps, Tippetts (J.R.), *221*
- compressors, gas turbines, performance, pipelines, Kuznetsov (A.L.), Evdokimov (V.E.), (et al.), *700*
- gyrodynamics, measurements (dynamic), turbomachinery, Godde (E.), *709*
- bearings (journal), lubricants (liquid), machine design, rotors, Ruddy (A.B.), *1028*
- diffusion pumps, vacuum, Harris (N.S.), *1531*
- hydraulic machinery, piston driven flow, Beswarick (W.J.), *1637*
- cooling, nuclear power, ocean, Huang (B.J.), *1912*
- control, displacement control, piston driven flow, Yamaguchi (A.), Ishikawa (T.), *2188*
- beams (flexural), dynamic response, vibration (forced), Stecco (S.S.), Janigro (A.), *2358*
- fluid power, hydraulics, piston driven flow, El Heeny (Y.A.H.), *2757*
- hydrodynamics, modeling, propellants, rockets, Kalnin (V.M.), Sherstiannikov (V.A.), *2872*
- cylindrical bodies, duct flow, magneto fluid dynamics, theory, Kapusta (A.B.), Shamota (V.P.), *2894*
- channel flow, unsteady flow, variational methods, Atanov (G.A.), Voronin (S.T.), *3665*
- compressors, stability, systems engineering, Greitzer (E.M.), *4674*
- geometrical properties, injectors, Parker (G.J.), *4678*
- ejectors, mixing, supersonic flow, Ziv (A.), Wolfshtein (M.), *4679*
- data analysis, injection systems, piston driven flow, Turcoiu (T.), Apostolescu (N.), *5503*
- blood, circulatory systems, hemolysis, prosthetic devices, Fumero (R.), *6022*
- automatic control, electrical instruments, hydraulics, servomechanisms, valves, Green (W.L.), Sanger (D.J.), (et al.), *6734*
- cylindrical bodies, liquid metals, magneto fluid dynamics, nonlinear systems, Fireteanu (V.), *6865*
- cavitation, flow reversal, mathematical models, unsteady flow, Ershov (N.S.), Kuchkin (V.N.), *7791*
- compressors, surge, turbomachinery, Horvath (A.J.T.), *8654*
- energy conversion, estuaries, reservoirs, tides, Robinson (I.S.), Perry (J.M.), *9521*
- irrigation, power generation, wind turbines, Clark (R.N.), Nelson (V.), (et al.), *9657*
- alfven number, generators, magneto fluid dynamics, pinch effect, Rutkowski (J.), *9799*
- cavitation inception, noise, scale effects, Mcnulty (P.J.), Pearsall (I.S.), *10530*
- channel flow, helical flow, magneto fluid dynamics, two dimensional flow, Kapusta (A.B.), Zibold (A.F.), (et al.), *10756*
- channel flow, magneto fluid dynamics, mathematical models, stability theory, Poklonskii (E.V.), Elkin (A.I.), *11807*
- channel flow, drag coefficient, helical flow, magneto fluid dynamics, Kapusta (A.B.), Likhacheva (A.I.), (et al.), *11808*
- ducts, fluid conveyance, sound generation, Kojima (E.), Nagakura (H.), *11957*

punch problems, anisotropic media, axisymmetric loading, boundary value problems, half space, Dhawan (G.K.), *247*
- impact, missiles, walls, Sliter (G.E.), *510*
- boundary elements, half space, semi infinite media, Telles (J.C.F.), Brebbia (C.A.), *1185*
- cracks, elasticity (linear), half space, Stallybrass (M.P.), *3232*
- half space, indentation, Shibuya (T.), *3244*
- boundary value problems, half space, shear loading, Hara (T.), Shibuya (T.), (et al.), *3245*
- large displacement, plastic behavior, rings, Ghosh (S.K.), Johnson (W.), (et al.), *3296*
- columns, flexure, reinforced concrete, slabs, strength, Gesund (H.), Goli (H.B.), *3532*
- reinforced concrete, shear strength, slabs, Petcu (V.), Stanculescu (G.), (et al.), *4534*
- elasticity (nonlinear), indentation, Choi (I.), Shield (R.T.), *5081*
- cavities, dynamic stresses, elastic foundations, inclusions, Kozhabekov (Zh.T.), *7409*
- compaction, dies, friction, powder metallurgy, powders, Lammens (R.F.), Liem (T.B.), (et al.), *7465*
- concrete, plates, reinforced bodies, shear, Godycki-Cwirko (T.), Kosinska (A.), *8379*
- contact problems, half space, thermoelasticity, Comninou (M.), Barber (J.R.), (et al.), *8870*
- piercing, tubes, Johnson (W.), Reid (S.R.), (et al.), *9429*
- columns, connections, plates, reinforced concrete, Neth (V.W.), De Paiva (H.A.R.), (et al.), *9446*
- anisotropic media, half space, Dhawan (G.K.), *10142*
- impact, layered media, shear, viscoelasticity (dynamic), winkler foundation, Aleksandrov (V.M.), Zelentsov (V.B.), *11159*

Pupin (A.A.), see Korolkov (B.P.), *3115*

Puranik (S.S.), see Bhargava (R.D.), *4341*

Purcell (E.M.), absorption, particle fluid flow, *809*

Purcell (W.E.), noise abatement, vibration isolation, *1821*

Puris (B.I.), additives, drag, polymers, spherical bodies, structure, velocity profiles, Polesskii (E.P.), (et al.), *5428*

pursuit, linear systems, maximum principle, rendezvous, time delay systems, Bien (Z.), Chyung (D.H.), *1141*
- airplanes, algorithms, differential games, evasion, Rajan (N.), Prasad (U.R.), (et al.), *1157*
- design, differential games, evasion, Ostapenko (V.V.), *2127*
- differential games, optimization, sensitivity, Abramyants (T.G.), Maslov (E.P.), (et al.), *2128*
- differential games, evasion, synthesis, Tomskii (G.V.), *2131*
- algorithms, differential games, Chikrii (A.A.), *4273*
- optimization, Gusiatnikov (P.B.), *4285*
- algorithms, differential games, Zak (V.L.), *4318*
- airplanes, evasion, missiles, suboptimal control, Steinberg (A.M.), Forte (I.), *6146*
- evasion, optimal control, variational methods, Large (E.), *7926*
- airplanes, design, feedback, feedforward control, interception, optimal control, Lunderstadt (R.), *8169*
- differential games, evasion, Getz (W.M.), Pachter (M.), *8170*
- algorithms, cybernetics, optimal control, optimization, search, trajectories, Vereshchagin (A.F.), Medvedev (V.S.), (et al.), *9184*
- algorithms, guidance, linear systems, pole placement, time varying systems, Solenski (N.), *10092*
- optimal control, stochastic processes, Yavin (Y.), Jordaan (A.M.), *11075*
- differential games, evasion, lyapunov's functions, Getz (W.M.), Pachter (M.), *11086*
- differential games, evasion, stochastic systems, Pachter (M.), Yavin (Y.), *11087*

Purtell (L.P.), laminar flow, molecular diffusion, oscillatory flow, pipe flow, *11494*

Pushistov (P.Yu.), atmospheric circulation, boundary layer (atmospheric), Shlychkov (V.A.), *984*
- cloud physics, clouds, convection (free), meteorology (physical), Malbakhov (V.M.), (et al.), *8029*

Pushkar (E.A.), magneto plasma dynamics, numerical methods, polar fluids, shock waves, similarity methods, *2890*

Pustylnikova (E.I.), see Butkovskii (A.G.), *4261*

Putilin (S.I.), aerodynamic interference, aerodynamic performance, missiles, moving surfaces, surface waves, wings, *9655*

Putman (W.F.), see Curtiss (H.C.) Jr., *8650*

Putnick (L.J.), see Matkowsky (B.J.), *3859*
- nonlinear analysis, plates (rectangular), vibration (forced), Matkowsky (B.J.), (et al.), *6293*

Puttick (K.E.), correlation, fracture, stochastics, transition, *7525*

Putyatin (B.V.), chemical kinetics, detonation (two phase), explosions, *9829*

Putyatin (V.V.), spectral density, state space techniques, stochastic systems, *6134*

Pyatakov (P.A.), edge effects, elastic waves, love waves, *11171*

Pyatkin (V.P.), control, robotics, trajectories, Sirotenko (V.Ya.), *202*

Pyatunin (G.A.), see Timoshenko (N.N.), *10322*

Pye (C.J.), composite materials, cracks, damage, damping capacity, nondestructive tests, Adams (R.D.), *9254*
- material testing, nondestructive tests, stress intensity factor, vibrators, Adams (R.D.), *10310*

Pyle (J.C.), beams (composite), concrete, slabs, steel, *3315*
Pyle (R.), analysis, ducts, friction factor, roughness, Novak (P.), *1563*
Pyrchenko (V.A.), see Rats (M.V.), *409*
pyrolysis, flames (diffusion), numerical analysis, solid fuels, Feng (C.C.), Tien (J.S.), *835*
- particles, shock tubes, Fussey (D.E.), Gosling (A.J.), (et al.), *839*
- combustors, gas turbines, mathematical models, soot formation, Kesten (A.S.), Sangiovanni (J.J.), (et al.), *3871*
- models, particles, reaction rates, Villermaux (J.), Antoine (B.), *3872*
- heat transfer, models, particles, reaction rates, Villermaux (J.), Verzaro (F.), (et al.), *3873*
- combustion, fire spread, flame propagation, sublimation, Frenandez-Pello (A.C.), Mao (C.-P.), *6846*
- coal, combustion, dust, flame propagation, Krazinski (J.L.), Buckius (R.O.), (et al.), *7880*
- coal, combustion, dust, models, Kansa (E.J.), Perlee (H.E.), *8800*
- fire, models, slabs, wood, Holve (D.J.), Kanury (A.M.), *10717*

Pytko (S.), elastic bodies, lubrication (elastohydrodynamic), magneto fluid dynamics, rolling contact, Wierzcholski (K.), *4900*

Q

Qadar (A.), bed load, piers, river beds, scour, vortices, *7649*

Qasrawi (A.M.S.), aerodynamic performance, ballistics (exterior), control stability, drag, missiles, East (R.A.), *6892*

Qin (Yu.W.), faraday rotator, holography, photoelasticity (dynamic), *3484*

Qu (S.-N.), finite element techniques, interpolation, plates, splines, *7204*

Quader (A.K.M.A.), non newtonian flow, pipe flow, turbulent flow, *2805*

quadratic programming, algorithms, constraints, optimization, probability, Lepp (R.), *49*

- approximations, cost control, heat equation, optimal control, Fletcher (R.), Harley (P.J.), *9100*
- algorithms, mathematical programming, numerical methods, optimization, Coope (I.D.), Fletcher (R.), *11081*

Quartapelle (L.), boundary conditions, navier stokes equation, numerical methods, stability (numerical), stokes flow, vorticity, Valz-Gris (F.), *9527*

Quarteroni (A.), free boundary, infiltration, nonlinear mechanics, porous media, variational methods, Visintin (A.), *5835*

quasilinearization, banach space, cauchy problem, differential equations (partial), evolution equations, Altman (M.), *33*

- algorithms, optimal control, singular control, Yeo (B.P.), *189*
- estimation, kalman filters, nonlinear systems, stochastic processes, Wagdi (M.N.), *2098*
- atmosphere, invariant imbedding, optical thickness, radiant interchange, solar radiation, Ueno (S.), *6075*
- nonlinear theory, plates (circular), Kayuk (Ya.F.), Khizhnyak (V.K.), *7345*
- aquifers, computing techniques, identification, perturbation theory, Galligani (I.), *8127*

Queau (J.P.), design (optimum), fillets, penalty function, stress intensity factor, Trompette (P.), *1425*

quenching, combustion products, flames, mathematical models, methanol, spark ignition engines, Browning (L.H.), Pefley (R.K.), *840*

- chemical kinetics, combustion, numerical methods, Dendy (J.E.) Jr., Wendroff (B.), *3875*
- propagation, wiener-hopf technique, Caflisch (R.E.), Keller (J.B.), *6973*
- limit cycles, nonlinear analysis, oscillators, vibration (nonlinear), Singh (Y.P.), *7369*
- aluminum alloys, crack growth, fatigue, Petrak (G.J.), Ruschau (J.J.), *10272*
- combustion products, flames, methane, mixtures, Fukuda (M.), Korematsu (K.), (et al.), *11794*

Quentin (G.J.), acoustic measurements, cylindrical bodies, scattering, spherical bodies, De Billy (M.), (et al.), *11974*

Quentrec (B.), constitutive equations, couette flow, micromechanisms, viscoelastic fluids, *5382*

Quest (J.), see Kruse (H.), *4629*

queue theory, algorithms, estimation, Ivanovskii (V.B.), *143*

- distribution function, mathematical models, matrix methods, Basharin (G.P.), Gromov (A.I.), *151*
- algorithms, markov processes, Kukhta (T.K.), *152*
- algorithms, linear systems, Kochetkov (E.S.), *153*
- optimization, Abramov (A.Kh.), Dagkesamanskii (N.D.), *2100*
- computer programming, networks, Vishnevskii (V.M.), Tverdokhlebov (A.S.), *2106*
- algorithms, mathematical programming, multiprocessor systems, Kawaguchi (T.), Nakano (H.), (et al.), *2152*
- algorithms, optimization, Garger (V.I.), Ioffe (L.Sh.), *2153*
- automatic control, Brodetskaya (T.S.), *3173*
- algorithms, erlang distribution, mathematical models, two phase systems, Vilenkin (S.Ya.), Fedotov (A.G.), *3197*
- computer aided manufacturing, mathematical models, process control, stochastic systems, Hitomi (K.), Nakajima (M.), (et al.), *3214*
- algorithms, laplace transform, Ivnitskiy (V.A.), *4262*
- algorithms, analytical methods, erlang queuing, Rzhikov (Yu.I.), *4263*
- multirate service system, optimal control, optimization, Dudin (A.N.), *6144*
- design, optimization, Gadjiev (A.G.), *9176*
- adaptive systems, design, feedback, networks, pierce loop, Yu (W.), Majithia (J.C.), *11093*

quicksand, stability, strength, Hanzawa (H.), *6378*

Quintard (M.), see Routaboul (F.), *7973*

Quintiere (J.G.), fire control, fire spread, mathematical models, methane, Rinkinen (W.J.), (et al.), *9778*

Quynn (R.G.), crimping, material testing, shrinkage, textiles, thermal effects, Poisson (W.H.), *7310*

R

Raab (B.), isotopes, nuclear power, space vehicles, steam power plants, *6854*

Rabas (T.J.), extended surfaces, fins, heat exchangers, pressure drop, tube bundles, Eckels (P.W.), (et al.), *4719*

- condensation, critical flow, heat exchangers (crossflow), tube bundles, *10578*

Rabe (D.C.), see Huffman (G.D.), *5510*

Rabinovich (G.D.), columns, thermal diffusion, transfer functions, *2856*

- see Zamskii (B.N.), *4134*
- see Suvorov (A.V.), *8746*

Rabinovich (M.D.), energy storage, heating, mathematical models, solar energy, Fert (A.R.), *6820*

Rabinovich (M.I.), see Klimenko (Yu.G.), *7016*

Rabinowicz (E.), friction (sliding), lubrication (boundary), metals, wear, *1008*

- see Carignan (F.J.), *1926*
- abrasion, erosion, particles, wear, *5977*

Rabl (A.), see Gaul (H.), *8767*

Rabotnov (Yu.N.), composite structures, laminates, strength, *290*

- see Mileiko (S.T.), *8224*

Rackwitz (R.), see Hohenbichler (M.), *8456*

Radach (G.), eddy viscosity, ekman layer, oceanography, rossby waves, *4881*

Radashevich (Yu.B.), algorithms, integer programming, linear programming, linear theory, Sidorov (I.M.), *4282*

Radchenko (E.V.), see Aminov (R.Z.), *3837*

Radeeva (E.N.), see Trofimov (V.V.), *7293*

Rademacher (F.J.C.), conveyors, granular media, rotating disks, screws, *8916*

Radford (A.D.), see Rosenman (M.A.), *7178*

Radford (R.C.), see Lebacqz (J.V.), *2161*

Radhakrishnamacharya (G.), biomechanics, kidneys, modeling, viscous flow, Chandra (P.), (et al.), *4119*

- dust, pipes, two phase flow, Maiti (M.K.), *8895*

Radhakrishnan (S.), aneurysms, biomechanics, heart, shells (spherical), stress analysis, Ghista (D.N.), (et al.), *9064*

Radhakrishnan (V.), see Krishnaiah Chetty (O.V.), *4472*

Radhakrishnan (V.M.), crack growth, hysteresis, low cycle fatigue, *449*

- see Mutoh (Y.), *5288*
- aluminum alloys, crack growth, creep, temperature, Mcevily (A.J.), *8384*

radial loading, dynamic plasticity, tubes, Nakazawa (Y.), Yaji (S.), (et al.), *1302*

- crack growth, holes, stress intensity factor, Brussat (T.R.), *1364*
- convergence, iterative methods, loads, Gorodetskii (A.V.), *3273*
- impulsive loading, shells (spherical), viscoelasticity (dynamic), Guelin (P.), Nowacki (W.K.), (et al.), *8345*
- annular flow, centrifugal pumps, design, Borovskii (B.I.), *11751*

radial turbines, gas turbines, high temperature, stresses, Arnold (D.J.), Balje (O.E.), *5658*

- aerodynamic performance, centripetal flow, rotors, Gracheva (S.M.), Tikhonov (A.N.), (et al.), *11745*

radial waves, gravity waves (internal), nonhomogeneous media, singularities, wavemaking resistance, Gorodtsov (V.A.), *11380*

- gravity waves (finite depth), gravity waves (solitary), korteweg de vries equation, solitary waves, Djordjevic (V.D.), *11568*
- gravity waves (finite depth), korteweg de vries equation, rotational flow, similarity methods, Djordjevic (V.D.), Pavlovic (M.), *11569*

radiant interchange, shape factors, Gross (U.), Spindler (K.), (et al.), *775*

- boltzmann equation, conductivity, neutrons, nuclear radiation, transport, Mennig (J.), Ozisik (M.N.), (et al.), *776*
- emissivity, scattering, two phase flow, Adzerikho (K.S.), Antsulevich (V.I.), (et al.), *777*
- radiation properties, solar collectors, Klein (S.A.), Theilacker (J.C.), *779*
- mathematical models, radiation properties, transient loading, Surkov (G.A.), *780*
- solar collectors, thermal properties, Manrique (J.A.), Suarez (R.), *781*
- decomposition, heat transfer, mass transfer, Senchenkov (A.S.), *797*
- anisotropic media, convection, cylindrical bodies, solar radiation, Edwards (D.K.), *1695*
- absorption, reflection, scattering, Yuen (W.W.), Wong (L.W.), *1706*
- plates (parallel), radiation, thermal waves, Baltsevich (Ya.A.), Rubtsov (N.A.), *1707*
- lasers (gasdynamic), spectroscopy, Dorogov (V.G.), Demenik (I.V.), (et al.), *1708*
- air conditioning, cooling, solar collectors, Jones (C.B.), Smetana (F.O.), *1722*
- capillary flow, convection, crystals, melting, Schwabe (D.), Scharmann (A.), *2907*
- atmosphere, radiation properties, scattering, spectral analysis, transmission, Arst (Kh.Yu.), Kostyanoy (G.N.), *2823*
- absorption, anisotropic media, scattering, Modest (M.F.), Azad (F.H.), *2824*
- design criteria, heat exchangers, heat exchangers (multipass), two phase flow, Kakac (S.) eds., Bergles (A.E.), (et al.), *2825, book*
- radiation, thermodynamics, Kelly (R.E.), *3766*
- boundary value problems, conduction (heat), nonlinear systems, Tao (L.N.), *3815*
- monte carlo analysis, radiation, Edwards (D.K.), *3825, book*
- heat transfer (combined modes), radiation, thermal sciences, Sparrow (E.M.), Cess (R.D.), *3826, book*
- absorption, coatings, radiation properties, reflection, scattering, Shafey (H.M.), Kunitomo (T.), *3827*
- atmosphere, mathematical models, scattered light, Ganapol (B.D.), *3828*
- solar collectors, solar energy, solar radiation, Alben (R.), Hardcastle (K.), *3829*
- optical instruments, solar cells, solar concentrators, Patera (R.P.), *3832*
- conductivity, convection (free), energy conversion, solar collectors, Aranovitch (E.), *3842*
- heat transfer (combined modes), radiometer, thermal measurements, Shcherbina (D.M.), *4713*
- energy conversion, solar collectors, solar energy, Hildebrandt (A.F.), Dasgupta (S.), *4725*
- buoyant flow, convection (benard), convection (free), thermal instability, Getling (A.V.), *5555*
- air conditioning, cooling, scale models, variational methods, Miyagawa (Y.), *5564*
- conductivity, heat transfer (combined modes), Filimonov (S.S.), Khrustalev (B.A.), (et al.), *5569*
- drops, scattering, Kolesnikov (P.M.), Cess (R.D.), *5582*
- convection, gases, heat transfer, radiation, spectroscopy, Mattick (A.T.), *5585*
- aerosols, meteorology, planetary atmospheres, Konyukh (L.A.), Yurevich (F.B.), (et al.), *5586*
- probability theory, real gas effects, vibration (thermally excited), Kruglov (V.I.), Katkovskii (L.V.), (et al.), *5588*
- mathematical models, optical thickness, temperature, Blokh (A.G.), Adzerikho (K.S.), (et al.), *5590*
- heat exchangers, high temperature, Mori (Y.), Yamada (Y.), (et al.), *5594*
- absorption, energy storage, solar collectors, solar ponds, thermal instability, Tabor (H.), *5602*
- flames, furnaces, heat transfer, models, Mastryukov (B.S.), *5639*
- atmosphere, invariant imbedding, optical thickness, quasilinearization, solar radiation, Ueno (S.), *6075*
- coatings, mie scattering, radiation properties, scattered light, spherical bodies, thin films, Shafey (H.M.), Kunitomo (T.), *6804*
- coatings, mie scattering, radiation properties, scattered light, spherical bodies, thin films, Kunitomo (T.), Shafey (H.M.), (et al.), *6805*
- obscuration, shape factors, visualization, Finkelstein (L.), Weissman (Y.), *6806*
- absorption, coatings, heat shields, solar radiation, space vehicles, spectral analysis, thermal loading, Bosma (J.), Levadou (F.), *6807*
- surfaces, thermal measurements, thin films, Guernigou (J.), Indrigo (C.), (et al.), *6809*
- absorption, cylindrical bodies, particles, radiation properties, Felske (J.D.), Lee (K.M.), *7860*
- absorption, cylindrical bodies, emissivity, radiation properties, Young (S.J.), *7861*
- integral methods, plane flow, radiation properties, Borishanskii (V.M.), Gotovskii (M.A.), (et al.), *7866*
- absorption, drops, evaporation, Harpole (G.M.), *8741*
- absorption, scattering, Ozisik (M.N.), Sutton (W.H.), *8742*
- convection (free), heat addition, heat transfer (combined modes), internal sources, turbulent flow, Cheung (F.B.), Chan (S.H.), (et al.), *8743*
- buoyant flow, conductivity, convection (free), diffusion, heat addition, heat transfer (combined modes), Epstein (M.), Cheung (F.B.), (et al.), *8751*
- convection, rotating fluids, thermal instability, Onyegegbu (S.O.), *8752*
- convection, heat transfer (combined modes), Janata (J.), *8753*
- energy storage, optical techniques, solar collectors, Gaul (H.), Rabl (A.), *8767*
- focusing, optical techniques, solar collectors, Bendt (P.), Gaul (H.), (et al.), *8768*
- emissivity, scattering, schuster number, surface effect, Gorban (I.A.), *9719*
- green function, reflection, scattering, Rogovtsov (N.N.), *9720*
- emissivity, reflection, scattering, Adzerikho (K.S.), Blokh (A.G.), (et al.), *9721*
- approximation methods, conductivity, experimental methods, mathematical models, Saito (A.), *9722*
- mathematical models, monte carlo analysis, scattering, Antyufeev (V.S.), *9723*
- disks, heat addition, solar energy, Zyablova (Zh.I.), Komissarchik (M.G.), (et al.), *9726*
- absorption, convection, convection (free), heat addition, thermal plumes, Yucel (A.), Bayazitoglu (Y.), *9727*
- blunt bodies, convection, heat transfer (combined modes), hypersonic flow, reflection, Rolin (M.N.), Soloukhin (R.I.), (et al.), *9728*
- adsorption, buoyant flow, convection (free), heat transfer (combined modes), solar radiation, Fathalah (K.A.), Elsayed (M.M.), *9729*
- augmentation, energy conservation, regenerators, waste heat, Chawla (O.P.), Khandwawala (A.I.), *9733*
- fins, heat addition, heat pipes, radiators, space vehicles, Furukawa (M.), *9735*
- fourier problem, mathematical models, Alexiades (V.), Chan (C.Y.), *10593*
- absorption, conduction (heat), heat transfer (combined modes), radiation properties, reflection, Stepanov (S.V.), Bityukov (V.K.), *10602*
- absorption, gases, radiation, transmission, Yuen (W.W.), *10604*
- conduction (heat), lasers, phase changes, radiation properties, Zscherpe (G.), *10607*
- ablation, boundary layer, heat transfer, injection, mass transfer, radiating flow, stagnation point, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10608*
- absorption, radiating flow, variable thermal properties, Reznichenko (V.V.), Smirnov (V.N.), *10609*

- channel flow, convection, heat transfer (combined modes), plates (parallel), solar collectors, Liu (C.H.), Sparrow (E.M.), *10610*
- channel flow, convection, heat transfer (combined modes), scattering, turbulent flow, Popov (Yu.A.), Polovnikov (V.I.), *10611*
- heat transfer (combined modes), magneto fluid dynamics, mie scattering, radiating flow, scattering, three dimensional flow, Ahluwalia (R.K.), Im (K.H.), *10612*
- combustion products, gas surface interaction, heat transfer, Popov (Yu.A.), Melman (M.M.), (et al.), *10707*
- fluidized beds, heat transfer, radiation, Borodulya (V.A.), Kovenskii (V.I.), *10840*
- absorption, integral methods, reflection, scattering, slabs, Stramigioli (C.), Santarelli (F.), (et al.), *11766*

radiating flow, arch dams, damping, hydraulic jump, jets, Petrillo (A.), Ranieri (M.), (et al.), *561*

- molecular theory, spectral analysis, Khodyko (Yu.V.), Vitkin (E.I.), (et al.), *5587*
- boundary layer, scattering, stagnation point, Kim (K.H.), Ozisik (M.N.), *8744*
- ablation, boundary layer, heat transfer, injection, mass transfer, radiant interchange, stagnation point, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10608*
- absorption, radiant interchange, variable thermal properties, Reznichenko (V.V.), Smirnov (V.N.), *10609*
- heat transfer (combined modes), magneto fluid dynamics, mie scattering, radiant interchange, scattering, three dimensional flow, Ahluwalia (R.K.), Im (K.H.), *10612*
- compressible flow, numerical methods, unsteady flow, Volchinskaya (M.I.), Chetverushkin (B.N.), *11413*
- discontinuities, magneto plasma dynamics, propagation, shock waves, Shankar (R.), Jain (S.K.), *11826*

radiation, channel flow, convection, emissivity, heat transfer (combined modes), Sparrow (E.M.), Shah (S.), (et al.), *782*

- convection, heat transfer (combined modes), monte carlo analysis, plates (parallel), Kobiyama (M.), Taniguchi (H.), (et al.), *783*
- film boiling, heat transfer (combined modes), mass transfer, Arai (N.), Takahashi (S.), (et al.), *799*
- analytical methods, biot method, melting, Prasad (A.), *812*
- bubble dynamics, sound generation, two phase flow, Kozyaev (E.F.), Naugolnykh (K.A.), *906*
- dispersed flow, liquid vapor mixture, two phase flow, void fraction, Ohba (K.), *939*
- failure, propagation, seismic waves, Barker (T.G.), Minster (J.B.), *961*
- radiometers, Ichiki (A.), *991*
- molecular theory, spectroscopy, Bernstein (L.S.), *1653*
- shape factors, spherical bodies, Chung (B.T.F.), Naraghi (M.H.N.), *1704*
- conduction (heat), conductivity, thermal measurements, thermal properties, Salokhin (V.F.), Spirin (G.G.), *1705*
- plates (parallel), radiant interchange, thermal waves, Baltsevich (Ya.A.), Rubtsov (N.A.), *1707*
- computing techniques, eigenvalues, electromagnetic waves, wiener-hopf technique, Siewert (C.E.), *2031*
- burning velocity, excitation, flame propagation, Clements (R.M.), Smith (R.D.), (et al.), *2860*
- radiant interchange, thermodynamics, Kelly (R.E.), *3766*
- monte carlo analysis, radiant interchange, Edwards (D.K.), *3825, book*
- heat transfer (combined modes), radiant interchange, thermal sciences, Sparrow (E.M.), Cess (R.D.), *3826, book*
- combustors, flames, soot formation, Claus (R.W.), *3869*
- convection, gases, heat transfer, radiant interchange, spectroscopy, Mattick (A.T.), *5585*
- energy conversion, lasers, propulsion, solar energy, space, Billman (K.W.) ed., *5664, book*
- acoustic waves, gaussian beams, interference, nonlinear waves, Fenlon (F.H.), *5736*
- acoustic measurements, acoustic waves, arrays, reflection, Nefedov (N.N.), *5786*
- eddy diffusivity, heat transfer (atmospheric), turbulence (geophysical), Gay (C.), Thomas (G.E.), *5947*
- boundary layer (atmospheric), heat transfer (atmospheric), Schonwald (B.), *5948*
- flames, models, soot, Gouesbet (G.), *6842*
- atmosphere, numerical methods, planetary atmospheres, Karp (A.H.), *7065*
- fredholm equations, integro differential equations, nonlinear analysis, Ueno (S.), *8120*
- approximations, expansion, magneto plasma dynamics, waves, Shyam (R.), Sharma (J.), (et al.), *8823*
- faults, seismic waves, Shamina (O.G.), Pavlov (A.A.), (et al.), *9909*
- compressional waves, earthquakes, focal point, Blagoveshchenskaya (Ye.E.), *9911*
- heat transfer, ocean air interaction, oceanography, Simpson (J.J.), Dickey (T.D.), *9924*
- heat transfer, ocean air interaction, oceanography, stratification, Holloway (P.E.), *9925*
- absorption, gases, radiant interchange, transmission, Yuen (W.W.), *10604*
- boilers, coal, combustion products, flyash, particles, Wall (T.F.), Lowe (A.), (et al.), *10708*
- fluidized beds, heat transfer, radiant interchange, Borodulya (V.A.), Kovenskii (V.I.), *10840*
- air, approximation methods, wakes, Pilyugin (N.N.), Tikhomirov (S.G.), (et al.), *11516*
- boilers, convection, experimental results, heat transfer, magneto fluid dynamics, Im (K.H.), Ahluwalia (R.K.), *11805*
- fluid-structure interaction, plates (stiffened), sound generation, Mace (B.R.), *11942*
- finite element techniques, machinery, noise, Thompson (B.S.), *11943*
- resonance, sound, tubes, Zuckerwar (A.J.), Meredith (R.W.), *11975*
- boundary value problems, porous media, sound, Oie (S.), Takeuchi (R.), *11981*
- boundary value problems, porous media, sound, Oie (S.), Takeuchi (R.), *11982*
- boundary value problems, porous media, sound, Oie (S.), Takeuchi (R.), *11983*
- acoustics, force, Anson (L.W.), Chivers (R.C.), *11985*

radiation pressure, focusing, ionized gases, laser plasma interaction, models, Del Pizzo (V.), Luther-Davies (B.), *3901*

- lasers (gasdynamic), shock waves (normal), Chlodzinski (J.), Denus (S.), (et al.), *6338*

radiation properties, radiant interchange, solar collectors, Klein (S.A.), Theilacker (J.C.), *779*

- mathematical models, radiant interchange, transient loading, Surkov (G.A.), *780*
- atmosphere, radiant interchange, scattering, spectral analysis, transmission, Arst (Kh.Yu.), Kostyanoy (G.N.), *2823*
- climatology, convection (forced), energy storage, heat loss, Leduc (R.), Won (T.K.), *2836*
- continuum mechanics, magneto fluid dynamics, multicomponent flow, plasma, Pai (S-I.), *2896, book*
- diagnostics, nuclear fusion, plasma, tokamak, Koopman (D.W.), Mcilrath (T.J.), (et al.), *2898*
- absorption, coatings, radiant interchange, reflection, scattering, Shafey (H.M.), Kunitomo (T.), *3827*
- hybrid construction, laser plasma interaction, reactor structures, thermal effects, Avrorin (E.N.), Zuev (A.I.), (et al.), *5685*
- coatings, mie scattering, radiant interchange, scattered light, spherical bodies, thin films, Shafey (H.M.), Kunitomo (T.), *6804*
- coatings, mie scattering, radiant interchange, scattered light, spherical bodies, thin films, Kunitomo (T.), Shafey (H.M.), (et al.), *6805*
- absorption, cylindrical bodies, particles, radiant interchange, Felske (J.D.), Lee (K.M.), *7860*
- absorption, cylindrical bodies, emissivity, radiant interchange, Young (S.J.), *7861*
- integral methods, plane flow, radiant interchange, Borishanskii (V.M.), Gotovskii (M.A.), (et al.), *7866*
- absorption, conduction (heat), heat transfer (combined modes), radiant interchange, reflection, Stepanov (S.V.), Bityukov (V.K.), *10602*
- conduction (heat), lasers, phase changes, radiant interchange, Zscherpe (G.), *10607*

radiators, fins, heat addition, heat pipes, radiant interchange, space vehicles, Furukawa (M.), *9735*

Radinovic (D.), atmospheric circulation, meteorology (physical), *4066*

radioactivity, hopkinson bar, materials properties, reactor structures, strain rate, temperature, tension, welding, Albertini (C.), Montagnani (M.), (et al.), *2488*

radiography, cracks, flaw detection, nondestructive tests, pressure vessels, welded joints, x ray techniques, Ruescher (E.H.), Graber (H.C.), *3507*

- casting, flaw detection, welded joints, x ray techniques, Closier (M.J.), *5318*
- monte carlo analysis, scattering, x ray techniques, Smith (R.L.), *7554*
- coatings, eddy currents, nondestructive tests, thickness, thin films, Goring (W.H.), *7577*

Radojevic (D.), eigenvalues, ferrous metals, liquid metals, magneto fluid dynamics, tensor methods, *11828*

Radon (J.C.), crack growth, fracture mechanics, fracture toughness, steel, De Castro (P.M.S.T.), (et al.), *7472*

- crack growth, fatigue, polymers, *8375*

Radovinskii (A.L.), hydroelasticity, shells (fluid-filled), vibration, vibration (nonaxisymmetric), *11689*

Radovskii (B.S.), see Privarnikov (A.K.), *11160*

Radu (C.), acoustic emission, fracture, rocks, tests, Rugina (I.), (et al.), *6401*

Radyakin (N.K.), drops, oscillations, rotational flow, zero g phenomena, *11596*

Radzikowski (J.), asymptotic behavior, boundary conditions, hyperbolic equations, lyapunov's functions, nonlinear analysis, Sadkowski (W.), *9104*

Rae (J.), see Robinson (P.C.), *12053*

Rae (J.M.), see Smith (T.), *1820*

Rafaelyan (R.S.), see Gnoenskii (L.S.), *2143*

Raftopoulos (D.D.), see Miles (J.H.), *3957*

- see Farahmand (B.), *5297*

rafts, piles, stability, Balaam (N.P.), Booker (J.R.), *11178*

- bodies of revolution, capsules, dynamic analysis, floating bodies, pipelines, rivers, Ginevskii (A.S.), Kolesnikov (A.V.), *11387*

Raggett (G.F.), algorithms, computer aided design, numerical methods, optimal control, *11099*

Raghavan (K.S.), dynamic analysis, elastoplasticity, plates (plastic), plates (rectangular), Rao (S.S.), *2283*

R

Ragheb (H.S.), convection (forced), leidenfrost phenomenon, transition boiling, water, Chang (S.C.), (et al.), *5544*
Ragsdell (K.M.), see Sandgren (E.), *58*
Ragulin (V.V.), see Karzhikhov (A.V.), *2598*
Rahal (C.M.), algorithms, modeling, networks, water, Sterling (M.J.H.), (et al.), *2596*
Raheel (M.), abrasion, stress strain relationships, textiles, trials, wear, *5136*
Rahman (M.), see Debnath (L.), *7767*
- see Salcudean (M.), *8731*
- cylindrical bodies, diffraction, nonlinear waves, offshore structures, shallow water, Chakravartty (I.C.), *10393*

Rai (M.M.), asymptotic behavior, elliptic equations, error, mesh generation, Anderson (D.A.), *9127*
- asymptotic methods, boundary layer, finite difference methods, grids, supersonic flow, Anderson (D.A.), *10414*

Rai (S.P.), see Abdul Khader (M.H.), *677*
Raible (C.J.), exhaust gases, internal combustion engines, thermodynamic processes, Cox (F.W.), *1762*
Raibman (N.S.), see Variaki (P.), *4265*
- see Variaky (P.), *6137*

Raichenko (L.M.), holes, infiltration, porous walls, unsteady flow, *4839*
Raikhman (A.Z.), see Perevalov (S.P.), *6489*
Railly (J.W.), see Sharma (P.B.), *1635*
- see AlDaini (A.J.), *3747*
- see Al-Daini (A.J.), *5500*

railroads, digital simulation, dynamic behavior, magnetically suspended structures, state space techniques, vibration, Sommerer (J.), *73*
- dynamic analysis, vibration, Chudzikiewicz (A.), Kisilowski (J.), (et al.), *387*
- modeling, soil mechanics, Chang (C.S.), Adegoke (C.W.), (et al.), *422*
- dynamic response, springs, vehicles, Carman (R.W.), Kieres (K.C.), *532*
- derailment, dynamic analysis, statistical design, wheels, Cherchas (D.B.), *1062*
- beams, elastic foundations, vibration (free), Richard (J.), *1274*
- operations research, Stevenson (D.G.), Georgiades (G.), *2170*
- design, flywheels, optimal control, Sweet (L.M.), Keane (M.J.), *2189*
- web design, wheels, Esaulov (V.P.), *2282*
- dynamic analysis, lagrange multiplier, many body systems, Knothe (K.), Mauer (L.), *2351*
- bridges, dynamic interaction, moving loads, Chu (K.H.), Garg (V.K.), (et al.), *3382*
- dynamic response, kinematics, steering, Bell (C.E.), Hedrick (J.K.), *4940*
- dynamic response, kinematics, wheels, De Pater (A.D.), *4941*
- bridges, gravel, interaction, Muller (G.), Jovanovic (D.), (et al.), *5259*
- bridges (railroad), experimental mechanics, vibration (forced), Okada (K.), *6311*
- design (optimum), modeling, railroad cars, vehicles, Haftka (R.T.), Prasad (B.), *6544*
- dynamic response, experimental mechanics, trains (railroad), Fries (R.H.), Cooperrider (N.K.), (et al.), *7151*

rails, dynamic testing, measurements (dynamic), wheels, Ahlbeck (D.R.), Harrison (H.D.), *16*
- buckling, contact problems, rods, Vielsack (P.), *333*
- contact stresses, wheels, Kumar (S.), Rajkumar (B.R.), *1455*
- dynamic stability, vibration (parametric), wheels, Korb (J.), *1986*
- stress analysis, thermal effects, welded joints, Edel (K.-O.), *2526*
- dynamic response, soil structure interaction, vibration (free), Moritoh (Y.), *3378*
- magnetic suspension, vehicles, vibration (random), Popp (K.), *3386*
- dynamic response, stability derivatives, wheels, Burton (T.D.), *4147*
- derailment, dynamic analysis, experimental mechanics, wheels, Sweet (L.M.), Karmel (A.), *6056*
- dynamic stability, vehicles, Bell (C.E.), Horak (D.), (et al.), *7146*
- adhesion, friction (rolling), rolling contact, wheels, Furmanik (K.), *9978*

Raimondo (S.), see Haasz (A.A.), *9002*
rainfall, hydrology, watersheds, Hjelmfelt (A.T.) Jr., *4042*
- cloud physics, precipitation, Shiino (J.), *4079*
- infiltration, runoff, sediment transport, Smith (R.E.), *4573*
- noise, noise measurements, vegetation, wind, Miller (L.N.), *5791*
- blunt bodies, film flow, reynolds number (high), reynolds number (small), Brehm (E.), *9544*

Rains (D.A.), electric power, motors, propulsion, ship performance, Vanlandingham (D.J.), (et al.), *5965*
Raithby (G.D.), see Van Doormaal (J.P.), *5566*
- see Stubley (G.D.), *7196*

Raj (K.), high speed, magnetic fluids, magneto fluid dynamics, seals, Stahl (P.), (et al.), *1944*
Raj (R.), see Pal (S.), *8597*
Rajagopal (K.R.), constitutive equations, correspondence principle, solid mechanics, viscoelasticity, Wineman (A.), *259*
- micromechanics, polar fluids, rheology, viscous flow, Gupta (A.S.), *1968*
- non newtonian flow, plates (parallel), pressure gradient, second order fluids, shear flow, Huilgol (R.R.), *3590*
- see Fosdick (R.L.), *4128*
- inertia, non newtonian flow, rotating disks, second order fluids, *9581*
- hydrodynamic stability, rheology, rotating disks, Gupta (A.S.), *9603*

Rajagopalan (K.S.), beams, bending, reinforced concrete, shear loading, torsion, *4362*
Rajagopalan (P.K.), algorithms, control, discrete systems, singular perturbations, Naidu (D.S.), *11043*
- algorithms, optimal control, singular perturbations, suboptimal control, Naidu (D.S.), *11076*

Rajagopalan (S.), duct flow, turbulence, turbulence (structure), two dimensional flow, Antonia (R.A.), *650*
Rajaiah (K.), see Durelli (A.J.), *6504*
- see Durelli (A.J.), *6506*

Rajamani (V.S.), see Sinha (M.S.P.), *11058*
Rajan (N.), airplanes, algorithms, differential games, evasion, pursuit, Prasad (U.R.), (et al.), *1157*
Rajaratnam (N.), channel flow, crossflow, erosion, river beds, scour, wall jets, *6596*
- crossflow, jets, scale effects, Gangadharaiah (T.), *8601*
- crossflow, entrainment, jets, Gangadharaiah (T.), *10452*

Rajendran (A.M.), buckling (plastic), ductile fracture, dynamic effects, imperfections, rings, Fyfe (I.M.), *9286*
Rajkumar (B.R.), see Kumar (S.), *1455*
Raju (D.P.), see Paul (H.S.), *4443*
Raju (G.K.), see Vidyanidhi (V.), *859*
Raju (I.S.), see Newman (J.C.) Jr., *7518*
Raju (P.K.), see Flax (L.), *2935*
Rajurkar (K.P.), see Pandit (S.M.), *1348*
Rakhimov (A.A.), helical flow, magneto fluid dynamics, modes, streamlines, two dimensional flow, *9788*
Rakhmatulina (I.Kh.), condensation, drops, evaporation, gases, *2840*
Rakopoulos (C.D.), generators, heat transfer, stability, two phase flow, El-Shirbini (A.A.), (et al.), *1857*
Rakovskii (V.A.), see Znachkovskii (O.Ya.), *7491*
Rallis (C.J.), burning velocity, chemical kinetics, flames (laminar), methane, Garforth (A.M.), *8791*
Rallison (J.M.), deformation, drops, interface phenomena, shear flow, *9882*
Ram (P.), see Singh (P.), *10435*
Ram (R.), see Pandey (B.D.), *11407*
Rama Mohana Rao (M.), differential equations (ordinary), linear theory, mathematical methods, nonlinear systems, *1073, book*
Ramachandra (K.), see Lingaiah (K.), *2559*
Ramachandra (S.M.), aerodynamic performance, containers, ejectable containers, falling bodies, lift, pitching, Sudhakar (K.), (et al.), *2743*
- balance system, flight, flying platforms, gliders, models, strain gages, wing body combinations, *8651*

Ramachandra Rao (B.S.), flexure, plates (rectangular), semi infinite media, Prakash (B.G.), *5155*
Ramachandra Reddy (C.V.), dynamic response, plates (sandwich), vibration (random), Ganesan (N.), (et al.), *1282*
Ramachandran (N.), heat transfer, melting, phase changes, solidification, velocity profiles, Jaluria (Y.), (et al.), *769*
Ramadge (P.J.), see Goodwin (G.C.), *7233*
Ramadhyani (S.), control-volume methods, finite element techniques, galerkin method, poisson equation, Patankar (S.V.), *5013*
Ramaiah (G.K.), buckling, compression, plates (annular), plates (orthotropic), *5184*
Ramakrishna (A.), see Viswanadham (N.), *11052*
Ramakrishnan (C.V.), see Sachdeva (T.D.), *541*
- see Bhavikatti (S.S.), *1428*
- see Bhavikatti (S.S.), *4525*
- see Sachdeva (T.D.), *6114*
- see Sachdeva (T.D.), *6115*
- see Sachdeva (T.D.), *9945*

Ramalingam (S.), abrasion, cutting, metals, microstructures, wear, Wright (P.K.), *435*
Ramamoorthy (P.), see Sheela (B.V.), *6140*
Ramamoorthy (R.P.), airplanes, algorithms, error, estimation, identification, *4223*
Ramamurti (V.), blades, dynamic stresses, rotating bodies, vibration (free), Sreenivasamurthy (S.), *372*
- see Srinivasan (V.), *6296*
- see Srinivasan (V.), *8152*
- see Sreenivasamurthy (S.), *10205*

Raman (P.V.), see Sundara Raja Iyengar (K.T.), *4420*
Ramana Prasad (V.V.), particle fluid flow, plates (parallel), pressure distribution, unsteady flow, Pattabhi Ramacharyulu (N.C.), *4620*
Ramanaiah (G.), bearings (slider), couple stresses, friction, lubrication (hydrodynamic), non newtonian flow, Sarkar (P.), *5986*
Ramaprian (B.R.), boundary layer, channel flow, reynolds number, sediment transport, transition flow, Mueller (A.), *2632*
- boundary layer (turbulent), curvature, structure, Shivaprasad (B.G.), *9661*

Ramasamy (G.), see Ranjan (G.), *7328*
Ramasamy (P.), see Ravindran (K.A.), *4112*
Ramazanov (S.K.), see Semesenko (M.P.), *2148*

Ramchandran (N.), bubbly flow, gases, membranes (permeable), Didwania (A.K.), (et al.), *1876*
Ramdas (V.), conduction (heat), heat exchangers, heat transfer, nusselt number, rotating fluids, Uhl (V.W.), (et al.), *790*
Ramenskiy (A.M.), atmospheric circulation, coriolis forces, *9933*
Ramey (G.E.), see Johnson (R.C.) Jr., *9662*
Ramey (H.J.) Jr., see Ikoku (C.U.), *7977*
• see Ikoku (C.U.), *8926*
Ramiah (B.K.), see Chickanagappa (L.S.), *10256*
Ramirez (W.F.), adsorption, convection, dispersion, porous media, surfactants, Shuler (P.J.), (et al.), *10690*
ramjet engines, combustors, mathematical models, Lilley (D.G.), *8798*
ramjets, combustors, regression rate, solid fuels, Hewett (M.E.), Netzer (D.W.), *5646*
• hypersonic flow, missiles, propulsion, rockets, Billig (F.S.), Waltrup (P.J.), (et al.), *8810*
• missiles, rockets, solid propellants, testing equipment, Readey (H.J.) Jr., Cobb (E.R.), *10729*
Ramm (A.G.), ill posed problems, iterative methods, stability theory, *10936*
Ramm (D.), groundwater, numerical methods, similarity methods, Chazan (D.), *7005*
Ramm (E.), see Brendel (B.), *5183*
• see Brendel (B.), *7360*
Rammant (J.P.), offshore structures, pipe laying, pipelines, sensitivity, wave loads, Backx (E.), *1453*
Ramos (A.), see Hsing (J.C.), *5703*
Ramos (J.I.), axisymmetric flow, compressible flow, finite difference methods, internal combustion engines, reciprocating engines, turbulent flow, Humphrey (J.A.C.), (et al.), *8591*
Ramsay (J.G.), see Pfiffner (O.A.), *10261*
Ramsay (R.T.), see Dean (D.L.), *3543*
Ramsey (F.V.), see Ellis (F.W.), *3013*
Ramsey (J.W.), convection (forced), cooling, heat transfer (atmospheric), solar collectors, wind, Charmchi (M.), *10637*
Ramsey (W.D.), argon, electric propulsion, ionic propulsion, *848*
Ramshaw (J.D.), chemically reactive flow, equilibrium, internal combustion engines, numerical methods, Cloutman (L.D.), *1756*
• brownian motion, membranes (permeable), molecular diffusion, *3643*
Ramu (S.A.), impulsive loading, plastic behavior, shells (cylindrical), Iyengar (K.J.), *2373*
Rana (V.D.), see Gupta (S.K.), *1194*
Ransweera (M.P.), cracks, finite element techniques, j-integral, Lockie (F.A.), *7514*
Rand (O.), see Singer (J.), *4424*
Randall (D.E.), aerodynamic loads, solar collectors, wind loads, Mcbride (D.D.), (et al.), *10874*
Randall (D.W.), control, internal combustion engines, knocking, pressure measurement, spark ignition, Powell (J.D.), *5653*
Randall (R.B.), diagnostics, flaw detection, gear trains, transmissions, vibration, *11338*
Randich (E.), see Cuthrell (R.E.), *3451*
Randolph (M.F.), see Carter (J.P.), *6383*
• analytical methods, design, piles, soil consolidation, Wroth (C.P.), *11179*
random error, doppler effect, electric propulsion, estimation, space vehicles, Asher (R.B.), Eller (T.J.), (et al.), *5714*
• buckling, stochastic systems, structural stability, Scheurkogel (A.J.), Elishakoff (I.), (et al.), *8260*
random excitation, linear systems, stochastic processes, stochastic systems, Kiega (V.), *111*
• cracks, mathematical methods, nonlinear analysis, stochastic systems, Wedig (W.), *360*
• beams, mathematical methods, vibration (random), Wedig (W.), *361*
• dynamic response, noise, noise (random), Kiureghian (A.D.), *517*
• dynamic response, excitation, noise (random), Gasparini (D.A.), Debchaudhury (A.), *518*
• galerkin method, oscillators, Bergman (L.A.), Heinrich (J.C.), *1267*
• nonlinear systems, vibration (nonlinear), Riganti (R.), *1268*
• asymptotic behavior, periodic orbits, perturbation methods, stability theory, Chow (P.L.), Chiou (K.L.), *1994*
• dissipation, hysteresis, linearization, structural optimization, Grossmayer (R.L.), Iwan (W.D.), *2318*
• dynamic response, vibration (random), Kropac (O.), *2321*
• measurements (dynamic), vibration (random), Walker (A.W.), *2325*
• collision models, nonlinear analysis, vibration (random), Fujita (T.), Hattori (S.), *3346*
• damage, dynamic analysis, fatigue, structural analysis, Kenny (R.A.), Chandra (S.), *3445*
• dynamic response, nonlinear mechanics, vibration (random), Kimura (K.), Sakata (M.), *4405*
• dynamic response, vibration (nonlinear), Dimentberg (M.F.), *4406*
• beams, vibration (random), Davies (H.G.), Wahab (M.A.), *4412*
• finite element techniques, first passage, galerkin method, particle dynamics, stochastic systems, Bergman (L.A.), Heinrich (J.C.), *4985*
• aerodynamic loads, structures, Spanos (P.-T.D.), Chen (T.W.), *5697*
• automobiles, dynamic analysis, highways, Lindgren (G.), *6277*
• data analysis, fourier transform, frequency domain techniques, vibration, Bendat (J.S.), *7175*
• stochastic systems, vibration (parametric), Ibrahim (R.A.), *7372*
• dynamic response, vibration (random), Robson (J.D.), *7373*
• dynamic analysis, probability theory, Spanos (P.-T.D.), Lutes (L.D.), *7374*
• acceleration, deceleration, dynamic analysis, vibration (parametric), Dimentberg (M.F.), *8284*
• hysteresis, seismic waves, structures, vibration (random), Baber (T.T.), Wen (Y.-K.), *9106*
• dynamic analysis, vibration (forced), vibration (parametric), Schmidt (G.), *9298*
• stochastic systems, vibration (random), Kropac (O.), *10032*
• averaging, dynamic analysis, vibration (nonlinear), Spanos (P.-T.D.), *10195*
• beams (cantilever), vibration (random), Gasparini (D.A.), Debchaudhury (A.), (et al.), *10201*
random loading, cyclic testing, experimental methods, low cycle fatigue, Makhutov (N.A.), Zatsarinnyi (V.V.), (et al.), *491*
• dynamic analysis, nonlinear systems, vibration, Gopalsamy (K.), *1264*
• loads, stochastic processes, Chalk (P.L.), Corotis (R.B.), *1432*
• damping, dynamic properties, Kameswara Rao (C.V.S.), *2319*
• ceramics, fracture mechanics, glass, life expectancy, Jakus (K.), Ritter (J.E.) Jr., *2458*
• probabilistic design, probability theory, Rzhanitsyn (A.R.), *2513, book*
• cyclic loading, fatigue, life expectancy, strength, Kruk (B.Z.), Kuzmenko (V.A.), (et al.), *2527*
• plates (annular), vibration (random), Chonan (S.), *3364*
• damage (cumulative), fatigue, life expectancy, material testing, Berezovszkij (A.M.), Balter (I.I.), (et al.), *3447*
• elastoplasticity, frames, geometric nonlinearities, reliability analysis, Casciati (F.), Faravelli (L.), *3527*
• damage (cumulative), fatigue, Shefer (L.A.), Ezhov (V.G.), (et al.), *3542*
• dynamic response, floating structures, offshore structures, wave loads, Etok (E.U.), Kirk (C.L.), *3556*
• crack growth, fatigue, probability, Kozin (F.), Bogdanoff (J.L.), *4481*
• dynamic properties, vibration (random), Fitzpatrick (J.A.), *5192*
• fatigue, surveys, testing equipment, Bily (M.), Kliman (V.), (et al.), *5330*
• damping capacity, dynamic analysis, offshore structures, wave loads, Vandiver (J.K.), *6536*
• drag, offshore structures, wave loads, Tung (C.C.), *6538*
• dynamic response, multiple degree of freedom, seismic loading, Der Kiureghian (A.), *7038*
• composite structures, elastic behavior, missiles, stochastic systems, viscoelasticity, Weeks (G.E.), Cost (T.L.), *7301*
• fracture, life expectancy, probability, reliability analysis, Bolotin (V.V.), *7468*
• limit analysis, probabilistic design, safety, structural design, Murzewski (J.), *7588*
• limit analysis, probabilistic design, reinforced concrete, Mascarenhas (A.T.), *7605*
• impact, moving loads, Wood (L.A.), Byrne (K.P.), *8341*
• cracking, failure, griffith cracks, stochastic systems, Smolskii (V.M.), *8411*
• bridges, loads, probabilistic design, Buckland (P.G.), Navin (F.P.D.), (et al.), *8454*
• dynamic analysis, mathematical models, Bily (M.), Cacko (J.), *9300*
• ocean waves, salter duck, wave energy, wave engines, Serman (D.D.), Mei (C.C.), *9631*
• conduction (unsteady), finite element techniques, stability theory, Tasaka (S.), *10073*
random media, elastic waves, scattering, Bose (S.K.), Debnath (L.), *2366*
• seismic waves, shear waves, Chu (L.), Askar (A.), (et al.), *3005*
• differential equations (partial), stability theory, Ahmadi (G.), *4976*
• scattering, waves, Chow (P.L.) eds., Kohler (W.E.), (et al.), *6043, book*
• collapse, framed structures, imperfections, La Tegola (A.), *6242*
• casting, deformation (plastic), forging, void closure, Stahlberg (U.), Keife (H.), (et al.), *7462*
• rayleigh waves, viscoelastic waves, Beltzer (A.I.), *8337*
• mathematical methods, particles, waves, Furutsu (K.), *8339*
• acoustic waves, fracture, Strizhkov (S.A.), *8959*
• acoustic emission, transient effects, Beltzer (A.I.), *9299*
• composite materials, elastic waves, propagation, shear waves, Kinra (V.K.), Anand (A.), *10235*
• stochastic systems, waves, Liu (K.C.), *11168*
• reflection, transmission, Verheggen (T.), *11172*
• propagation, underwater acoustics, Broek (H.W.), Lawlor (J.E.), *11902*
• propagation, underwater acoustics, Worcester (P.F.), Williams (G.O.), (et al.), *11903*
• eddies, sound propagation, Newhall (B.K.), Jacobson (M.J.), (et al.), *11904*
• sound propagation, underwater acoustics, Spiesberger (J.L.), Worcester (P.F.), *11906*
• computer aided design, packed beds, Powell (M.J.), *12057*
random search, games, integration, monte carlo analysis, Goldfain (I.I.), *5011*
• mesh generation, optimization, stochastics, Sheela (B.V.), *6099*

- burgers equation, conservation laws, hyperbolic equations, Harten (A.), Lax (P.D.), *8132*

Rane (A.), see Yao (S.-C.), *3795*
- see Yao (S.-C.), *8697*
- convection, drops, evaporation, heat transfer, Yao (S.-C.), *10651*

Rane (A.G.), convection, dispersed flow, drops, entrance region, heat transfer, tubes, two phase flow, Yao (S.-C.), *7825*

Ranga Raju (K.G.), baffles, drag, stilling basins, Kitaal (M.K.), (et al.), *558*
- bed load, bottom irregularities, sediment transport, shear stress, Garde (R.J.), (et al.), *9519*

Rangachari (S.), see Ginestra (J.C.), *5833*

Rangacharyulu (M.A.V.), constraints, structural optimization, surveys, Done (G.T.S.), *2512*

Rangaiah (V.P.), beams (timoshenko), impedance methods, shock, vibration (forced), Neubert (V.H.), *3360*
- see Neubert (V.H.), *7383*
- dynamic analysis, plates (annular), vibration (free), Sadasivan (S.), *9314*

Rangan (B.V.), beams (prestressed), prestressed concrete, shear strength, *511*

Rangarajan (N.), see Oosthuizen (P.H.), *3779*

Ranieri (M.), see Petrillo (A.), *561*

Ranjan (G.), clay, piles, scale models, Ramasamy (G.), (et al.), *1328*

Rankin (G.W.), developing flow, jets, velocity profiles, Sridhar (K.), *2659*

Rankin (R.R.), boundary layer, generators, insulation, magneto fluid dynamics, walls, Self (S.A.), (et al.), *8815*

Rankovic (S.), see Jaric (J.), *5098*

Rannenberg (M.), evaporation, heat transfer, porous surfaces, Beer (H.), *1873*

Rantapuska (S.), see Von Alfthan (C.), *11558*

Rantsevich (V.B.), cracks, fatigue, flaw detection, thermography, *6496*

Rao (A.C.), see Kothari (M.), *1468*
- design (optimum), geometric programming, mechanisms, synthesis, *2561*
- see Kothari (M.), *3083*
- see Jaini (C.K.C.), *4550*

Rao (B.V.A.), see Prabhu (B.S.), *10218*

Rao (D.M.), boundary layer (control), delta wings, drag, leading edge, subsonic flow, Johnson (T.D.) Jr., *9652*

Rao (D.P.), diffusion coefficient, liquids, mass transfer, Rao (G.H.), *10670*

Rao (D.V.), flood flow, precipitation, probability theory, *4044*

Rao (G.H.), see Rao (D.P.), *10670*

Rao (G.P.), see Saha (D.C.), *2088*
- see Saha (D.C.), *4256*
- see Saha (D.C.), *7246*

Rao (G.V.), design, digital control, multivariable systems, sampled data systems, *2093, book*

Rao (H.S.), control, engines, fuel economy, nonlinear programming, Cohen (A.I.), (et al.), *2122*
- see Frogner (B.), *2176*

Rao (J.S.), beams (timoshenko), frequency response, vibration (free), Kulkarni (S.V.), (et al.), *5199*

Rao (K.P.), see Bonde (D.H.), *253*
- see Venkatesh (A.), *4194*

Rao (M.G.), see Ivakhnenko (A.G.), *4067*

Rao (N.R.), composite materials, saint venant principle, sandwich construction, strips, Vaisarajan (K.V.), *2210*

Rao (N.S.), bearings (gas lubricated), bearings (journal), bearings (porous metal), lubricants (gas), lubrication (hydrostatic), *9954*
- see Singh (K.C.), *10887*

Rao (S.P.), heat transfer, mass transfer, mathematical models, packed beds, Gnielinski (V.), *4733*

Rao (S.S.), see Raghavan (K.S.), *2283*
- constraints, design (optimum), shells (cylindrical), shells (stiffened), Reddy (E.S.), *2511*
- computing techniques, dynamic programming, linear programming, nonlinear programming, optimization, *7177, book*
- design (optimum), dynamic analysis, optimization, vibration isolation, Hati (S.K.), *9302*
- computing techniques, finite element methods, fluid mechanics, heat transfer, matrix methods, *10061*

Rao (S.V.), see Lamba (S.S.), *183*

Raous (M.), periodic problems, plates (circular), thermal stresses, turbomachinery, viscoelastic materials, *263*

Rapaport (M.), differential equations (ordinary), differential geometry, perturbation methods, transformation, *873*

Rapoport (D.A.), inspection, laminates, layered media, nondestructive tests, thermography, *6484*

Rappoport (I.S.), algorithms, differential games, linear systems, *4319*

Raptis (A.A.), cylindrical bodies, heat transfer, incompressible flow, mass transfer, Tzivanidis (G.J.), *814*
- acceleration, convection (free), magneto fluid dynamics, plates (vertical), suction, Tzivanidis (G.J.), (et al.), *855*

rarefied flow, cylindrical bodies, kinetic theory, rarefied gases, Abdel-Gaid (M.A.), Khidr (M.A.), (et al.), *1528*
- expansion, gases, nozzles, Nanbu (K.), Watanabe (Y.), *3646*
- heat transfer, rarefied gases, Monaco (R.), Orsi (A.P.), *6635*
- compressible flow, hypersonic flow, spherical bodies, Artamonov (A.K.), Arknipov (V.N.), *11409*
- acoustic waves, compressible flow, multiphase flow, nonequilibrium flow, numerical methods, shock waves, Cook (T.L.), Demuth (R.B.), (et al.), *11426*
- compressible flow, navier stokes equation, one dimensional flow, Aristov (V.V.), Makhmudov (A.A.), (et al.), *11434*

rarefied gases, molecular beams, tube bundles, Barashkin (S.T.), Neudachin (I.G.), (et al.), *591*
- calibration, heat transfer, hot wire, Gottesdiener (L.), *711*
- cylindrical bodies, kinetic theory, rarefied flow, Abdel-Gaid (M.A.), Khidr (M.A.), (et al.), *1528*
- creeping flow, spherical bodies, stokes flow, Obayashi (T.), Tougou (H.), *3645*
- birefringence, boundary layer, conducting fluid, Oudeman (P.), Korving (J.), (et al.), *5423*
- diffusion, porous surfaces, Mingle (J.O.), *5425*
- bgk model, channels, condensation, two dimensional flow, Gajewski (P.), Wismiewski (A.), *6634*
- heat transfer, rarefied flow, Monaco (R.), Orsi (A.P.), *6635*
- boltzmann equation, hydrodynamics, initial value problems, Shapovalov (G.K.), *7694*
- immiscible fluids, plates (parallel), pulsatile flow, Kant (R.), *7696*
- compressible flow, kinetic theory, Fisher (S.S.) ed., *8554, book*
- wedges, Tiem (D.H.), *8555*
- blast effects, explosions, impulsive transfers, Aristov (V.V.), Shakhov (E.M.), *9835*
- channel flow, circuits, heat transfer, magneto plasma dynamics, Soundalgekar (V.M.), Akolkar (S.P.), *10737*
- blunt bodies, compressible flow, drag, hypersonic flow, optimization, shape factors, Bunimovich (A.I.), Dubinskii (A.V.), *11405*
- compressible flow, planetary atmospheres, plasma, shock waves, supersonic flow, Gurevich (A.V.), Paschenko (N.T.), *11406*
- channel flow, plane flow, poiseuille flow, Siewert (C.E.), *11437*
- sound propagation, transport, transport phenomena, ultrasonics, Woods (L.C.), Troughton (H.), *11438*
- aerodynamic coefficients, plates, Gorelov (S.L.), Erofeev (A.I.), *11447*
- collision models, planetary theory, transition flow, two phase flow, Pai (S.I.), *11448*
- force, rotating bodies, Ivanov (S.G.), Yanshin (A.M.), *11449*
- adhesion, capillary flow, mass transfer, Levdanskii (V.V.), Martynenko (O.G.), *11451*
- couette flow, heat transfer, kinetic theory, porous surfaces, Khidr (M.A.), Abdel-Gaid (M.A.), *11454*
- shock waves (normal), simulation, Belotserkovskiy (G.M.), Yanitskiy (V.Ye.), *11456*
- existence theorems, plasma, statistical theory, vlasov equation, Kharchenko (A.P.), *11835*

Rashleigh (S.C.), acoustic measurements, optical techniques, transducers, *3979*

Raske (T.F.), beams (flexural), dynamic behavior, moving loads, *6207*

Rasmussen (G.), acoustic measurements, transducers (pressure), *3981*

Rasmussen (H.), estuaries, galerkin method, stratified flow, two dimensional flow, *6607*
- free boundary, porous media, unsteady flow, Salhani (D.), *8920*

Rasmussen (M.L.), see Reddy (J.N.), *9090*

Rastogi (P.K.), deformation, holography, moire methods, stress analysis, Spajer (M.), (et al.), *9419*

Rastorguev (B.S.), see Popov (N.N.), *6521*

Rastorguev (G.I.), see Kurshin (L.M.), *6226*

Rasulov (M.A.), darcy flow, filtration, hydrodynamics, oil removal, underground, *4968*

Ratcliffe (P.A.), see Pugh (A.C.), *11044*

rate sensitivity, anisotropic media, necking, sheet metal, strain rate, Neale (K.W.), Chater (E.), *274*
- cylindrical bodies, plastic behavior, torsion, work hardening, Meguid (S.A.), *277*
- compressible flow, ice mechanics, material testing, strength, Sinha (N.K.), *493*
- constitutive relations, extrusion, finite element techniques, viscoplasticity, Tayal (A.K.), Natarajan (R.), *1339*
- plastic waves, plates, rods, strain rate, Stepanov (G.V.), Serbin (A.A.), *6326*

Rath (H.J.), bubble dynamics, compressible flow, hydrodynamic stability, *11530*

Rath (P.C.), dynamic analysis, gyrodynamics, satellites, Pal (J.), *4142*

Rath (R.S.), annular flow, axial flow, cylindrical bodies, heat transfer, Bastia (S.N.), *3787*
- convection (free), friction (skin), plates (parallel), unsteady flow, Jena (G.), *4617*

Rathod (V.P.), see Chaturani (P.), *8577*

Ratnikov (E.F.), see Vlasov (S.M.), *10486*

Rats (M.V.), foundations, optimization, sampling, soils, Pyrchenko (V.A.), *409*

Rattray (M.) Jr., circulation, ekman layer, ocean air interaction, oceanography, Dworski (J.G.), *4866*

Ratwani (M.M.), composite materials, fatigue, fibers, interlaminar stresses, Kan (H.P.), *10130*

Raupach (M.R.), boundary layer (atmospheric), turbulence (geophysical), turbulence (structure), Thom (A.S.), *11554*

Ravetto (P.), see Coppa (G.), *1529*

Ravey (J.C.), couette flow, experimental methods, unsteady flow, viscometry, Dognon (M.), (et al.), *8494*

Ravina (I.), see Gur (Y.), *6585*

- see Gur (Y.), *7643*

Ravindran (K.A.), friction (sliding), lubricants (solid), lubrication (solid), Ramasamy (P.), (et al.), *4112*

Ravishankar (N.), finite element methods, hydraulic cylinders, hydraulics, *1467*

Rawat (M.L.), see Patni (G.C.), *3620*

Ray (A.K.), see Nuttall (H.E.), *10829*

Ray (D.), dynamic analysis, hysteresis, nonlinear systems, sensitivity, structural response, structures, Pister (K.S.), (et al.), *106*

Ray (G.), see Ghista (D.N.), *6013*

- see Ghista (D.N.), *6014*

Raybman (N.S.), see Varlaki (P.), *3163*

Rayes (A.G.), see Wood (D.J.), *8583*

rayleigh benard instability, cavities, convection (benard), heat addition, rayleigh number, Olson (J.M.), Rosenberger (F.), *578*

- convection (benard), insulating materials (thermal), nonlinear theory, Chapman (C.J.), Proctor (M.R.E.), *2607*
- boussinesq equation, convection (benard), rayleigh number, Platten (J.K.), Legros (J.C.), *6786*
- cellular motions, monte carlo analysis, thermal excitation, transient effects, transition flow, Jhaveri (B.), Homsy (G.M.), *8709*

rayleigh method, eigenvalue problems, matrix methods, Macavei (F.), *4150*

- plates (holed), plates (rectangular), vibration (free), Ali (R.), Atwal (S.J.), *6295*
- shells (orthotropic), shells (spherical), vibration (free), De Souza (V.C.M.), Croll (J.G.A.), *8316*

rayleigh number, cavities, convection (benard), heat addition, rayleigh benard instability, Olson (J.M.), Rosenberger (F.), *578*

- convection (free), heat transfer, shells (fluid-filled), Powe (R.E.), Warrington (R.O.), (et al.), *755*
- chandrasekhar number, convection, electro fluid dynamics, magneto fluid dynamics, Riahi (N.), *760*
- convection (free), heat, shear flow, temperature profile, Yoshizaki (M.), *1515*
- convection (free), cylindrical bodies, heat transfer, laminar flow, Chand (J.), Vir (D.), *1679*
- fluid boundaries, heat addition, layered media, thermal instability, Dowden (J.), *6782*
- boussinesq equation, convection (benard), rayleigh benard instability, Platten (J.K.), Legros (J.C.), *6786*
- convection, hydrodynamic stability, rotating fluids, shells (spherical), Geiger (G.), Busse (F.), *6787*
- boussinesq equation, conduction, convection (free), heat transfer, open thermosyphons, thermosyphons, Penot (F.), Peube (J.-L.), *6790*
- convection, diffusion, modal analysis, nonlinear analysis, Riahi (N.), *7841*
- laminar flow, thermosyphons, three dimensional flow, Mallinson (G.D.), Graham (A.D.), (et al.), *8702*
- critical phenomena, diffusion, inclined layer, stratified flow, thermal instability, Paliwal (R.C.), Chen (C.F.), *8712*
- closed conduit flow, hydrodynamic stability, solar ponds, thermal instability, thermohaline stability criteria, Pnueli (D.), *8715*
- augmentation, channel flow, convection (free), extended surfaces, heat transfer, plates (parallel), Sparrow (E.M.), Prakash (C.), *9699*
- convection, heat addition, hydrodynamic stability, porous media, saturation, Straus (J.M.), Schubert (G.), *11367*
- convection (free), heat addition, porous media, thermal instability, Horne (R.N.), Caltagirone (J.-P.), *11369*

rayleigh ritz method, boundary value problems, elliptic equations, finite element techniques, galerkin method, Schreiber (R.), Eisenstat (S.C.), *2058*

- plates (rectangular), vibration (free), Kaldas (M.M.), Dickinson (S.M.), *2333*
- finite element methods (hybrid), global approach, nonlinear analysis, Noor (A.K.), Peters (J.M.), *4196*
- anisotropic media, cylindrical bodies, thermoelasticity (steady), Kalam (M.A.), *4819*
- collocation, computer programming, elliptic equations, finite element methods, galerkin method, Weiser (A.), Eisenstat (S.C.), (et al.), *6096*
- composite materials, discontinuities, eigenvalues, sturm-liouville problems, Bielak (J.), *7156*
- membrane theory, strings, vibration (free), Irie (T.), Yoda (K.), *7387*
- edge effects, elastic foundations, plates (rectangular), vibration (free), Laura (P.A.A.), Grossi (R.O.), *7392*
- boundary value problems, elasticity (linear), Tereshchenko (V.Ya.), *8192*
- anisotropic structures, plates (sandwich), shells, vibration (free), Kuznetsov (N.D.), Kartashov (G.G.), (et al.), *8305*
- buckling, plates (rectangular), vibration (free), Kaldas (M.M.), Dickinson (S.M.), *8307*
- computing techniques, soil structure interaction, vibration, Solari (G.), Stura (D.), *8963*
- laminates, mechanical stabilization, plates, shape factors, temperature, Hyer (M.W.), *9247*
- composite materials, interlaminar stresses, laminates, perturbation methods, Bar-Yoseph (P.), Pian (T.H.H.), *9249*
- elastic behavior, plates (circular), vibration, Laura (P.A.A.), Avalos (D.R.), (et al.), *9308*
- plates (rectangular), vibration (free), Laura (P.A.A.), De Irassar (P.V.), (et al.), *10204*
- blades, shells (cylindrical), vibration (free), Leissa (A.W.), Lee (J.K.), (et al.), *10210*

rayleigh taylor instability, heat transfer, hydrodynamic stability, mass transfer, surface tension, viscous effects, Ho (S.-P.), *634*

- dispersion relation, models, oscillations, stabilization, Chakraborty (B.B.), *8825*
- compressibility, modes, plasma, theory, Shivamoggi (B.K.), *9801*

rayleigh waves, acoustic waves, anisotropic media, finite amplitude, Planat (M.), *398*

- discontinuities, finite element techniques, scattering, Fuyuki (M.), Matsumoto (Y.), *401*
- crack initiation, crack propagation, photoelasticity (dynamic), Rossmanith (H.P.), Fourney (W.L.), *2465*
- scattering, surface barrier, Biryukov (S.V.), *5244*
- interfaces, reflection, refraction, seismic waves, Lutikov (A.I.), *5866*
- elastic bodies, half space, seismic waves, Yakovenko (M.G.), *5870*
- half space, sand, submerged bodies, Vardoulakis (I.), *6334*
- acoustic waves, curved surfaces, resonance, ultrasonics, Lapin (A.D.), *6335*
- scattering, surface flaws, Momoi (T.), *6350*
- analysis, half space, layered media, seismic waves, Cara (M.), Minster (J.B.), (et al.), *7020*
- seismic loading, structural response, Gamer (U.), *7042*
- acoustics, residual stresses, surface waves, Hirao (M.), Fukuoka (H.), (et al.), *8334*
- random media, viscoelastic waves, Beltzer (A.I.), *8337*
- couplings, half space, scattering, viscoelastic fluids, Angel (Y.C.), Bogy (D.B.), *9338*
- damping, heat transfer, liquid solid interface, solid solid interface, Van Der Sluijs (J.C.A.), Van Der Sluijs (M.J.), *9339*
- half space, scattering, surface flaws, wave generation, Witos (F.), *10229*

Razevig (V.D.), algorithms, digital simulation, mathematical models, multivariable systems, stochastic systems, *3179*

Razygraev (N.P.), see Ermolov (I.N.), *6490*

Razzak (G.A.), see Blitz (J.), *1419*

Rdzanek (W.), acoustics, cylindrical waves, impedance, *6896*

reaction kinetics, decomposition, vibration (thermally excited), Zaslonko (I.S.), Mukoseev (Yu.K.), *829*

- chemical kinetics, flame propagation, mathematical models, Matkowsky (B.J.), Olagunju (D.O.), *4738*
- liquid gas mixture, mathematical models, parabolic equations, Martin (R.H.) Jr., *4970*
- combustion, detonation, shock waves, tubes, Gendugov (V.M.), *5630*
- diffusion, periodic orbits, reaction-diffusion systems, travelling waves, Maginu (K.), *7168*
- stability theory, travelling waves, Bell (J.), *9634*
- diffusion, mathematical methods, quasisolutions, stability theory, Lakshmikantham (V.), Vatsala (A.S.), *10028*
- differential equations (ordinary), diffusion, magneto fluid dynamics, nonlinear analysis, Bishop (A.), Campbell (D.), (et al.), *10931*

reaction rates, models, particles, pyrolysis, Villermaux (J.), Antoine (B.), *3872*

- heat transfer, models, particles, pyrolysis, Villermaux (J.), Verzaro (F.), (et al.), *3873*
- chemical kinetics, hydrogen, ignition, Rogers (R.C.), Schexnayder (C.J.) Jr., *4735*
- electrochemical mass transfer, turbulence (transport), Storck (A.), Hutin (D.), *5621*
- combustion, extinguishment, inhibition, Nesterko (N.A.), Taran (E.N.), *5636*
- chemical kinetics, combustion, flames (turbulent), Yoshida (A.), Gunther (R.), *6837*

reactor structures, high temperature, pressurized pipes, structural analysis, Kraus (H.), *1206*

- dynamic response, seismic loading, Jaeger (T.A.) eds., Boley (B.A.), *1463, book*
- analysis, dynamic analysis, failure, Jaeger (T.A.) eds., Boley (B.A.), *1464, book*
- containment, dynamic loads, structural analysis, Jaeger (T.A.) eds., Boley (B.A.), *1465, book*
- hopkinson bar, materials properties, radioactivity, strain rate, temperature, tension, welding, Albertini (C.), Montagnani (M.), (et al.), *2488*
- edge cracks, piping systems, stability theory, Tada (H.), Paris (P.C.), (et al.), *4501*
- hybrid construction, laser plasma interaction, radiation properties, thermal effects, Avrorin (E.N.), Zuev (A.I.), (et al.), *5685*
- design criteria, laser plasma interaction, nuclear fusion, thermonuclear energy, Basov (N.G.), Krokhin (O.N.), (et al.), *5686*
- modeling, nuclear reactors, Jaeger (T.A.) eds., Boley (B.A.), *6548, book*
- boundary integral methods, condensation, dynamic response, pressure vessels, shells (spherical), steam, Krieg (R.), Goller (B.), (et al.), *6549*
- mechanics, modeling, structural analysis, Jaeger (T.A.) eds., Boley (B.A.), *7618, book*
- cracks, flaws, fracture mechanics, nozzles, pressure vessels, Atluri (S.N.), Kathiresan (K.), *9463*

- liquid metals, magneto fluid dynamics, particles, thermonuclear energy, Muravev (E.V.), *11824*

reactors, electrochemical mass transfer, fluidized beds, Barthole-Delaunay (C.), Storck (A.), (et al.), *834*
- catalyzed ignition, combustion, tubes, Harrison (B.K.), Ernst (W.R.), *1743*
- equilibrium, heat transfer, Giger (G.K.), Mutharasan (R.), (et al.), *3001*
- fluidized beds, multiphase media, Kuhne (J.), Wippern (D.), *5944*
- bifurcation, diffusion, dynamics, stability theory, Pao (C.V.), *7173*
- finite difference methods, thermal effects, Stewart (H.B.), *7967*
- combustion, filtration, Stolyarova (N.N.), Sukhov (G.S.), (et al.), *9773*
- combustion, explosions, shock waves (normal), Sukhov (G.S.), Yarin (L.P.), *9889*
- multiphase flow, safety, transport, Veziroglu (T.N.), *10819*

Read (T.T.), differential operators, discrete spectra, hilbert space, mathematical methods, spectra, *7161*

Readey (H.J.) Jr., missiles, ramjets, rockets, solid propellants, testing equipment, Cobb (E.R.), *10729*

real gas effects, heat engines, thermodynamic processes, Sandri (R.), *721*
- correlation, heat exchangers, heat transfer, turbulent flow, Miropolskii (Z.L.), Karamysheva (A.I.), (et al.), *4648*
- catalytic surfaces, dissociation, heat transfer, hydrogen, shock tubes, Nasser (A.E.M.), East (R.A.), *5562*
- probability theory, radiant interchange, vibration (thermally excited), Kruglov (V.I.), Katkovskii (L.V.), (et al.), *5588*
- boundary layer, compressible flow, Schreier (S.), *6626*
- blunt bodies, compressible flow, numerical methods, supersonic flow, Antonets (A.V.), Marinin (V.P.), *7687*
- dissociation, heat transfer, stagnation point, thermal instability, Agranat (V.M.), Bertsun (V.N.), (et al.), *9704*
- chemically reactive flow, monte carlo analysis, turbulence model, turbulent flow, Pope (S.B.), *10479*
- gases, mixtures, thermal properties, Nedostup (V.I.), Galkevich (E.P.), *10548*
- heat transfer, nonequilibrium flow, stagnation point, Mori (Y.), Himeno (N.), (et al.), *10605*

real time solution, computer programming, fast fourier transform, processing, Kuno (A.Ya.), *71*
- displacement, holography, interferometry, receptance measurement, Chalko (T.), *2477*
- computer programming, data analysis, imaging systems, spectra, Meredith (B.D.), Kelly (W.L.) IV, *3129*

realization, algorithms, hilbert transfer, Khermanis (E.Kh.), *2095*
- algorithms, discrete systems, identification, nonlinear systems, Tam (T.-J.), Nonoyama (S.), *3150*
- linear systems, observers, Emre (E.), Silverman (L.M.), *4233*
- design, discrete systems, observers, time optimal systems, Inoue (A.), Fisher (D.G.), (et al.), *4314*

reattachment, cylindrical bodies, external flow, heat transfer, hot wire, separated flow, shear flow, Ota (T.), Kon (N.), (et al.), *1665*
- blunt bodies, heat transfer, separated flow, transition, Ota (T.), Asano (Y.), (et al.), *3654*
- axisymmetric flow, heat transfer, separated flow, thermal measurements, turbulent flow, Smyth (R.), *3780*
- blunt bodies, prandtl number, separated flow, turbulence (transport), Ota (T.), Kon (N.), *4602*
- mixing layers, steps, turbulence, turbulence (structure), Chandrsuda (C.), Bradshaw (P.), *5464*
- bubble dynamics, experimental results, separated flow, separation, turbulence, Hillier (R.), Cherry (N.J.), *5470*
- subsonic flow, turbulent flow, Eaton (J.K.), Johnston (J.P.), *9568*
- compressible flow, navier stokes equation, shear layer, turbulent flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10431*
- cavities, separated flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10434*

Reaugh (J.E.), see Gordon (J.T.) Jr., *10244*

recirculation, separated flow, stagnation point, two dimensional flow, O'Brien (V.), *1547*
- boundary layer, computing techniques, navier stokes equation, viscous flow, Brandeis (J.), Rom (J.), *1548*
- convection (forced), heat transfer, nuclear reactors, Cho (S.M.), Kane (R.S.), *1687*
- finite difference methods, flame holders, models, Majumdar (S.), Bhaduri (D.), *1748*
- flames (diffusion), natural gas, Hatami (R.), *1749*
- closed conduit flow, flow measurement, heat transfer, Launder (B.E.) eds., Humphrey (J.A.C.), *2826, book*
- buoyant flow, curved surfaces, duct flow, laminar flow, Chilukuri (R.), Humphrey (J.A.C.), *3785*
- boundary layer, moving surfaces, supersonic flow, Zhuk (V.I.), Ryzhov (O.S.), *5431*
- flow measurement, fluid mechanics, steps, turbulent flow, Moss (W.D.), Baker (S.), *5434*
- closure, turbulence model, turbulent flow, Minh (H.H.), *6692*
- cavities, finite element methods, laminar flow, Pepper (D.W.), Cooper (R.E.), *8584*
- three dimensional flow, turbulence model, ventilation, Sakamoto (Y.), Matsuo (Y.), *10643*

recoil, material testing, polymers, thermoplasticity, viscoelastic fluids, Apicella (A.), Nicodemo (L.), (et al.), *2576*

recovery systems, ballistics (terminal), drag coefficient, optimization, reentry, Williamson (W.E.) Jr., *1793*
- flood flow, oil removal, petroleum, Pope (G.A.), *12066*

recuperators, heat exchangers, heat exchangers (crossflow), heat exchangers (multipass), heat transfer, regenerators, Shah (R.K.) eds., Mcdonald (C.F.), (et al.), *1711, book*

Reddy (B.S.), chebyshev approximations, plates (annular), plates (orthotropic), postbuckling behavior, Alwar (R.S.), *5180*

Reddy (C.S.), see Wirtz (R.A.), *819*

Reddy (C.T.), computing techniques, finite element techniques, integration, triangular elements, Shippy (D.J.), *6113*

Reddy (E.S.), see Rao (S.S.), *2511*

Reddy (J.N.), bending, bimodulus materials, composite materials, plates (rectangular), plates (thick), thermoelasticity (steady), Bert (C.W.), (et al.), *920*
- see Belie (R.G.), *2463*
- finite element techniques, laminates, penalty function, plates (anisotropic), plates (sandwich), *3308*
- finite element methods, plates (anisotropic), plates (rectangular), plates (sandwich), plates (thick), Chao (W.C.), *3310*
- beams (curved), nonlinear structures, vibration (free), Singh (I.R.), *4413*
- finite element methods, large displacement, plates (circular), vibration (nonlinear), Huang (C.L.), (et al.), *4425*
- bimodulus materials, composite materials, finite element techniques, laminates, Chao (W.C.), *5128*
- see Sasaki (Y.K.), *6659*
- see Bert (C.W.), *7343*
- convection (free), enclosure flow, finite element techniques, mathematical models, stream function, vorticity, Satake (A.), *8726*
- anisotropic media, composite materials, laminates, plates (sandwich), thermal effects, Hsu (Y.S.), *8888*
- functional analyis, hamilton principle, tensor methods, variational methods, vector methods, Rasmussen (M.L.), *9090*
- bending, composite materials, laminates, plates (anisotropic), plates (nonlinear), plates (rectangular), plates (thick), Chao (W.C.), *9273*

Reddy (S.R.), coagulation, colloids, emulsions, hydrodynamic stability, non newtonian suspensions, particle size, Fogler (H.S.), *3592*
- brownian motion, emulsions, flocculation, particle size, suspensions, Fogler (H.S.), *3593*

Redeker (G.), see Jain (R.K.), *2741*

Redekopp (L.G.), see Koop (C.G.), *10483*

Reding (J.P.), see Ericsson (L.E.), *686*
- aerodynamic loads, incompressible flow, slender bodies, yawing, Ericsson (L.E.), *5495*

Redkovskaya (M.N.), algorithms, discrete programming problem, optimization, programming, Yaremchuk (T.G.), *4283*

reduction, computer programming, impulsive transfers, orbit correction, simplex method, trajectory optimization, Vladimirov (V.P.), Aleksandrov (E.V.), *3920*
- honeycomb structures, screens, turbulence, turbulent flow, Scheiman (J.), Brooks (J.D.), *9616*

Reed (H.L.), see Nayfeh (A.H.), *8563*

Reed (K.W.), see Murakawa (H.), *6236*

Reeder (J.), capillary waves, gravity waves (surface), harmonic waves, phase velocity, wilton ripples, Shinbrot (M.), *9623*

Reeder (J.W.), infiltration, porous media, soil mechanics, *5839*

Reeds (J.A.), see Butler (J.P.), *9116*

Reedy (E.D.) Jr., aluminum alloys, boron, fracture toughness, material testing, *7507*

Reemtsen (R.), see Lozano (C.J.), *8740*

reentry, ablators, arcjets, insulating materials (thermal), joints, space shuttle, Brewer (W.D.), Pittman (C.M.), (et al.), *1723*
- ballistics (terminal), drag coefficient, optimization, recovery systems, Williamson (W.E.) Jr., *1793*
- ballistics (terminal), dispersion, rockets, trajectories, Platus (D.J.), *1796*
- accelerometers, aerodynamic coefficients, digital simulation, spinning bodies, Mcdowell (J.L.), Williamson (W.E.) Jr., *3924*
- lift, optimal control, spinning bodies, topological techniques, Platus (D.H.), *5709*
- ballistics (terminal), optimal control, planetary atmospheres, planetary entry, Ivanov (N.M.), Martynov (A.I.), (et al.), *5713*
- artificial satellites, oblateness, orbit decay, upper atmosphere, De Lafontaine (J.), *6883*
- aerodynamic heating, space vehicles, Wurster (K.E.), Eldred (C.H.), *6888*
- artificial satellites, manned satellites, weather satellites, Rex (D.), *10780*

Rees (D.W.A.), anisotropy, bauschinger effect, plasticity, stress strain relationships, work hardening, *7285*

Rees (N.W.), see Romberg (T.M.), *11540*

Reese (J.M.), acoustics, couplings, spherical bodies, vibration, Thompson (W.) Jr., *11984*

Reethof (G.), see Loh (H.-T.), *11928*
Reeves (W.A.), burning rate, combustion, flammability, ignition, textiles, Hammons (M.A.), (et al.), *6834*
reflection, ellipsoids, shock waves, spherical bodies, Nosenko (N.I.), Sysoev (N.N.), (et al.), *681*
- asymptotic methods, flow irregularities, kelvin waves, ocean waves, wave generation, Haines (C.R.), *1603*
- carbon dioxide, shock waves, shock waves (oblique), Ando (S.), *1615*
- absorption, radiant interchange, scattering, Yuen (W.W.), Wong (L.W.), *1706*
- acoustic waves, layered media, transmission, Fokkema (J.T.), *2367*
- elastic waves, solid solid interface, transmission, Fokkema (J.T.), *2370*
- elasticity (nonlinear), refraction, Grinfeld (M.A.), Movchan (A.A.), *2371*
- boundary layer (thermal), computing techniques, shock waves, unsteady state, Brun (R.), Chauvin (C.), (et al.), *2723*
- shock polar, shock waves, unsteady state, Ben-Dor (G.), *2724*
- acoustic waves, wavy walls, Wirgin (A.), *2951*
- absorption, acoustic measurements, porous media, Nakamura (T.), Nakamura (A.), (et al.), *2954*
- absorption, coatings, radiant interchange, radiation properties, scattering, Shafey (H.M.), Kunitomo (T.), *3827*
- acoustic waves, scattering, transmission, waveguides, Bostrom (A.), *3932*
- acoustic properties, flaw detection, ultrasonics, Haines (N.F.), Langston (D.B.), *3940*
- acoustic waves, nonlinear waves, pipes, Nakamura (T.), Nakamura (A.), (et al.), *3942*
- liquid solid interface, numerical methods, ultrasonics, Ngoc (T.D.K.), Mayer (W.G.), *3944*
- acoustic waves, scattering, Norton (S.J.), *3946*
- attenuation, sonar, underwater acoustics, Stewart (J.L.), Westerfield (E.C.), (et al.), *3954*
- arrays, sonar, underwater acoustics, Lynch (J.F.), Pitt (S.P.), (et al.), *3956*
- electromagnetic waves, shells (sandwich), shells (spherical), Bushnell (D.), *4370*
- critical region, shock waves (oblique), Wright (T.W.), *4455*
- acoustic waves, half space, moving surfaces, sound fields, spectra, Hwang (Y.F.), Tichy (J.), *4763*
- acoustic waves, half space, sound propagation, Nusayr (A.-M.), *4781*
- acoustic waves, diffraction, Vovk (I.V.), *4784*
- acoustic waves, modes, resonance, transmission, viscoelastic materials, Madigosky (W.), Fiorito (R.), *4787*
- attenuation, interface waves, solid-fluid interaction, stonely waves, Hawker (K.E.), *4788*
- ocean bed, sound propagation, underwater acoustics, Harrison (C.H.), *4790*
- ground effect, impedance, sound propagation, Durnin (J.), Bertoni (H.L.), *4794*
- absorption, acoustic waves, fibers, Mathew (J.), Alfredson (R.J.), *4798*
- acoustic waves, dynamic stresses, flexural waves, plates, shear, wave equations, Dubbelday (P.S.), Rudgers (A.J.), *5209*
- elastic constants, layered media, sh waves, Coen (S.), *5243*
- drops, scattered light, water, Popov (Yu.A.), *5583*
- interface phenomena, ocean bed, refraction, sound propagation, underwater acoustics, Frisk (G.V.), Doutt (J.A.), (et al.), *5725*
- ocean bed, underwater acoustics, Vidmar (P.J.), *5745*
- acoustic measurements, coherent structure, ocean bed, underwater acoustics, Berkson (J.M.), *5749*
- ocean bed, sedimentation, underwater acoustics, Vidmar (P.J.), *5752*
- ocean bed, underwater acoustics, Volovov (V.I.), Ivakin (A.N.), *5758*
- acoustic measurements, acoustic waves, arrays, radiation, Nefedov (N.N.), *5786*
- fourier series, seismic waves, Marcoux (M.O.), *5863*
- interfaces, rayleigh waves, refraction, seismic waves, Lutikov (A.I.), *5866*
- cylindrical bodies, half space, torsional waves, Weda (H.), *6353*
- cylindrical waves, elastic bodies, free boundary, Kasiak (M.), Wlodarczyk (E.), *6354*
- nondestructive tests, surface flaws, ultrasonics, welded joints, Perevalov (S.P.), Raikhman (A.Z.), *6489*
- cracks, fatigue, flaw detection, pipes, threaded joints, Lyapkov (A.A.), Spektorov (I.Sh.), *6494*
- mach reflection, roughness, shock waves, unsteady state, Takayama (K.), Ben-Dor (G.), (et al.), *6711*
- flow measurement, mach reflection, photography, shock waves, transition, Ben-Dor (G.), Takayama (K.), *6714*
- ocean bed, sedimentation, shear waves, underwater acoustics, Vidmar (P.J.), *6907*
- bifurcation, ducts, modes, sound propagation, Nilsson (B.), Brander (O.), *6927*
- acoustic waves, half space, impulse, Chambers (L.G.), *6930*
- refraction, shock waves, surveys, Griffith (W.C.), *7776*
- embankments, finite difference methods, nonlinear waves, wave interactions, Nasser (M.S.), *8511*
- ellipsoids, perturbation methods, shock waves, Gorbachev (L.P.), Sokolov (V.B.), *8635*
- acoustic waves, ground effect, impedance, sound propagation, surface waves, Habault (D.), Filippi (P.J.T.), *8865*
- ocean, seismic waves, Gjoystdal (H.), Ursin (B.), *8953*
- core-mantle boundary, earth, mantle, seismic waves, Dey (S.), Addy (S.K.), *8954*
- refraction, surface waves, vertical contact, Its (E.N.), Yanovskaya (T.B.), *8958*
- free boundary, ultrasonics, Kutzner (J.), *9343*
- plates, visualization, vortex rings, Schneider (P.E.M.), *9525*
- boundary layer, shock tubes, shock waves, Walenta (Z.A.), *9642*
- green function, radiant interchange, scattering, Rogovtsov (N.N.), *9720*
- emissivity, radiant interchange, scattering, Adzerikho (K.S.), Blokh (A.G.), (et al.), *9721*
- blunt bodies, convection, heat transfer (combined modes), hypersonic flow, radiant interchange, Rolin (M.N.), Soloukhin (R.I.), (et al.), *9728*
- elastic waves, half space, layered media, scattering, Coen (S.), *10236*
- absorption, conduction (heat), heat transfer (combined modes), radiant interchange, radiation properties, Stepanov (S.V.), Bityukov (V.K.), *10602*
- solar collectors, solar radiation, Kamildzhanov (A.Kh.), *10636*
- acoustic measurements, acoustic properties, acoustics (architectural), concert halls, Barron (M.), Marshall (A.H.), *10789*
- random media, transmission, Verheggen (T.), *11172*
- acoustic waves, barriers, liquid solid interface, plane waves, ultrasonics, Claeys (J.M.), Leroy (O.J.), (et al.), *11648*
- absorption, integral methods, radiant interchange, scattering, slabs, Stramigioli (C.), Santarelli (F.), (et al.), *11766*
- direction, sonar, underwater acoustics, Chestnut (P.C.), Floyd (R.W.), *11901*
- acoustic waves, ocean bed. sedimentation, underwater acoustics, Stoll (R.D.), Kan (T.-K.), *11907*
- acoustic waves, modes, underwater acoustics, Weston (D.E.), Tindle (C.T.), *11913*
- ducts (curved), modes, sound propagation, Shepherd (I.C.), Cabelli (A.), *11934*
- acoustic waves, layered media, transmission, viscoelasticity, waveguides, Stepanishen (P.R.), Strozeski (B.), *11966*
- echos, scattering, sound, Ueda (M.), Ichikawa (H.), *11967*
- echos, panels, ultrasonics, Trivett (D.H.), *11973*

refraction, impedance, ocean, ocean bed, sound propagation, underwater acoustics, Stickler (D.C.), Ahluwalia (D.S.), *893*
- breakwater, diffraction, ocean waves, shallow water, Lui (P.L.-F.), Lozano (C.J.), (et al.), *1887*
- elasticity (nonlinear), reflection, Grinfeld (M.A.), Movchan (A.A.), *2371*
- interface cracks, shear cracks, wiener-hopf technique, Kuliev (V.D.), *2452*
- laser doppler velocimeters, liquids, stratified flow, turbulence, Mcdougall (T.J.), *2767*
- optical techniques, schlieren methods, thermography, Kiss (L.), *3774*
- cauchy problem, characteristic methods, crystals, hyperbolic equations, Uhlmann (G.A.), *4978*
- caustics, diffraction, gravity waves (surface), Williams (R.G.), Darbyshire (J.), (et al.), *5481*
- interface phenomena, ocean bed, reflection, sound propagation, underwater acoustics, Frisk (G.V.), Doutt (J.A.), (et al.), *5725*
- interfaces, rayleigh waves, reflection, seismic waves, Lutikov (A.I.), *5866*
- aerosols, atmosphere, drops, particle size, Mathai (C.V.), Harrison (A.W.), *5960*
- gases, ideal gas, shock waves, Legowski (Z.), Wlodarczyk (E.), *6712*
- acoustic waves, internal waves, ocean, sound propagation, Uscinski (B.J.), *6908*
- reflection, shock waves, surveys, Griffith (W.C.), *7776*
- processing, seismic waves, Palmer (D.), *8003*
- reflection, surface waves, vertical contact, Its (E.N.), Yanovskaya (T.B.), *8958*
- diffraction, gravity waves (surface), sloping bottom, Houston (J.R.), *11576*
- bottom irregularities, gravity waves (surface), numerical methods, rays, Selezov (I.T.), Sorokina (V.V.), *11589*
- modal analysis, underwater acoustics, Kuznetsov (V.K.), *11910*
- acoustic properties, networks, noise abatement, strips, Amram (M.), Stern (R.), *11969*

refractories, elastic constants, high temperature, ultrasonics, Bell (J.F.W.), Chen (J.Y.F.), (et al.), *1836*
- creep, data analysis, data extrapolation, Tsvilyuk (I.S.), Baumshtein (M.V.), *3254*
- ceramics, endurance limit, material testing, thermal fatigue, Lamon (J.), *3435*
- materials properties, microstructures, Krivenyuk (V.V.), Zelenyuk (E.E.), *8985*

refrigeration, boiling, convection (forced), evaporation, heat transfer, Mishra (M.P.), Varma (H.K.), (et al.), *1669*
- critical heat flux, energy conversion, heat transfer, thermosyphons, Savchenkov (G.A.), Kunakov (V.G.), *3836*
- condensers, heat exchangers, mathematical models, Tassou (S.A.), Green (R.K.), *5592*
- boiling, heat transfer, nucleate boiling, refrigerant-oil mixtures, Chongrungreong (S.), Sauer (H.J.) Jr., *7831*

Rega (G.), see Luongo (A.), *3350*
- cables, dynamic response, finite difference methods, vibration (free), Luongo (A.), *6287*
- see Capecchi (D.), *7040*

regenerators, digital simulation, mathematical models, numerical methods, Khandwawala (A.I.), Chawla (O.P.), *72*
- furnaces, heat exchangers, swirl flow, Ekjaer (H.P.), *788*
- heat exchangers, heat exchangers (crossflow), heat exchangers (multipass), heat transfer, recuperators, Shah (R.K.) eds., Mcdonald (C.F.), (et al.), *1711, book*

- condensation, evaporation, heat transfer, mass transfer, rotary regenerators, Van Leersum (J.G.), Ambrose (C.W.), *3838*
- heat exchangers, resistance, thermal effects, Romie (F.E.), *3839*
- energy storage, heat exchangers, Romie (F.E.), *5596*
- design, design criteria, heating, steam turbines, Sergeeva (V.B.), Ivashchenko (S.S.), (et al.), *6816*
- carbon dioxide, heat transfer (combined modes), high temperature, injection, Asif (S.A.), Khandwawala (A.I.), *7868*
- augmentation, energy conservation, radiant interchange, waste heat, Chawla (O.P.), Khandwawala (A.I.), *9733*
- heat transfer, specific heat, Maclaine-Cross (I.L.), *10624*
- cooling, crossflow, evaporation, heat exchangers, Maclaine-Cross (I.L.), Banks (P.J.), *11767*

Regier (L.), euler equations, lagrange equations, oceanography, particle fluid flow, tracers, Stommel (H.), *4880*

Regirer (S.A.), flexible walls, pipe flow, unsteady flow, viscoelastic materials, Rutkevich (I.M.), *11690*

regression rate, combustors, ramjets, solid fuels, Hewett (M.E.), Netzer (D.W.), *5646*
- discrete systems, prediction, process control, time delay systems, Potapova (T.P.), *8164*
- combustion, hypergolic propellants, self ignition, Paul (P.J.), Mukunda (H.S.), (et al.), *9770*

regularization, asteroids, libration theory, perturbation methods, resonance, Garfinkel (B.), *871*
- burgers equation, uniqueness, Larkin (N.A.), *6074*
- ks formulation, oblateness, orbit mechanics, perturbation methods, two body problem, Sharma (R.K.), *6877*
- fredholm equations, optimization, smoothing of data, Butler (J.P.), Reeds (J.A.), (et al.), *9116*

regulator problem, linear systems, multivariable systems, tracking, Wolovich (W.A.), Ferreira (P.), *112*
- algorithms, multivariable systems, synthesis, Cheng (L.), Pearson (J.B.) Jr., *160*
- adaptive systems, pole placement, Gawthrop (P.J.), *185*
- linear systems, synthesis, time delay systems, Vinter (R.B.), Kwong (R.H.), *1142*
- distributed parameters, resonance, Starikov (A.F.), *1146*
- discrete systems, optimal control, Warrior (J.), Viswanadham (N.), *1151*
- design, heat exchangers, multivariable systems, process control, Davison (E.J.), Taylor (P.A.), (et al.), *1163*
- design, feedback, sensitivity, state space techniques, Howze (J.W.), Cavin (R.K.) III, *2083*
- minimax techniques, stochastic control, Nakonechnyi (A.G.), *2101*
- optimal control, riccati equation, singular perturbations, Dmitriev (M.G.), *2119*
- algorithms, mathematical programming, optimal control, Dzhafarov (E.M.), Iskenderov (I.A.), *2155*
- design, process control, time lag, Khasmamedov (F.I.), *2169*
- linear theory, stability theory, Tkachenko (V.A.), *3167*
- control, design, power generation, turbomachinery, Taiwo (O.), *3217*
- control, linear systems, multivariable systems, pole placement, Kimura (H.), *4209*
- boundary value problems, linear systems, optimization, stability theory, Tsygankova (L.A.), *4253*
- constraints, design, optimal control, Sirazetdinov (T.K.), Smirnov (S.V.), *4292*
- design, observers, Baloev (A.A.), *4296*
- minimization, optimal control, synthesis, Romanenko (L.G.), *4305*
- aerospace vehicles, design, rotating bodies, structural response, Baloev (A.A.), *4307*
- algorithms, constraints, numerical methods, optimal control, Kalaba (R.), Spingarn (K.), *5054*
- control, design, position control, robotics, Seyfarth (K.), Hain (E.), *7252*
- cooling, helium, liquid vapor mixture, temperature, valves, Novikov (N.V.), Gorodyskii (N.I.), (et al.), *7575*
- iterative methods, large scale systems, optimal control, time optimal systems, Samovsky (J.), *8165*
- design, large scale systems, Viswanadham (N.), Ramakrishna (A.), *11052*
- bilinear systems, control, dead-beat control, discrete systems, Grasselli (O.M.), Isidori (A.), (et al.), *11059*
- constraints, optimal control, Zolezzi (T.), *11070*
- modal control, optimal control, Gibson (J.S.), *11071*
- algorithms, linear programming, suboptimal control, time delay systems, Kim (B.K.), Bien (Z.), *11088*

Rehbinder (G.), cutting, jets, rocks, water, *431*

Rehder (J.J.), chemical propulsion, electric propulsion, orbit transfer, vehicles, Wurster (K.E.), *849*

Reichert (G.), design, helicopters, vibration isolation, *695*

Reichweger (J.), see Krisper (G.), *4145*

Reid (D.W.), boundary value problems, cauchy problem, optimal control, parabolic equations, Teo (K.L.), *5049*

Reid (I.), bed load, discharges, flow measurement, Layman (J.T.), (et al.), *1498*

Reid (J.G.), algorithms, navigation, optimal control, tracking, Chaffin (D.E.), (et al.), *7249*

Reid (S.R.), see Johnson (W.), *9429*

Reid (T.J.), see Emery (W.J.), *10783*

Reid (W.H.), see Drazin (P.G.), *6674*

Reif (T.), cold working, deformation (plastic), sheet metal, stress strain relationships, *3422*

Reifsnider (K.), composite materials, fatigue, fracture criteria, materials properties, *8378*

Reifsnider (K.L.), see O'Brien (T.K.), *2493*

Reijnhart (R.), evaporation, heat transfer, thermal diffusion, wind tunnels (environmental), Rose (R.), *6826*
- boundary layer (atmospheric), diffusion, evaporation, mass transfer, Piepers (J.), (et al.), *8030*

Reilly (R.S.), see Egan (W.J.) Jr., *5654*

Reimschussel (W.), diffusion, equations of motion, two component flow, Abramczyk (H.), *3854*

reinforced bodies, bonded joints, cylindrical bodies, torsion, Kuo (Y.-M.), Conway (H.D.), *245*
- cracks, failure, filamentary structures, textiles, Pipkin (A.C.), Rogers (T.G.), *1395*
- fibers, geometric nonlinearities, laminates, Hyer (M.W.), *2247*
- failure, plastics, Turvey (G.J.), *3275*
- beams (plastic), computing techniques, dynamic analysis, Laudiero (F.), *3279*
- composite materials, ellipsoids, penny shaped crack, Taya (M.), *4356*
- beams (cantilever), damping, fibers, laminates, Plunkett (R.), *4357*
- aluminum alloys, high strength, high temperature, material testing, Yajima (S.), Okamura (K.), (et al.), *5125*
- composite structures, rotating disks, Tsuda (S.), Shiratori (E.), (et al.), *5129*
- half space, membranes, thermoelasticity (steady), Tamate (O.), Sekine (H.), (et al.), *5795*
- deformation, dynamic loads, plates, slabs, Parker (D.F.), *6198*
- composite materials, layered media, three dimensional formulation, Lee (J.D.), *7305*
- mine shafts, mines, pipes, stress analysis, thin walled structures, Tsoi (N.G.), Kolesnikov (A.V.), (et al.), *7621*
- concrete, plates, punch problems, shear, Godycki-Cwirko (T.), Kosinska (A.), *8379*
- composite structures, high cycle fatigue, low cycle fatigue, Rosenkranz (G.), Gerold (V.), *9245*
- composite materials, fibers, pipes, Ainsworth (L.), *9466*
- anisotropic structures, axial loading, pressure, tubes, Highton (J.), Soden (P.D.W.), *10325*
- beams, composite structures, design (minimum weight), design (optimum), structural stability, vibration, Rikards (R.B.), *10348*
- design (optimum), dynamic loads, pressurized pipes, reinforced concrete, Heinloo (M.), Kaliszky (S.), *10349*
- deformation, plastics, pressure vessels, shells (torispherical), strength, Barton (D.C.), Soden (P.D.), (et al.), *10367*
- numerical methods, optimization, stiffened structures, Kartvelishvili (V.M.), Mironov (A.A.), (et al.), *11325*

reinforced concrete, frames, modeling, statically indeterminate structures, Ford (J.S.), Chang (D.C.), (et al.), *509*
- frames, nonlinear analysis, Hsu (C.-T.T.), Mirza (M.S.), (et al.), *523*
- modeling, shear transfer, Buyukozturk (O.), Connor (J.J.), (et al.), *534*
- beams (prestressed), concrete, fibers, impulsive loading, Hughes (B.P.), *1438*
- columns, deformation, Ford (J.S.), Chang (D.C.), (et al.), *1439*
- design, loads, Noakowski (P.), *1442*
- fibers, tensile strength, Stroeven (P.), *1444*
- containment, seismic loading, slabs, stiffness, strength, White (R.N.), Perdikaris (P.C.), (et al.), *1462*
- beams (composite), cracking, shrinkage, slabs, Johnson (R.P.), Allison (R.W.), *2265*
- missiles, penetration, Degen (P.P.), *2372*
- crack growth, fatigue, materials properties, Lovegrove (J.M.), Salah El Din (A.S.), (et al.), *2420*
- fibers, strength, Stages (A.H.), Minor (J.), *2516*
- composite structures, nonlinear analysis, ultimate strength, Lachance (L.), Hays (C.O.), *2518*
- cracks, shear transfer, Bazant (Z.P.), Tsubaki (T.), (et al.), *2519*
- cracking, slabs, Fujii (F.), *2520*
- beams, fatigue, fibers, Kormeling (H.A.), *2521*
- design, slabs, Hornung (R.K.), Oesterle (E.), *2522*
- beams (composite), creep, viscoelasticity, Lazic (V.B.), Lazic (J.D.), *3251*
- analytical methods, bond characteristics, cyclic loading, Tassios (T.P.), Yannopoulos (P.J.), *3530*
- beams (flexural), composite structures, Taylor (R.), Al-Najmi (A.Q.S.), *3531*
- columns, flexure, punch problems, slabs, strength, Gesund (H.), Goli (H.B.), *3532*
- dynamic analysis, elastoplasticity, piers, seismic loading, Ozaka (Y.), Yanagida (T.), (et al.), *3533*
- bending, panels (flat), shear, torsion, ultimate strength, Majid (K.I.), Celik (T.), *3534*
- axial loading, bearing capacity, ultimate strength, Salat (G.), *3535*
- prestressed concrete, viscoelasticity, Temnov (I.I.), Khlopovskii (Yu.N.), *3536*
- cooling towers, imperfections, shells, stress analysis, Kato (S.), Yokoo (Y.), *3552*

- beams, decay, shear strength, Scribner (C.F.), Wight (J.K.), *4038*
- beams, bending, shear loading, torsion, Rajagopalan (K.S.), *4362*
- cracking, deflections, plates (circular), slabs, Desayi (P.), Muthu (K.U.), *4531*
- cracks, stress analysis, Bazant (Z.P.), Taubaki (T.), *4533*
- punch problems, shear strength, slabs, Petcu (V.), Stanculescu (G.), (et al.), *4534*
- beam columns, bending, Solanki (H.T.), *5147*
- beams, dynamic behavior, stiffness, Johns (K.C.), Belanger (M.D.), *5351*
- beams (torsional), torsion, ultimate strength, Izumi (M.), *5353*
- bridges (arch), shakedown structures, Ronca (P.), Cohn (M.Z.), *5359*
- buildings, frames, seismic loading, Emori (K.), Schnobrich (W.), *5890*
- columns, creep buckling, Bazant (Z.P.), Tsubaki (T.), *6269*
- bending, columns (eccentrically loaded), design (ultimate strength), tension, Nazir (C.P.), *6500*
- beams, grooves, strength, torsion, Pandit (G.S.), Gupta (S.P.), *6519*
- beams, deformation (plastic), dynamic loads, materials properties, Popov (N.N.), Rastorguev (B.S.), (et al.), *6521*
- beams (flexural), bending, low temperature, Goto (Y.), Miura (T.), *6955*
- beams (flexural), concrete, cyclic loading, Thompson (K.J.), Park (R.), *7290*
- columns, composite materials, shape factors, Smith (D.G.E.), *7355*
- crack growth, fatigue, Salah El Din (A.S.), Lovegrove (J.M.), *7489*
- columns, cracks, eccentric loading, Bridge (R.Q.), *7505*
- crack growth, crack opening displacement, finite element techniques, fracture, j-integral, microcracks, Petersson (P.-E.), *7539*
- axial loading, beams, design (optimum), Melchers (R.E.), *7596*
- bond characteristics, crack resistance, cracking, Somayaji (S.), Shah (S.P.), *7602*
- geometric nonlinearities, material nonlinearities, plane stress, shells (thin), Arnesen (A.), Sorensen (S.I.), (et al.), *7603*
- design (ultimate strength), plates (skew), slabs, Kwiecinski (M.), Wojewodzki (W.), *7604*
- limit analysis, probabilistic design, random loading, Mascarenhas (A.T.), *7605*
- bridges, foundations, matrix methods, piles, structural response, Onu (G.), *7607*
- axial loading, design (ultimate strength), flexure, hydraulic structures, Liu (T.C.), Gleason (S.), *7609*
- cracking, fracture, limit analysis, shells, Coenen (J.H.), *8439*
- beams, repeated loading, shear reinforcement, strain, Farghaly (S.A.), *8449*
- collapse, frames, ultimate strength, Ford (J.S.), Chang (D.C.), (et al.), *8450*
- framed structures, inelasticity, structural analysis, Krishnamoorthy (C.S.), Mosi (D.R.), *8451*
- cooling towers, thermal effects, Orosz (A.), *8452*
- dynamic properties, shells (thick), spherical bodies, transient loading, Bak (G.), *9320*
- computer aided design, mathematical programming, nonlinear programming, optimization, Bond (D.), *9442*
- beams, bending, elastoplasticity, shear, Nakazawa (T.), Ohta (T.), *9444*
- ductility, slabs, strength, Mirza (S.A.), Macgregor (J.G.), *9445*
- columns, connections, plates, punch problems, Neth (V.W.), De Paiva (H.A.R.), (et al.), *9446*
- bending, fiber reinforced concrete, fibers, torsion, Narayanan (R.), Toorani-Goloosalar (Z.), *9450*
- shells (stiffened), thin walled structures, Gupta (A.K.), *10150*
- biaxial loading, design, piles, Klein (G.K.), Karavaev (V.N.), *10259*
- experimental methods, piles, strain gages, Gatti (G.), Collotta (T.), (et al.), *10260*
- design (optimum), dynamic loads, pressurized pipes, reinforced bodies, Heinloo (M.), Kaliszky (S.), *10349*
- beams, shear strength, ultimate strength, Megahid (A.), Maamoun (A.), (et al.), *10358*
- beams, shear, shear stress, Batchelor (B. De V.), Kwun (M.), *10359*
- beams, energy dissipation, failure, Okada (K.), Koyanagi (W.), (et al.), *10360*
- beams, deformation, Christiansen (K.), *11327*

reinforced openings, filament winding, shells (nonlinear), stress analysis, Lykyanenko (P.D.), Makarenkov (A.G.), *251*
- buckling (experimental), shells (spherical), Gudramovich (V.S), Diskovskii (I.A.), *351*
- composite materials, edge effects, Partsevskii (V.V.), Petrovskii (A.V.), *2249*
- shells (spherical), stress concentration, Peiekh (B.L.), Galasi (A.A.), (et al.), *2268*
- design (optimum), holes, shells, Pelekh (B.L.), Gleba (A.Yu.), *4380*
- plates (holed), variational methods, Kurshin (L.M.), Rastorguev (G.I.), *6226*

Reinhart (W.R.), bending, finite element techniques, gear teeth, Ferguson (R.J.), (et al.), *1132*

Reinink (Y.), see Bos (M.G.), *3601*

Reinking (R.F.), boundary layer (atmospheric), heat transfer (atmospheric), mass transfer, turbulence (geophysical), *5949*

Reipert (Z.), energy methods, finite difference methods, plates, *7350*

Reismann (H.), beams, continuum mechanics, elasticity, shells, solid mechanics, Pawlik (P.S.), *5069, book*
- beams, dynamic analysis, plates (nonhomogeneous), wave engines, Yamaguchi (T.), *8297*

Reiss (E.L.), see Sinay (L.R.), *4753*
- bifurcation, boundary value problems, boussinesq equation, convection, perturbation methods, Tavantzis (J.), *4974*
- see Ahluwalia (D.S.), *6924*

Reissner (E.), bending, curved tubes, finite pure bending, large displacement, shells (nonhomogeneous), tubes, *293*
- beams (cantilever), buckling, lateral stability, shear loading, *3330*
- beams (anisotropic), beams (flexural), beams (torsional), finite strain, plates (anisotropic), *4365*
- beams (curved), deformation (finite), springs, *7324*
- bending, plates, strain, *8238*

Reissner (J.E.), holes, shells (spherical), stress concentration, *7333*

Rekov (A.M.), see Kornienko (V.T.), *5320*

relativity, mathematical models, modeling, pattern recognition, Jumarie (G.), *104*
- dynamic analysis, kinematics, Asanov (G.S.), *1990*
- conduction, thermodynamics, thermodynamics (irreversible), Pavon (D.), Jou (D.), (et al.), *3767*
- continuum theory, kinematics, rheology, Huilgol (R.R.), *6038*
- dynamics, gravity, Anderson (I.M.), *6046*
- atmosphere, functional analyis, geometrical properties, Defrise (P.), *7136*
- electron beams, modeling, pinch effect, vlasov equation, Zharinov (A.V.), Chikhachev (A.S.), *9802*
- dispersion relation, ionic flow, nonlinear characteristics, oscillations, plasma, Chian (A.C.-L.), *11834*

relaxation, cyclic loading, tests, torsion, wires, Kuznetsov (B.I.), *494*
- acoustic properties, liquids, optical techniques, spectroscopy, Gladkov (S.M.), Koroteev (N.I.), *919*
- crack opening displacement, creep, finite element techniques, Bassani (J.L.), Mcclintock (F.A.), *1387*
- creep, material testing, polymers, Hayashi (K.), Gozu (K.), (et al.), *1412*
- damping, oscillations, vibration (self excited), Levin (A.I.), *6066*
- asymptotic behavior, dynamics, matched asymptotic expansions, nonconservative systems, oscillations, van der pol equation, Grasman (J.), *8106*
- magneto fluid dynamics, stability theory, stress analysis, tensor methods, Simkhovich (S.L.), *9795*
- nozzles, pulsejets, supersonic flow, Belavin (V.A.), Golub (V.V.), (et al.), *11515*
- combustion, convection, mass transfer, Sieniutycz (S.), *11775*

relaxation methods, plasticity, variational methods, Germain (P.), *3272*
- iterative methods, linear equations, matrices, Hadjidimos (A.), *5009*
- structural response, vibration (free), Flanagan (D.P.), Belytschko (T.), *5196*
- algorithms, nonlinear programming, optimization, Alekseychik (M.I.), Kalyuzhnyy (G.V.), *6142*
- computing techniques, iterative methods, nonlinear structures, structural analysis, Wellford (L.C.), Sen (H.), *8131*
- finite difference methods, laplace equation, Ponnuswamy (V.), *8138*
- computing techniques, difference equations, poisson equation, torsion, Banki (I.), *9124*

relaxing media, constitutive equations, viscoelasticity, Kecs (W.), *258*
- alloys, data analysis, stress relaxation, viscoelastic materials, Povolo (F.), *2230*
- stress relaxation, stresses (normal), viscoelastic fluids, viscometry, Pedersen (S.), Chapoy (L.L.), *2577*
- accelerated testing, polymers, viscoelastic materials, Askadskii (A.A.), Todadze (T.V.), *3256*
- experimental methods, hopkinson bar, stress strain relationships, viscoelasticity, Tormala (P.), Paakkonen (E.), (et al.), *5106*
- dislocations, plastic behavior, Blum (W.), Nix (W.D.), *6187*
- constitutive equations, creep, Delph (T.J.), *7956*
- dislocations, rods, stress relaxation, yield criteria, Merzhievskii (L.A.), Shamonin (S.A.), *8200*
- plasticity, variational methods, Temam (R.), Strang (G.), *8210*
- statistical continuum mechanics, viscoelastic fluids, Skvortsov (G.E.), *8489*

relay systems, perturbation theory, stability, Tikhomirov (V.V.), *128*
- feedback, limit cycles, on off systems, oscillations, stability theory, Balasubramanian (R.), *8161*
- approximation methods, control, stochastic systems, Fuller (A.T.), *11063*

reliability, containment, nuclear reactors, structure, testing equipment, vessels, Weymouth (L.J.), *488*
- damage (cumulative), life expectancy, Bolotin (V.V.), *508*
- mechanical components, probabilistic design, safety, Moss (T.R.) ed., *1434, book*
- estimation, interval estimation, statistical theory, Pavlov (I.V.), *2020*
- composite materials, data analysis, failure, triaxial loading, Wetherhold (R.C.), *2245*
- crack growth, j-integral, Georgiev (M.N.), Morozov (E.M.), *2462*
- corners, crack initiation, cracks, plates (reinforced), Brussat (T.R.), Chiu (S.T.), (et al.), *3443*
- finite element techniques, stochastic systems, structural analysis, Contreras (H.), *5030*
- dynamics, rigid bodies, Schrader (K.H.), *5036*
- modeling, probabilistic design, structural analysis, Frangopol (D.), *5360*
- bimetallic materials, coatings, machine elements, probability theory, strength, Kalmutskii (V.S.), *7600*
- probabilistic design, risk, stochastic processes, vibration (random), Shinozuka (M.) eds., Yao (J.T.P.), *8447, book*

reliability analysis, life expectancy, stochastic systems, weibull statistics, Ishikawa (H.), Tanimoto (T.), (et al.), *47*

- convolution integrals, estimation, optimization, probability theory, Grigoriu (M.), Lind (N.C.), *48*
- corrections, error, faults, Ostafin (V.A.), Romankevich (A.M.), *103*
- composite structures, laminates, structural analysis, surveys, Lenoe (E.M.) eds., Oplinger (D.W.), (et al.), *286, book*
- earthquake effects, lifeline systems, Tsuchiya (M.), Shibata (H.), *1885*
- probability theory, statistical theory, Roizman (V.P.), Vaingortin (L.D.), *2021*
- dynamic analysis, linear systems, observers, process control, Mironovskii (L.A.), *2082*
- detection, failure, gyroscopes, Kerr (T.H.), *2096*
- control, probability theory, Umrikhin (Yu.D.), *2097*
- detection, faults, kalman filters, Clark (R.N.), Setzer (W.), *2099*
- design, diagnostics, process control, Davydovskaya (N.I.), *2114*
- airplanes, digital control, flight control, fly-by-wire system, navigation, Berman (H.), Boudreau (J.), *2159*
- intermittency, probability, Schneeweiss (W.G.), *2515*
- analytical methods, mathematical models, statically indeterminate structures, Karavai (M.F.), Sogomonyan (E.S.), *3177*
- design, digital control, Brodetskii (G.L.), *3178*
- elastoplasticity, frames, geometric nonlinearities, random loading, Casciati (F.), Faravelli (L.), *3527*
- airplane structures, algorithms, failure, Yanko (A.K.), *3529*
- analytical methods, discrete systems, Netes (V.A.), *4260*
- estimation, faults, stochastic processes, Nikiforov (I.V.), *4269*
- probability theory, strength, Ditlevsen (O.), *6515*
- probability theory, safety, structural design, Baba (S.), Nakagawa (K.), (et al.), *6516*
- linear programming, loads, structural design, Casciati (F.), Faravelli (L.), *6517*
- cyclic loading, probabilistic design, springs, My Dao Thien, Massoud (M.), *6518*
- offshore structures, safety, wave loads, Bea (R.G.), *6535*
- fracture, life expectancy, probability, random loading, Bolotin (V.V.), *7468*
- failure, life expectancy, markov processes, Teodorescu (D.), *7601*
- continuous systems, diagnostics, dynamic properties, Mironovskii (L.A.), *8174*
- failure, matrix methods, probability theory, trusses, Murotsu (Y.), Okada (H.), (et al.), *8448*
- probabilistic design, safety, structural design, Hohenbichler (M.), Rackwitz (R.), *8456*
- dams, fail safe design, failure, optimization, Bhattacharjee (M.C.), *10087*
- safety, structural analysis, Baratta (A.), *10356*

reliability design, bearings (liquid lubricated), lubricants (liquid), machine design, Bushe (N.A.), Zakharov (S.M.), *1020*
- seismic loading, structural design, Bolotin (V.V.), *4040*
- earthquake effects, Davidson (J.W.), Felton (L.P.), (et al.), *7034*

Remezov (V.B.), elastic waves, electromagnetic loading, flaw detection, nondestructive tests, ultrasonics, Shkariet (Yu.M.), *499*

remote control, canard, mechanical systems, missiles, rolling motion, Blair (A.B.) Jr., *6728*

Ren (J.-G.), see Wang (D.-J.), *5220*

Renaud (M.F.), annuli, approximations (higher order), conical bodies, divergence, laminar flow, *3662*

Renaut (D.), see Gaumet (J.-L.), *1917*

rendezvous, linear systems, maximum principle, pursuit, time delay systems, Bien (Z.), Chyung (D.H.), *1141*

Reneman (R.S.), see Arts (T.), *7109*

Renner (W.W.), see Cavanagh (R.C.), *5746*

Renshaw (T.), aluminum alloys, tension, ultrasonic welding, welded joints, Sarrantonio (A.), *9486*

repeated loading, erosion, impact, Polezhaev (Yu.V.), *7498*
- beams, reinforced concrete, shear reinforcement, strain, Farghaly (S.A.), *8449*

Repik (E.U.), boundary layer (turbulent), friction (skin), heat transfer, reynolds analogy, Kuzenkov (V.K.), *6765*

Repik (Ye.U.), boundary layer (turbulent), correlation, flow measurement, Sosedko (Yu.P.), *2630*

Repukhov (V.M.), axial turbines, convection (forced), cooling, gas turbines, surface jets, Shvets (I.T.), *4676*

Rerkshanandana (N.), beams (box), eccentric loading, plates, ultimate strength, Usami (T.), (et al.), *7352*

Resende (L.), beams, finite element techniques, three dimensional formulation, Doyle (W.S.), *9143*

reservoir engineering, oil removal, simulation, Kazemi (H.), Merrill (L.S.), *2994*
- crack propagation, fracture mechanics, gas wells, hydraulics, interface cracks, Hanson (M.E.), Shaffer (R.J.), (et al.), *5311*
- simulation, three dimensional flow, Kuniansky (J.), Hillestad (J.G.), *7995*
- compaction, finite element methods, multiphase flow, subsidence, Morgan (K.), Lewis (R.W.), (et al.), *8912*
- petroleum deposits, porous media, Da Prat (G.), Cinco-Ley (H.), (et al.), *8922*

reservoirs, hydrocarbons, pressure gradient, Tiab (D.), Crichlow (H.B.), *960*
- channel flow, stratification, supercritical flow, variational methods, Benjamin (T.B.), *1495*
- design, ludwig tubes, orifices, Matsuo (K.), Kawagoe (S.), (et al.), *2763*
- half space, singularities, streamlines, viscous flow, Hasegawa (E.), Fukuda (H.), *3616*
- drainage, groundwater, infiltration, Guzova (A.M.), *4842*
- multiphase flow, porous media, Leventhal (S.H.), *5860*
- diffusion, lakes, Imberger (J.), Patterson (J.), (et al.), *5912*
- channel flow, finite difference methods, flood routing, Desikan (V.), Nath (S.C.), *6597*
- diffusion, particle fluid flow, particle size, turbidity, Miyanaga (Y.), Aki (S.), *6606*
- mathematical models, three dimensional flow, Coats (K.H.), *7984*
- lakes, mixing layers, wind-wave interaction, Imberger (J.), Hamblin (P.F.), *8519*
- jets, orifices, viscous buckling, Munson (B.R.), *8529*
- combustion chambers, simulation, Youngren (G.K.), *8943*
- experimental methods, fracture criteria, pressure change, Lee (W.J.), Holditch (S.A.), *8944*
- pressure gradient, simulation, Watts (J.W.) III, *8946*
- dams, earthquake effects, finite element techniques, pressure, Saini (S.S.), *9514*
- energy conversion, estuaries, pumps, tides, Robinson (I.S.), Perry (J.M.), *9521*
- energy conservation, energy storage, mathematical models, Ucer (A.S.), *9717*
- finite difference methods, mathematical models, three dimensional formulation, wells, Trimble (R.H.), Mcdonald (A.E.), *10059*
- asymptotic methods, conical bodies, moment coefficient, stresses (normal), Layrangues (P.), *10395*
- convection, energy storage, heat transfer (combined modes), hydrocarbons, storage, transient effects, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*
- algorithms, control, dynamic programming, Sniedovich (M.), *11085*
- containers (partially filled), nonlinear analysis, sloshing, variational methods, Limarchenko (O.S.), *11683*

residual strength, crack opening displacement, elastoplasticity, fracture mechanics, fracture toughness, Schwalbe (K.-H.), *2442*

residual stresses, asymptotic behavior, series, sheet metal, Yagoda (H.P.), *54*
- composite structures, finite element techniques, shells (of revolution), Blagonadezhin (V.L.), Dmitriev (A.V.), *92*
- drilling, experimental results, finite element methods, strain analysis, Schajer (G.S.), *490*
- offshore structures, shells (cylindrical), welded joints, White (J.D.), *529*
- drawing, materials processing, measurements, Shimahashi (Y.), Saito (K.), *1399*
- bonded joints, thermal stresses, Weitsman (Y.), *2975*
- airplane structures, composite materials, patching, thermal effects, Jones (R.), Callinan (R.J.), *2980*
- elastoplasticity, half space, indentation, shakedown structures, Hills (D.A.), Ashelby (D.W.), *3263*
- defects, lasers, layered media, nondestructive tests, ultrasonics, Berger (H.) eds., Linzer (M.), *3505, book*
- copper alloys, stress relaxation, x ray techniques, Amin (K.E.), Ganesh (S.), *4510*
- beams, bending, cyclic loading, strain measurement, Troshchenko (V.T.), Zhabko (N.I.), *4512*
- coatings, piston rings, stress analysis, thermoelasticity (steady), Kulik (A.Ya.), Shapiro (M.I.), *5099*
- composite materials, shells (of revolution), Blagonadezhin (V.L.), Vorontsov (A.N.), (et al.), *5100*
- machining (electrochemical), strain measurement, surfaces, Chadwick (F.J.), *5321*
- drilling, holes, strain measurement, Eggeman (G.W.), *5322*
- diffraction, plates, x ray techniques, Doi (O.), Ukai (T.), *5323*
- elastoplasticity, finite element techniques, Arkhipov (A.N.), Temis (Yu.M.), *6116*
- elastic waves, stonely waves, Guz (A.N.), Zhuk (A.P.), *6329*
- crack arrest, cyclic loading, cyclic testing, fatigue, Romaniv (O.N.), Siminkovich (V.N.), (et al.), *6420*
- deformation (plastic), holes, rings, strain gages, Misra (A.), Peterson (H.A.), *6468*
- holes, shafts, stress relieving, welding, Bush (A.F.), Kromer (F.J.), *6467*
- hardness, indentation, plastic flow, Rubenstein (C.), *6480*
- fracture, steel, surface effect, Iwai (Y.), Arima (J.), *7292*
- fatigue, surface effect, work hardening, Trofimov (V.V.), Radeeva (E.N.), *7293*
- acoustic measurements, flaw detection, j-integral, microstructures, nondestructive tests, stress intensity factor, Kino (G.S.), Barnett (D.M.), (et al.), *7585*
- gas turbines, mechanical joints, thermoplasticity, Kravchenko (B.A.), Gutman (G.N.), (et al.), *7953*
- acoustics, rayleigh waves, surface waves, Hirao (M.), Fukuoka (H.), (et al.), *8334*
- computing techniques, welded joints, Brust (F.W.), Rybicki (E.F.), *8367*
- cracks, elastic bodies, Guz (A.N.), *8387*
- acoustic measurements, acoustoelasticity, beams, rolling, transducers, Fukuoka (H.), Toda (H.), (et al.), *8428*
- coatings, laminates, Martynenko (A.A.), *9248*
- composite materials, x ray techniques, Tsai (S.-D.), Mahulikar (D.), (et al.), *9255*
- bars, beams, end effects, Schilling (C.G.), *9262*
- acoustic measurements, acoustoelasticity, deformation (plastic), nondestructive tests, Johnson (G.C.), *10316*
- aluminum alloys, thermal effects, ultrasonics, Salama (K.), Ling (C.K.), (et al.), *10321*

resins, composite materials, Kray (R.J.), *2244*

- adhesion, effective elastic moduli, materials properties, metallic composites, Spathis (G.D.), Sideridis (E.P.), (et al.), *5124*
- composite materials, fatigue, graphite, life expectancy, weibull statistics, Shimokawa (T.), Hamaguchi (Y.), *6203*
- composite materials, micromechanics, viscoelasticity (dynamic), Schaffer (B.G.), Adams (D.F.), *7273*
- composite structures, fibers, material testing, Strife (J.R.), Prewo (K.M.), *8218*
- composite materials, swell, thermal effects, thermal expansion, Adamson (M.J.), *10558*

Resio (D.T.), see Corson (W.D.), *7052*

resistance, deformation, life expectancy, low cycle fatigue, welded joints, Daunis (M.A.), Daunene (S.A.), *1352*
- bed load, roughness, sediment transport, Mantz (P.A.), *1496*
- heat exchangers, regenerators, thermal effects, Romie (F.E.), *3839*
- bending, cables, design, Shashaty (A.J.), *4552*
- equilibrium, fredholm equations, magneto fluid dynamics, toroids, Lo Surdo (C.), *4748*
- filtration, laminar flow, porous media, tube bundles, Kolodziej (J.A.), *5437*
- algorithms, conduits, roughness, Kumar (S.), Roberson (J.A.), *6594*
- automobiles, drag coefficient, friction (rolling), Roussillon (G.), *6726*
- conduction (heat), heat exchangers, microbial fouling, thermal contact resistance, thermal effects, Characklis (W.G.), Nimmons (M.J.), (et al.), *6812*
- heat transfer, helium, pipe flow, two phase flow, Petukhov (B.S.), Zhukov (V.M.), (et al.), *6976*
- nickel alloys, resistance thermometers, thermal measurements, Lushchaev (G.A.), Karchkov (V.A.), (et al.), *7822*
- elastic bodies, impact, structural analysis, Tagliacozzo (C.), *8344*
- evaporation, porous media, two phase flow, Maiorov (V.A.), *12067*

resonance, nonlinear characteristics, transmissions, Hortel (M.), Schmidt (G.), *388*
- asteroids, libration theory, perturbation methods, regularization, Garfinkel (B.), *871*
- periodic orbits, planetary satellites, solar system, stability theory, Wiesel (W.), *872*
- acoustics, cylindrical bodies, scattering, spherical bodies, Flax (L.), Dragonette (L.R.), (et al.), *907*
- lyapunov's functions, mechanical systems, stability theory, Tkhai (V.N.), *1077*
- distributed parameters, regulator problem, Starikov (A.F.), *1146*
- differential equations (ordinary), eigenvalue problems, spinning bodies, stability theory, Kunitsyn (A.L.), Medvedev (S.V.), *2000*
- acoustic emission, elastic constants, Boileau (P.E.), Grenier (M.), (et al.), *2489*
- averaging, solar system, spinning bodies, Robinson (C.), Murdock (J.), *2915*
- solar system, three body problem, Mettler (E.), *2917*
- acoustics, elastic bodies, scattering, sound fields, Flax (L.), Raju (P.K.), (et al.), *2935*
- acoustic waves, cavities, eigenvalues, tube bundles, Planchard (J.), *2948*
- dynamic response, fatigue, foundations, loads, offshore structures, Smith (I.M.), Molenkamp (F.), *3558*
- pipe flow, unsteady flow, wavy walls, Latinopoulos (P.), Tolikas (D.K.), *3711*
- artificial satellites, averaging, libration theory, restricted three body problem, Barkin (Iu.V.), Markov (Iu.G.), *3915*
- artificial satellites, libration theory, periodic orbits, restricted three body problem, Barkin (Yu.V.), Markov (Yu.G.), *3916*
- elastic waves, scattering, shear waves, spherical bodies, Brill (D.), Gaunaurd (G.), (et al.), *3947*
- beams (timoshenko), rotating bodies, vibration (forced), Victor (F.), Ellyin (F.), *4431*
- fluid-structure interaction, plates, vibration (flow induced), Strawderman (W.A.), Ko (S.-H.), (et al.), *4767*
- acoustic waves, elastic bodies, wave interactions, Fiorito (R.), Madigosky (W.), (et al.), *4779*
- absorption, acoustic properties, cavities, noise abatement, Velizhanina (K.A.), Oborotov (V.A.), *4783*
- acoustic waves, modes, reflection, transmission, viscoelastic materials, Madigosky (W.), Fiorito (R.), *4787*
- hamiltonian equations, second order analysis, stability theory, Ivanov (A.P.), Sokolskiĭ (A.G.), *4947*
- acoustics, viscoelastic fluids, Fiorito (R.), Madigosky (W.), (et al.), *5738*
- ocean air interaction, rossby waves, tides, Ivanovskii (A.I.), Krivolutskii (A.A.), *5941*
- critical speed, rotating bodies, vibration (forced), Matsuura (K.), *6305*
- acoustic waves, curved surfaces, rayleigh waves, ultrasonics, Lapin (A.D.), *6335*
- acoustic emission, duct flow, heat transfer, pipe flow, turbulent flow, unsteady flow, Andre (P.), Creff (R.), *6764*
- retaining walls, Aggour (M.S.), Brown (C.B.), *7043*
- differential equations (partial), perturbation methods, Roberts (A.J.), *7166*
- bifurcation, circumnavigation, differential equations (ordinary), stability theory, Goltser (I.M.), *7917*
- attitude control, hamiltonian equations, space vehicles, spinning bodies, Cochran (J.E.), Holloway (H.E.), *7923*
- capsizing, ocean waves, rolling motion, ship motion, stochastics, Blocki (W.), *8041*
- capsizing, models, rolling motion, safety, ship motion, Kuo (C.), Welaya (Y.), *8043*
- harmonic analysis, interaction, nonlinear analysis, wave interactions, Verheest (F.), *8114*
- boundary value problems, differential equations (ordinary), mathematical methods, turning point problems, Lewis (G.N.), *8125*
- absorption, collisicn models, energy conversion, laser plasma interaction, Guillaneux (P.), *8832*
- chimneys, gust loads, vortex shedding, wind loads, Richardson (J.R.), *8835*
- centrifugal fans, noise abatement, Koopmann (G.H.), Neise (W.), *8866*
- cams, dynamic stability, oscillators, Cronin (D.L.), Labouff (G.A.), *9468*
- acoustics, ducts, nonlinear characteristics, Rott (N.), *9845*
- acoustics, attenuation, ducts, Cote-Dunajewski (T.), *9846*
- cavities, compressible flow, heating, jets, pressure change, supersonic flow, Kuptsov (V.M.), Filippov (K.N.), *10417*
- nonlinear analysis, scattering, three wave resonance, wave interactions, Kaup (D.J.), *10482*
- axial flow, cylindrical bodies, flexible bodies, oscillations, slender bodies, Paidoussis (M.P.), Issid (N.T.), (et al.), *10765*
- earthquake resistant structures, soils, structural response, Herzog (M.A.M.), *10853*
- gravity waves (internal), nonlinear analysis, wave interactions, Liu (A.K.), Kubota (T.), (et al.), *11566*
- compressional waves, ducts (variable area), piping systems, Belik (N.P.), Chirva (L.G.), *11605*
- scattering, wave interactions, Ma (Y.C.), *11621*
- radiation, sound, tubes, Zuckerwar (A.J.), Meredith (R.W.), *11975*

respiratory system, analog simulation, cardiovascular system, simulation, Balasubramanian (R.), *230*
- lungs, spirometry, volumetric meters, Jones (D.P.), O'Connor (S.A.), (et al.), *1962*
- biomathematics, mathematical models, nervous system, Chestnova (A.A.), Chetayev (A.N.), *3224*
- human engineering, prosthetic devices, Nouh (A.), *6029*
- bronchi, flow measurement, lungs, Horsfield (K.), Thurlbeck (A.), *9061*

restraint systems, inflatable structures, inflation, membranes (inflatable), Cole (B.N.), *1242*
- stiffness matrix, structures, Mohr (G.A.), *3139*

restricted three body problem, libration theory, periodic orbits, Broakwell (J.V.), Brown (J.V.), *876*
- hamiltonian equations, kepler orbits, n body problems, periodic orbits, Meyer (K.R.), *1786*
- bifurcation, periodic orbits, Robin (I.A.), *1788*
- orbit mechanics, three body problem, Patetta (N.), *1789*
- bifurcation, hamiltonian equations, periodic orbits, Bottkol (M.), *1997*
- libration theory, stability theory, Meire (R.), *2916*
- artificial satellites, averaging, libration theory, resonance, Barkin (Iu.V.), Markov (Iu.G.), *3915*
- artificial satellites, libration theory, periodic orbits, resonance, Barkin (Yu.V.), Markov (Yu.G.), *3916*
- equilibrium, libration theory, Szebehely (V.), Mckenzie (R.), *3917*
- orbit mechanics, perturbation methods, Kaufman (B.), *3918*
- circumnavigation, three body problem, Llibre (J.), Simo (C.), *4953*
- gravity, orbits, solar system, swing-by, Farquhar (R.W.), Dunham (D.W.), *5706*
- jacobian constant, planetary theory, solar system, stability theory, Szebehely (V.), Mckenzie (R.), *8837*
- libration theory, periodic orbits, planetary theory, Richardson (D.L.), *8840*
- computing techniques, periodic orbits, Zikides (M.K.), *8841*
- lyapunov's functions, stochastics, Gonczi (R.), Froeschle (C.), *9810*
- libration theory, three dimensional formulation, Richardson (D.L.), *9811*
- hamilton principle, periodic orbits, series expansion, Hitzl (D.L.), Levinson (D.A.), *9812*
- periodic orbits, stability theory, Kammeyer (P.C.), *9813*
- approximations, stability theory, Markellos (V.V.), Szebehely (V.), *10773*

retaining walls, earth pressure, frozen ground, slopes, soil mechanics, Novikov (F.Ya.), *420*
- earth pressure, granular media, Misra (B.), *6395*
- resonance, Aggour (M.S.), Brown (C.B.), *7043*
- earth pressure, Phatak (D.R.), *7444*

Retelle (J.P.) Jr., oscillatory flow, unsteady flow, variable area flow, wind tunnels, Mcmichael (J.M.), (et al.), *10541*

Retford (E.T.), see Schlueter (R.A.), *2194*

return flow, channels (closed), jets, Sallam (T.M.), Kaji (M.), (et al.), *2660*
- boundary layer (turbulent), flow reversal, unsteady state, Cousteix (J.), Le Balleur (J.-C.), (et al.), *7703*

Reul (H.), blood flow, heart, valves, Talukder (N.), (et al.), *4917*

Reuss (P.), holes, pressure vessels, shells (axisymmetric), stress analysis, *241*

Reuter (W.G.), crack growth, crack initiation, failure, steel, Brown (H.L.), (et al.), *7471*

Reva (V.N.), see Burdyuk (V.Ya.), *2032*

Revell (J.D.), airplane structures, airplanes, noise abatement, Balena (F.J.), (et al.), *9850*

reverberation, acoustics, sound generation, Yousri Gerges (S.N.), *901*

- acoustic measurements, holography, Dikshit (H.K.), Dikshit (K.D.), *3971*
- absorption, geometrical properties, noise abatement, Bartel (T.W.), *4800*
- coherent structure, sound fields, Chu (W.T.), *5770*
- sound fields, Ebeling (K.J.), Freudenstein (K.), *5772*
- acoustics (architectural), eigenvalue problems, Van Nieuwland (J.M.), Weber (C.), *5775*
- absorption, series expansion, Joyce (W.B.), *6932*
- attenuation, sound generation, Thunder (T.D.), *7944*
- absorption, acoustic properties, acoustic waves, decay, Lyle (C.D.), *10787*
- acoustics (architectural), transfer functions, Davy (J.L.), *10799*
- acoustics, energy methods, Maidanik (G.), Maga (L.J.), *11930*
- acoustics, decay, energy methods, Kawakami (F.), Yamaguchi (K.), *11931*
- sound fields, transient effects, Lyle (C.D.), *11937*
- acoustics (architectural), decay, diffusion, Kuttruff (K.H.), *11938*
- acoustics, decay, Lyle (C.D.), *12001*

Revesz (G.), see Hajnal (M.), *8172*

rewetting, cladding, nuclear reactors, Sawan (M.E.), Temraz (H.M.), *730*
- cooling, nuclear reactors, transition boiling, Kim (A.K.), Lee (Y.), *1714*
- boiling, conduction (heat), thermal waves, Zhukov (S.A.), Barelko (V.V.), (et al.), *4704*
- boiling, peclet number, Bonakdar (H.), Mcassey (E.V.) Jr., *6773*
- channel flow, conduction (heat), Salcudean (M.), Rahman (M.), *8731*
- hydraulics, tubes, unsteady flow, Chan (A.M.C.), Banerjee (S.), *10825*

Rex (D.), artificial satellites, manned satellites, reentry, weather satellites, *10780*

Reynolds (A.C.) Jr., see Bennett (C.O.), *4841*

Reynolds (A.J.), see El Telbany (M.M.M.), *8570*

Reynolds (B.), see Lakshminarayana (B.), *11553*
- axial compressors, blades, hot wire, three dimensional flow, wakes, Lakshminarayana (B.), *11738*

Reynolds (D.D.), see Carnes (T.N.), *11927*

Reynolds (W.C.), see Biringen (S.), *5465*

reynolds analogy, boundary layer (turbulent), friction (skin), heat transfer, Repik (E.U.), Kuzenkov (V.K.), *6765*
- film boiling, galilei number, hydrodynamic stability, nusselt number, Klimenko (V.V.), *7829*

reynolds equation, bearings (hydrodynamic), bearings (journal), lubrication (hydrodynamic), Banerjee (M.B.), Gupta (R.S.), (et al.), *1012*
- airfoil characteristics, finite difference methods, stratification, trailing vortices, turbulent flow, vortices, wakes, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- bearings (foil), bearings (gas lubricated), bearings (spherical), Ono (K.), Mizukawa (M.), *1939*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), stiffness, Kamala (V.), *1943*
- bearings (journal), finite element methods, stability, Manfrida (G.), Martelli (F.), *2567*
- finite element methods, galerkin method, oil films, seals, Dhagat (S.K.), Sinhasan (R.), (et al.), *2569*
- bearings (journal), galerkin method, lubrication (hydrodynamic), Schmidt (J.), *3044*
- boundary layer, cauchy problem, compressible flow, computing techniques, plates, Yakhot (A.), Ben-Dor (G.), (et al.), *3657*
- bearings (slider), laplace transform, lubrication (hydrodynamic), Macdonald (D.A.), *4107*
- lubrication (hydrodynamic), turbulent flow, Kumar (V.), *4108*
- bearings (gas lubricated), bearings (slider), film thickness, finite element methods, Mitsuya (Y.), *5983*
- particle fluid flow, pressure drop, Tozeren (H.), Skalak (R.), *5985*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), whirling shafts, Murata (S.), Miyake (Y.), (et al.), *5995*
- bearings (hydrodynamic), dynamic properties, finite element methods, rotors, Birembaut (Y.), Peigney (J.), *5997*
- bearings (gas lubricated), bearings (journal), finite difference methods, lubrication (hydrostatic), Pande (S.S.), Somasundaram (S.), *7098*
- film thickness, lubrication (hydrodynamic), squeeze films, Vora (K.H.), *9031*
- bearings (journal), peclet number, temperature, viscosity, Smith (R.N.), Tichy (J.A.), *9039*
- rolling contact, rolling contact, temperature, viscosity, Mahdavian (S.M.), *9040*
- bearings (journal), cavitation, lubrication (hydrodynamic), numerical methods, Meyer (G.H.), *9045*
- bearings (gas lubricated), bearings (thrust), design, Safar (Z.S.), *9957*
- bearings (hydrostatic), finite element methods, lubrication (hydrostatic), Belousov (A.I.), Goryunov (L.V.), (et al.), *9960*
- additives, bearings (journal), lubrication (hydrodynamic), micropolar media, Singh (C.), Sinha (P.), *9963*
- bearings (journal), computer aided design, finite difference methods, lubrication (hydrodynamic), thermal effects, Cowking (E.W.), *9964*
- bearings (gas lubricated), bearings (thrust), lubricants (gas), vibration, Wernerowski (K.), *9966*
- lubrication (hydrodynamic), roughness, seals, surfaces, thermoelasticity, Wu (Y.-T.), Burton (R.A.), *12092*

reynolds equation (lubrication), bearings (journal), lubrication (hydrodynamic), Knoll (G.), Peeken (H.), (et al.), *3146*

reynolds equation (turbulence), liquids, three dimensional flow, turbulent flow, Shablovskii (O.N.), *4650*
- boundary roughness, hypersonic flow, transition, Boudreau (A.H.), *9565*

reynolds number, boundary layer, navier stokes equation, numerical analysis, Hedstrom (G.W.), Osterheld (A.), *606*
- frost, transition (reverse), transition flow, Lysenko (V.I.), Maslov (A.A.), *1539*
- boundary layer, shape factors, transition, turbulence, Wazzan (A.R.), Gazley (C.) Jr., (et al.), *1540*
- friction factor, natural surfaces, roughness, Musker (A.J.), *1564*
- turbulence (geophysical), turbulence (structure), Antonia (R.A.), Chambers (A.J.), *1583*
- aerodynamic performance, supersonic flow, wing body combinations, Stallings (R.L.) Jr., Lamb (M.), (et al.), *1628*
- cavitation inception, orifices, vorticity, Yamaguchi (A.), Suzuki (T.), *2586*
- boundary layer, channel flow, sediment transport, transition flow, Ramaprian (B.R.), Mueller (A.), *2632*
- film flow, froude number, rotating cylinders, surface tension, weber number, Kovac (J.), Balmer (R.T.), *3628*
- averaging, channel flow, magnetic fluids, magneto fluid dynamics, Lavrentev (I.V.), *3895*
- free shear layer, laminar flow, transition, turbulence, Demetriades (A.), Ortwerth (P.J.), (et al.), *4605*
- computing techniques, fluid injection, laminar flow, navier stokes equation, Smith (F.T.), Dennis (S.C.R.), *4613*
- bingham number, drawing, dynamic analysis, strips, Camenschi (G.), Sandru (N.), *5279*
- boundary layer, interaction, mach number, navier stokes equation, shock waves, Mateer (G.G.), Viegas (J.R.), *5432*
- jets, velocity profiles, Antonia (R.A.), Chambers (A.J.), (et al.), *5450*
- boundary layer (turbulent), numerical methods, turbulence model, Biringen (S.), Reynolds (W.C.), *5465*
- aerodynamic performance, centrifugal compressors, compressible flow, geometrical properties, Wachter (J.), Wohrl (B.), *5499*
- lubricants (liquid), lubrication (hydrodynamic), squeeze films, Hamza (E.A.), Macdonald (D.A.), *5980*
- lubrication (hydrodynamic), poiseuille flow, roughness, stokes flow, surfaces, Phan-Thien (N.), *8063*
- contact problems, film thickness, lubrication (elastohydrodynamic), viscosity, Evans (H.P.), Snidle (R.W.), *9027*
- bearings (gas lubricated), bearings (journal), laminar flow, thermal effects, Fijalkowski (S.), *9965*
- bodies of revolution, cavitation inception, turbulence (freestream), water tunnels, Murai (H.), Ihara (A.), *10397*
- lubrication (hydrodynamic), navier stokes equation, squeeze films, variational methods, Verma (R.L.), *10892*
- shear flow, turbulence (structure), turbulent flow, velocity profiles, Antonia (R.A.), Satyaprakash (B.R.), (et al.), *11546*
- bodies (liquid filled), inertial waves, rotating cylinders, Whiting (R.D.), *11684*

reynolds number (critical), boundary layer (control), hydrodynamic stability, tollmien schlichting waves, Milling (R.W.), *1579*
- channel flow, developing flow, hydrodynamic stability, stability theory, Gupta (S.C.), Garg (V.K.), *3700*
- constrictions, experimental results, hydrodynamic stability, pipe flow, Lopez (J.L.), *3705*
- developing flow, hydrodynamic stability, pipe flow, velocity profiles, Garg (V.K.), *5460*
- developing flow, hydrodynamic stability, pipe flow, three dimensional flow, Garg (V.K.), Gupta (S.C.), *6676*
- convection, friction (skin), heat transfer, tubes, viscous flow, Addlesee (A.J.), *7571*
- convection, pipe flow, thermal instability, El-Hawary (M.A.), *8713*

reynolds number (high), compressible flow, navier stokes equation, unsteady flow, Zeytounian (R.), *585*
- heat transfer, matched asymptotic expansions, second order analysis, wall jets, Afzal (N.), *592*
- asymptotic behavior, boundary layer (turbulent), flow obstructions, incompressible flow, Sykes (R.I.), *595*
- convergence, euler equations, mathematical methods, vorticity, Haid (O.H.), *1121*
- aerodynamics, compressible flow, numerical methods, survey, Le Balleur (J.C.), Peyret (R.), (et al.), *1527*
- asymptotic methods, boundary layer, incompressible flow, separation, surveys, Ruban (A.I.), Sychev (V.V.), *1550*
- acoustics, boundary value problems, mathematical methods, viscous flow, Geymonat (G.), Sanchez-Palencia (E.), *3104*
- iterative methods, navier stokes equation, numerical analysis, two dimensional flow, Cebeci (T.), Hirsh (R.S.), (et al.), *3130*
- boundary layer, fluid injection, laminar flow, subsonic flow, Napolitano (M.), Messick (R.E.), *3656*
- high speed flow, streamlines, Riley (N.), *3684*
- boundary layer, modeling, turbomachinery, wind tunnels, Blair (M.F.), Bailey (D.A.), (et al.), *4688*
- probability theory, stochastic processes, turbulence, Barndorff-Nielsen (O.), *4936*

- compressible flow, navier stokes equation, numerical methods, Davydov (Yu.M.), *5422*
- boundary layer, fluid mechanics, transition, Fraser (C.J.), Milne (J.S.), *5430*
- channel flow, flow irregularities, flow obstructions, pressure drop, Unger (J.), *5439*
- axial pumps, cavitation, noise, vibration (flow induced), Vladaianu (D.), Marinescu (V.), *5501*
- elliptic equations, finite difference methods, interpolation, Han (T.), Humphrey (J.A.C.), (et al.), *6625*
- plates (perforated), sound propagation, turbulent flow, unsteady flow, vortex shedding, Howe (M.S.), *6897*
- free shear layer, hydrodynamic stability, mathematical models, Huerre (P.), Scott (J.F.), *7742*
- discharges, hydraulic instruments, jets, orifices, Akers (A.), *8510*
- mathematical models, navier stokes equation, turbulence, Deissler (R.G.), *8617*
- blunt bodies, film flow, rainfall, reynolds number (small), Brehm (E.), *9544*
- boundary layer, flow obstructions, two dimensional flow, Smith (F.T.), Brighton (P.W.M.), (et al.), *10423*
- annular flow, numerical methods, rotating bodies, spherical bodies, Nakabayashi (K.), Nishida (H.), (et al.), *11375*
- micromeritics, particle fluid flow, power law fluids, Hua (T.N.), Ishii (T.), *12017*

reynolds number (small), drops, surface tension, two dimensional flow, Vanden-Broeck (J.-M.), *569*
- blood flow, spherical bodies, trajectories, Starobin (I.M.), *571*
- blunt bodies, leading edge, separated flow, Lane (J.C.), Loehrke (R.I.), *574*
- inertia, navier stokes equation, rotating disks, Bar-Yoseph (P.), Salan (A.), (et al.), *579*
- film flow, sloping bottom, wavy walls, Wang (C.Y.), *1511*
- critical flow, dripping flow, drops, Dunskii (V.F.), Nikitin (N.V.), *1512*
- drag, drops, fluctuating flow, oscillations, Stewart (M.B.), *3623*
- drag coefficient, porous surfaces, spherical bodies, Masliyah (J.H.), Polikar (M.), *3632*
- finite difference methods, navier stokes equation, stream function, vorticity, Rubin (S.G.), Khosla (P.K.), *4588*
- irrigation, laminar flow, Vorontsov (E.G.), Yakhno (O.M.), *4598*
- dispersion, gravity waves (surface), oscillatory flow, ripples, viscous flow, Kamachi (M.), Honji (H.), *5473*
- mixtures, pipes, turbulent flow, two phase flow, Chisholm (D.), *5815*
- finite element techniques, galerkin method, navier stokes equation, viscous flow, Heinrich (J.C.), Marshall (R.S.), *7679*
- nonisothermal flow, similarity methods, squeeze flow, unsteady flow, Phan-Thien (N.), *7724*
- cylindrical bodies, end effects, wakes, Slaouti (A.), Gerrard (J.H.), *7732*
- film flow, surface waves, viscous flow, Demekhin (E.A.), Shkadov (V.Ya.), *7758*
- stability, visualization, vortex rings, Takamoto (M.), Izumi (K.), *8525*
- bodies of revolution, rotating bodies, secondary flow, separated flow, Smith (S.H.), *8527*
- cavities, finite difference methods, navier stokes equation, two dimensional flow, Gupta (M.M.), *8543*
- impact jets, oscillations, plates, viscous buckling, Cruickshank (J.O.), Munson (B.R.), *9526*
- asymptotic methods, spherical bodies, unsteady flow, Sano (T.), *9530*
- internal flow, rotating bodies, spherical bodies, Rumez (W.), *9536*
- cylindrical bodies, eddies, finite difference methods, Smith (F.T.), *9540*
- drag coefficient, particle dynamics, spherical bodies, visualization, Boillat (J.L.), Graf (W.H.), *9541*
- blunt bodies, film flow, rainfall, reynolds number (high), Brehm (E.), *9544*
- fluid-structure interaction, oscillating bodies, viscous flow, Guz (A.N.), *11677*

reynolds stresses, cylindrical bodies, drag, grids, piers, piles, submerged bodies, Ball (D.J.), Hall (C.D.), *2585*
- closure, curvature, mixing layers, turbulence, turbulence model, Gibson (M.M.), Rodi (W.), *2691*
- averaging, suspensions, two phase flow, Iwanaga (M.), Ishihara (T.-O.), *2985*
- boussinesq equation, hydraulics, turbulence model, turbulent flow, Rodi (W.), *4570, book*
- closure, statistical theory, turbulence, Yoshizawa (A.), *4644*
- hot wire, turbulence, De Grande (G.), Kool (P.), *6694*
- boundary layer (atmospheric), drag coefficient, friction coefficient, friction velocity, ocean air interaction, roughness, turbulence (geophysical), Wu (J.), *8980*
- boundary layer (atmospheric), friction coefficient, friction velocity, heat transfer (atmospheric), ocean air interaction, turbulence (geophysical), Smith (S.D.), *8997*
- closure, continuum mechanics, turbulence, Speziale (C.G.), *9612*
- dissipation, drag coefficient, ocean air interaction, wind, Large (W.G.), Pond (S.), *10872*
- strain rate, turbulence (isotropic), turbulence model, vorticity, Siggia (E.D.), *11541*
- shear flow, stress strain relationships, turbulence model, turbulent flow, So (R.M.C.), Peskin (R.L.), *11559*

Reznichenko (V.A.), analog to digital conversion, computer graphics, digital analog computation, Bugiov (E.G.), (et al.), *4511*

Reznichenko (V.V.), absorption, radiant interchange, radiating flow, variable thermal properties, Smirnov (V.N.), *10609*

Reznikov (B.S.), buckling (thermal), failure, shells (stiffened), thermoelasticity, *352*

Reznikov (L.M.), damping, design (optimum), frequency domain techniques, stochastic systems, Fishman (G.M.), *9179*

Rhee (H.C.), boundary conditions, cracks, finite element methods (hybrid), finite element techniques, Atluri (S.N.), *88*

Rheinboldt (W.C.), computing techniques, continuation methods, finite element techniques, mesh generation, nonlinear mechanics, structural analysis, *6089*
- see Babuska (I.), *7205*

rheology, constitutive equations, extensional flow, non newtonian flow, Huilgol (R.R.), *546*
- constitutive equations, thermal properties, thermodynamic properties, viscous effects, Lebon (G.), Rubi (J.M.), *719*
- biomechanics, continuum mechanics, flow, fluid mechanics, Dokumentation Rheologie, *1482, book*
- micromechanics, polar fluids, viscous flow, Rajagopal (K.R.), Gupta (A.S.), *1968*
- flow, plastics, polymers, Cogswell (F.N.), *2573, book*
- biomechanics, shear flow, viscometry, Whorlow (R.W.), *2578, book*
- biomaterials, lungs, tissues, Fung (Y.C.), *3062*
- equations of motion, existence theorems, polar fluids, viscoelastic fluids, Solonnikov (V.A.), Kazhikhov (A.V.), *3076*
- navier stokes equation, statistical continuum mechanics, turbulence (structure), viscous flow, Enz (C.P.), *4126*
- polar fluids, stagnation point, Guram (G.S.), Smith (A.C.), *4136*
- materials possessing memory, thermodynamics (nonequilibrium), Huet (C.), *4566*
- continuum mechanics, elasticity (nonlinear), fluid mechanics, solid mechanics, Gurtin (M.E.), *4924, book*
- creep, fibers, textiles, Koczy (L.), Fulop (I.), *5137*
- concrete, consolidation, vibration, Aci Committee 309, *5352*
- coal, particle fluid flow, Ghassemzadeh (M.R.), Carmi (S.), *5385*
- micromechanisms, polymers, viscoelastic fluids, Johnson (M.W.) Jr., Segalman (D.), *5386*
- continuum theory, kinematics, relativity, Huilgol (R.R.), *6038*
- polar fluids, statistical continuum mechanics, Lombardero (M.), Lago (S.), *6581*
- polar fluids, statistical continuum mechanics, thermodynamic properties, Lago (S.), Lombardero (M.), *6582*
- chemical reactions, coal, heat addition, liquefaction, Khandhadia (P.S.), Forsyth (T.H.), (et al.), *6769*
- continuum mechanics, internal state variables, thermodynamics (nonequilibrium), Pfeifroth (L.), *7133*
- particle fluid flow, suspensions, viscosity, Tanaka (H.), White (J.L.), *7639*
- free boundary, rotating cylinders, viscoelastic fluids, Beavers (G.S.), Yoo (J.Y.), (et al.), *7642*
- contact problems, lubrication (elastohydrodynamic), thermal effects, traction, Houpert (L.), Flamand (L.), (et al.), *8064*
- biomechanics, closed conduit flow, collapse, vocal cords, Conrad (W.A.), *9058*
- hydrodynamic stability, rotating disks, Rajagopal (K.R.), Gupta (A.S.), *9603*
- heat transfer, laminar flow, non newtonian flow, nusselt number, pipe flow, power law fluids, Joshi (S.D.), Bergles (A.E.), *10582*

Rhines (P.B.), see Holland (W.R.), *10860*

Rhodes (E.), see Khalil (M.F.), *5990*

Rhodes (F.E.), see Ditcher (A.K.), *280*

Rhodes (J.), elastoplasticity, imperfections, plates, *270*

Riahi (N.), chandrasekhar number, convection, electro fluid dynamics, magneto fluid dynamics, rayleigh number, *760*
- convection, heat transfer, mass transfer, prandtl number, *5616*
- convection, diffusion, modal analysis, nonlinear analysis, rayleigh number, *7841*
- convection, magneto fluid dynamics, nonlinear materials, prandtl number, *10584*

Riashko (L.B.), design, stability theory, stochastic systems, *4248*

Riaux (H.), see Aribert (J.M.), *1437*

Riazantsev (Iu.S.), see Berman (V.S.), *2858*

Riba (J.P.), see Sandoval-Robles (J.G.), *10681*

Ribaut (M.), blades, cascades, friction, pressure distribution, trailing edge, Niessner (H.), *2654*

Ribeiro (G.), see Lin (T.H.), *4351*

Ribreau (C.), see Bonis (M.), *8074*

riccati equation, algorithms, optimal control, Allwright (J.C.), *2117*
- optimal control, regulator problem, singular perturbations, Dmitriev (M.G.), *2119*
- attitude control, flexible bodies, space vehicle structures, Fenton (J.), Gill (K.F.), *3921*
- distributed parameters, optimal control, Huntley (E.), *4315*
- oscillations, time invariant systems, Nishimura (T.), Kano (H.), *5041*
- boundary layer, eigenvalues, semi infinite media, Bramley (J.S.), Sloan (D.M.), *6065*
- discrete systems, eigenvalues, pole placement, Mori (Y.), Shimemura (E.), *7228*
- computing techniques, periodic orbits, Sanchez (D.A.), *9121*
- algorithms, lyapunov's functions, matrix methods, numerical methods, Balzer (L.A.), *11042*

Ricceri (G.), elastic constants, sand, saturation, strength, triaxial tests, Soranzo (M.), *3399*
Ricco (M.), automobiles, brakes, friction (solid solid), high temperature, *1469*
Rice (E.J.), jet engines, sound generation, sound propagation, Heidelberg (L.J.), *11929*
Rice (J.R.), crack growth, crack tip geometry, elastoplasticity, finite element methods (hybrid), fracture mechanics, Drugan (W.J.), (et al.), *2441*
- acoustic emission, damage, elastic waves, microcracks, *6355*
- see Riedel (H.), *9406*

Rice (R.W.), ceramics, crystals, flaws, grinding, polycrystalline materials, strength, Mecholsky (J.J.), (et al.), *7469*
Richard (H.A.), photoelasticity, stress concentration, stress intensity factor, *7541*
Richard (J.), beams, elastic foundations, railroads, vibration (free), *1274*
Richard (P.D.), see Paciga (J.E.), *3069*
Richard (R.M.), bolted joints, connections, joints, structural analysis, Gillett (P.E.), (et al.), *525*
Richards (B.E.), film cooling, hypersonic flow, laminar flow, slots, thermal protection, Stollery (J.L.), *5561*
Richards (E.J.), impact, noise abatement, sound generation, *2956*
Richards (G.D.), channel flow, finite element techniques, holes, plates (holed), viscoelastic fluids, Townsend (P.), *10445*
Richards (R.) Jr., design (optimum), elasticity, harmonic analysis, inclusions, Bjorkman (G.S.) Jr., *2510*
Richardson (D.L.), libration theory, periodic orbits, planetary theory, restricted three body problem, *8840*
- libration theory, restricted three body problem, three dimensional formulation, *9811*

Richardson (G.C.), see Sauer (J.A.), *8377*
Richardson (J.M.), acoustic measurements, brittle fracture, ceramics, life expectancy, probability, risk, Evans (A.G.), *9437*
Richardson (J.R.), chimneys, gust loads, resonance, vortex shedding, wind loads, *8835*
Richardson (S.M.), asymptotic methods, duct flow, elliptical bodies, *2791*
richardson number, boundary layer (turbulent), flow measurement, interface phenomena, Piat (J.-F.), Hopfinger (E.J.), *8557*
- shear layer, turbulence (clear air), turbulence (geophysical), Keller (J.L.), Haines (P.A.), *10478*
- buoyancy, hydrodynamic stability, shear flow, stratified flow, turbulent flow, Kranenburg (C.), *11535*

Richart (F.E.) Jr., see Allen (N.F.), *5836*
Richter (H.J.), annuli, flooding, liquid vapor mixture, nuclear reactors, two phase flow, *8576*
Richter (T.), see Savidis (S.A.), *2346*
Ricker (G.G.), see Williams (J.R.), *1824*
Rickerby (D.G.), impact, plasticity, spherical bodies, Macmillan (N.H.), *6365*
Ricketts (D.), piezoelectric devices, transducers, underwater acoustics, *12008*
ricochet, ballistics, cylindrical bodies, rotating cylinders, water, water surface, Bai (Y.L.), Johnson (W.), *11652*
Ricou (R.), see Chambarel (A.), *8827*
Rida (M.A.M.), see Dougill (J.W.), *9411*
Ridha (A.H.), see Barclay (W.H.), *5427*
Riedel (D.), cylindrical bodies, elastoplasticity, forming, pressurized pipes, *7344*
Riedel (H.), crack opening displacement, crack propagation, creep rupture, fracture mechanics, stress intensity factor, Rice (J.R.), *9406*
Rieder (G.), eigenvalues, elastic bodies, vibration, Zastrow (U.), *7378*
Riege (H.), see Abdel Aziz (M.M.), *7845*
Rienecker (M.M.), see Fenton (J.D.), *11560*
Rienstra (S.W.), acoustics, exhaust gases, vortex shedding, *11960*
- diffraction, sound, trailing edge, vortex shedding, *11978*

Riera (J.D.), see Bignon (P.G.), *6363*
Ries (H.), electroslag welding, nondestructive tests, surfaces, welding, Brezina (P.), (et al.), *2571*
Riethmuller (M.L.), see Lourenco (L.), *4831*
Rifert (V.G.), condensation, fins, heat exchangers, tubes, *2843*
Riff (R.), see Baruch (M.), *10007*
Riganti (R.), nonlinear systems, random excitation, vibration (nonlinear), *1268*
- see Bellomo (N.), *3107*

rigid bodies, dynamic stability, rotating bodies, Chudnenko (A.N.), *1068*
- biaxial loading, cracks, inclusions, Viola (E.), Piva (A.), *1366*
- dynamic behavior, Mangeron (D.), Irimiciuc (N.), *3085, book*
- kinematics, mechanisms, Pekarek (F.), *3087*
- dynamic analysis, rotating bodies, Johnston (G.W.), *4143*
- dynamic analysis, kinematics, Falk (S.), *4936*
- dynamics, reliability, Schrader (K.H.), *5036*
- kinematics, mathematical methods, Freudenstein (F.), Primose (E.J.F.), *6049*
- dynamic interaction, impact, Brach (R.M.), *6051*
- analogies, deformable bodies, finite element techniques, structural analysis, Grabski (J.), *7215*
- design, linkages, mobility, structures, Baker (J.E.), *7631*
- dynamic analysis, kinematics, Laub (A.J.), Shiflett (G.R.), *8093*
- lyapunov's functions, spinning bodies, stabilization, Kern (G.), *8097*
- connected bodies, dynamic analysis, energy dissipation, gyrodynamics, Rimrott (F.P.J.), *8099*
- gait, human body, locomotion, Hardt (D.E.), Mann (R.W.), *9056*
- bones, geometrical properties, Charit (Y.), *9070*
- kinematics, mathematical models, mechanical systems, Lotstedt (P.), *9083*
- artificial satellites, dynamic programming, optimal control, Akulenko (L.D.), *9818*
- dynamic response, flexible bodies, stiffness matrix, Huston (R.L.), *10012*
- dynamic analysis, vibration (torsional), Slawianowski (J.J.), *10193*
- dynamic analysis, lagrange equations, Kuipers (M.), Van De Ven (A.A.F.), *10928*
- boundary conditions, two phase flow, Yankov (Ya.D.), *11452*

Rigney (D.A.), see Heilmann (P.), *12089*
Rikards (R.B.), see Narusberg (V.L.), *5348*
- beams (timoshenko), optimization, vibration (forced), *7384*
- beams, composite structures, design (minimum weight), design (optimum), reinforced bodies, structural stability, vibration, *10348*

Riley (D.R.), see Coit (W.G.), *4557*
Riley (N.), high speed flow, reynolds number (high), streamlines, *3684*
- see Potter (J.M.), *8793*

Riley (W.A.) Jr., diffraction, optical techniques, ultrasonics, waves, *7947*
Rimrott (F.), dynamic stability, rotating bodies, spinning bodies, vibration (self excited), *9089*
Rimrott (F.P.J.), connected bodies, dynamic analysis, energy dissipation, gyrodynamics, rigid bodies, *8099*
Rimskii (V.K.), conical bodies, impact, layered media, simulation, Sabodash (P.F.), *405*
- impact, plates (sandwich), wedges, Sabodash (P.F.), *11176*

Rinaldi (S.), see Gatto (M.), *7660*
Rind (E.), dynamic properties, pendulums, polymers, ropes, torsion, transducers (displacement), Bryant (E.L.), *3510*
rings, large displacement, Watson (L.T.), Wang (C.Y.), *301*
- contact problems, rotating disks, Babloyan (A.A.), Engibarian (A.A.), *327*
- buckling, Hassan (S.D.), El-Ghabaty (S.S.), *340*
- collapse, large displacement, plastic behavior, postbuckling behavior, Kyriakides (S.), Babcock (C.D.), *1249*
- bearings, contact stresses, cylindrical bodies, Kosova (N.V.), Atopov (V.I.), (et al.), *2223*
- large displacement, plastic behavior, punch problems, Ghosh (S.K.), Johnson (W.), (et al.), *3296*
- eigenvalues, vibration (forced), Teichmann (D.), *3363*
- crack initiation, ductile fracture, plasticity, rotating disks, Tomkins (B.), Atkins (A.G.), *3431*
- design (elastic), load cells, Barbato (G.), Desogus (S.), (et al.), *3512*
- disks, elasticity (linear), holes, Uspenskii (A.A.), *5166*
- deformation (plastic), holes, residual stresses, strain gages, Misra (A.), Peterson (H.A.), *6466*
- sound fields, sound generation, Lvova (E.A.), Khimunin (A.S.), *6937*
- asymptotic behavior, composite materials, fibers, Bogan (Yu.A.), *7326*
- contact problems, machine elements, Teplyi (M.I.), Chernets (M.V.), *7327*
- boundary value problems, elastic foundations, elasticity (linear), Siemer (H.), Welskopf (H.), *7328*
- gyrodynamics, rotating bodies, structural response, vibration (nonlinear), Maewal (A.), *7368*
- elastic foundations, elasticity (linear), influence coefficients, Hegedus (I.), *8235*
- buckling, combined loading, elasticity (linear), Schmidt (R.), *8262*
- elastic bodies, large displacement, perturbation methods, stick—slip, Benson (R.C.), *9260*
- imperfection sensitivity, postbuckling behavior, pressure, Schmidt (R.), *9282*
- buckling (plastic), ductile fracture, dynamic effects, imperfections, Rajendran (A.M.), Fyfe (I.M.), *9286*
- elastic foundations, plates, structural analysis, structural optimization, Makeev (E.M.), Semenenko (V.P.), *11111*
- arches, beams (curved), buckling (nonlinear), Batoz (J.-L.), *11120*
- screens, sound propagation, transmission, De Smedt (R.), *11988*

Rinkinen (W.J.), see Quintiere (J.G.), *9778*
Rionero (S.), see Galdi (G.P.), *4124*
Ripa (P.), gravity waves (internal), nonlinear analysis, rossby waves, wave interactions, *7761*
Ripp (A.G.), see Deryabina (G.N.), *9434*
Ris (V.F.), abrasion, blades, centrifugal compressors, dust, *2755*
risk, life expectancy, offshore structures, Ostergaard (C.), Schellin (T.E.), *527*
- mathematical models, operations research, Kottas (J.F.), Lau (H.-S.), *2118*
- failure, systems, weakest link systems, Garson (R.C.), *2514*
- design criteria, hydraulic structures, probabilistic design, Tung (Y.-K.), Mays (L.W.), *4530*
- earthquake effects, lifeline systems, Shinozuka (M.), Takada (S.), (et al.), *7035*
- seismic loading, structural response, Der Kiureghian (A.), *7049*
- probabilistic design, reliability, stochastic processes, vibration (random), Shinozuka (M.) eds., Yao (J.T.P.), *8447, book*
- acoustic measurements, brittle fracture, ceramics, life expectancy, probability, Richardson (J.M.), Evans (A.G.), *9437*

Ritchie (R.O.), crack growth, environmental tests, fatigue, pressure vessels, steel, Suresh (S.), (et al.), *2414*
Ritchie (S.I.M.), see Wood (A.S.), *3823*
Ritter (J.E.) Jr., see Jakus (K.), *2458*

Ritter (Z.W.), explosions, explosive loading, explosive solid interactions, hydrodynamics, shock waves, *9843*
River (B.H.), adhesives, bonded joints, shear loading, Gillespie (R.H.), *3586*
river beds, field tests, pore pressure, sedimentation, soils, Bennett (R.H.), Faris (R.), *423*
- bubble dynamics, buoyant flow, flow measurement, pipes, Sargent (D.M.), *564*
- granular media, groundwater, infiltration, porous media, Van'T Woudt (B.D.), Nicolle (K.), *976*
- sediment transport, suspensions, Higgins (R.J.), *1499*
- biomechanics, channel flow, channels, darcy flow, roughness, vegetation, Kouwen (N.), Li (R.-M.), *4569*
- bottom irregularities, discharges, prediction, Parker (G.), Peterson (A.W.), *4575*
- channel flow, crossflow, erosion, scour, wall jets, Rajaratnam (N.), *6596*
- bed load, piers, scour, vortices, Qadar (A.), *7649*
- channels, erosion, variable area flow, Gill (M.A.), *9507*
- finite difference methods, mathematical models, unsteady flow, Henriques (A.G.), *9508*
- hydraulic structures, scour, stability, Kumar (D.), Misra (G.C.), (et al.), *9515*

rivers, free boundary, ice, velocity profiles, Shen (H.T.), Ackermann (N.L.), *1493*
- bends, numerical methods, secondary flow, shallow water, Kalkwijk (J.P.T.), De Vriend (H.J.), *1494*
- bottom irregularities, sediment transport, shear stress, Todten (H.), Vetter (B.), *1497*
- power plants, thermal diffusion, Maruta (A.), Stere (C.), (et al.), *1894*
- scour, sediment transport, silting, Lapshenkov (V.S.), Boguslavskaya (T.A.), *1899*
- flow measurement, streams, Biritskii (M.I.), *1900*
- digital control, water pollution, Gourishankar (V.), Lawal (M.A.), *2174*
- discharges, flood flow, sediment transport, Williams (G.P.), *2580*
- channel flow, gravity waves (surface), propagation, saint venants equation, tides, Chatterjee (A.K.), *2707*
- boundary roughness, waterways, Motayed (A.K.), Krishnamurthy (M.), *3598*
- bed load, channels, sediment transport, Bagnold (R.A.), *3605*
- crossflow, discharges, dispersion, water pollution, Roman (P.), *3609*
- computer programming, discharges, hydraulics, Price (R.K.), Samuels (P.G.), *3613*
- discharges, hydrology, streams, Zheleznyakov (G.V.), Danilevich (B.B.), *4045*
- measurements, optical analysis, sediment transport, Ward (P.R.B.), Chikwanha (R.), *4574*
- finite element techniques, tides, Meissner (U.), *5901*
- dispersion, mixing, water pollution, Shen (H.T.), *5911*
- digital simulation, sediment transport, Bettess (R.), White (W.R.), *7656*
- contamination, discharges, environmental control, estuaries, water pollution, Smith (R.), *7657*
- dispersion coefficient, mathematical models, mixing, Lau (Y.L.), Krishnappan (B.G.), *9520*
- froude number, plumes, stratified flow, surface tension, Mcclimans (T.A.), Saegrov (S.), *10399*
- dispersion, fickian model, models, Nordin (C.F.) Jr., Troutman (B.M.), *10673*
- contamination, diffusion, stochastic processes, Molyneux (J.E.), Witten (A.J.), *10674*
- contamination, dispersion, fickian model, Liu (H.), Cheng (A.H.D.), *10677*
- bodies of revolution, capsules, dynamic analysis, floating bodies, pipelines, rafts, Ginevskii (A.S.), Kolesnikov (A.V.), *11387*
- channel flow, diffusion coefficient, water pollution, West (J.R.), Cotton (A.P.), *11777*

riveted joints, bolted joints, design, joints, plasticity, Surtees (J.O.), Gildersleeve (C.P.), (et al.), *8482*
Rivett (B.H.P.), see Clarke (D.), *157*
Rivlin (R.S.), see Sawyers (K.N.), *232*
- elasticity (nonlinear), elastodynamics, one dimensional waves, stability theory, *4928*
- bifurcation, critical load, plates, *8266*
- see Kazakia (J.Y.), *8485*

Rizk (M.H.), aerodynamic interference, propellers, transonic flow, wakes, wings, *9656*
Rizvi (S.A.H.), determinants, difference equations, linear equations, *46*
Rizzetta (D.P.), see Borland (C.J.), *10521*
Rizzi (A.) eds., compressible flow, inviscid fluid, numerical methods, shock waves, transonic flow, Viviand (H.), *9556, book*
Rizzi (N.), frames, postbuckling behavior, Di Carlo (A.), (et al.), *342*
- see Pignataro (M.), *343*

Roads (J.O.), atmospheric circulation, climatology, heat transfer (atmospheric), *5930*
Roberson (J.A.), see Kumar (S.), *6594*
Robert (A.), birefringent materials, photoelasticity (three dimensional), scattered light, Royer (J.), *7547*
Roberts (A.D.), see Fuller (K.N.G.), *9950*
Roberts (A.J.), differential equations (partial), perturbation methods, resonance, *7166*
Roberts (E.H.), frequencies, modal analysis, multistory frames, vibration (free), Wood (R.H.), *2343*
Roberts (J.B.), see Hinton (R.E.), *1019*
- jets, laser doppler velocimeters, spectral analysis, velocity measurement, Downie (J.), (et al.), *1645*

Roberts (J.C.), composite materials, hips, prosthetic devices, Ling (F.F.), *8079*
Roberts (L.D.), see Lee (M.H.), *10679*
Roberts (P.B.), combustors, emissions, gas turbines, scale models, Kubasco (A.J.), (et al.), *7883*
Roberts (S.A.), compressible flow, lasers (gasdynamic), numerical methods, phase shifts, Lamberton (H.M.), *588*
Roberts (S.M.), perturbation methods, series, variational methods, *4988*
- boundary value problems, computing techniques, singular perturbations, *10038*

Roberts (T.M.), critical load, framed structures, multistory frames, structural stability, *1251*
- beams (open section), beams (thin section), finite strain, stability, *8231*

Robertson (G.H.), acoustics, spectral analysis, *3962*
- acoustics, noise, spectral analysis, *3965*
- sound propagation, underwater acoustics, *5722*
- sound propagation, underwater acoustics, Wagner (R.L.), *5751*

Robillard (L.), see Vasseur (P.), *2799*
- cavities, convection (free), cooling, heat transfer, laminar flow, transient effects, water, Vasseur (P.), *7844*

Robin (I.A.), bifurcation, periodic orbits, restricted three body problem, *1788*
- computing techniques, periodic orbits, planetary satellites, three dimensional formulation, Markellos (V.V.), *7919*

Robinson (C.), averaging, resonance, solar system, spinning bodies, Murdock (J.), *2915*
Robinson (D.E.), see Braun (M.), *6012*
Robinson (F.J.), design, engines, expanders, expansion, *7624*
Robinson (I.S.), energy conversion, estuaries, pumps, reservoirs, tides, Perry (J.M.), *9521*
Robinson (J.), finite element techniques, membrane theory, mesh generation, stiffness matrix, *1133*
- finite element techniques, interpolation, mesh generation, Ward (P.), *2067*

Robinson (P.C.), diffusion, finite element methods, nonlinear theory, two phase flow, Rae (J.), (et al.), *12053*
Robke (H.), see Theremin (H.) eds., *4104, book*
robotics, mathematical models, tools, trajectories, Clement (A.), *8*
- algorithms, control, design, manipulators, Malyshev (V.A.), Timofeyev (A.V.), *201*
- control, trajectories, Pyatkin (V.P.), Sirotenko (V.Ya.), *202*
- control, manipulators, mechanics, mechanisms, Morecki (A.), Bianchi, (et al.), *209, book*
- algorithms, control, Krutko (P.D.), Popov (Ye.P.), *213*
- algorithms, control, design, manipulators, trajectories, Lakota (N.A.), Lisenko (S.A.), (et al.), *214*
- algorithms, control, design, manipulators, trajectories, Vereschagin (A.F.), Generozov (V.L.), *216*
- design, manipulators, Shishigin (M.I.), Khomeriki (T.L.), *223*
- computer aided manufacturing, numerical control, positioning accuracy, tools, Farkas (J.), El-Sonbaty (I.), *2166*
- artificial intelligence, computer aided design, Rybak (V.I.), *2182*
- dynamic analysis, manipulators, vibration (forced), Yudin (V.I.), *3357*
- kinematics, manipulators, mechanisms (planes), mechanisms (spatial), Duffy (J.), *3568, book*
- kinematics, manipulators, structural support, Nitescu (P.N.), *4141*
- closure, kinematics, linkages, mechanisms (spatial), Sticher (F.), *4559*
- kinematics, manipulators, Nitescu (P.N.), *4934*
- kinematics, manipulators, Nitescu (P.N.), *4935*
- geometrical properties, kinematics, manipulators, Sugimoto (K.), Duffy (J.), *6048*
- design, manipulators, mechanical joints, mechanisms, Derby (S.), *6563*
- design, manipulators, mechanisms, synthesis, Orlandea (N.), Berenyi (T.), *6564*
- man machine systems, manipulators, prosthetic devices, Rovetta (A.), *7121*
- control, design, position control, regulator problem, Seyfarth (K.), Hain (E.), *7252*
- analog simulation, manipulators, simulation, Backhouse (C.), Jones (J.R.), *7253*
- algorithms, design, manipulators, Sugimoto (K.), Duffy (J.), *7630*
- computer aided manufacturing, mathematical models, modeling, process control, Devries (W.R.) ed., *8173, book*
- control, decoupling, design, manipulators, Freund (E.), Hoyer (H.), *8176*
- error, manipulators, surfaces, Kumar (A.), Waldron (K.J.), *8469*
- cams, design, kinematics, synthesis, Tsai (Y.C.), Soni (A.H.), *8479*
- algorithms, design, manipulators, mechanisms (planes), Murata (H.), Hayashi (I.), *8480*
- kinematics, manipulators, mechanisms (spatial), optimization, Benati (M.), Morasso (P.), (et al.), *9084*
- kinematics, mechanisms (spatial), Osman (M.O.M.), Bahgat (B.M.), (et al.), *9085*
- algorithms, manipulators, Schmieder (L.), *9155*
- control, digital control, manipulators, Luh (J.Y.S.), Walker (M.W.), (et al.), *9186*
- design, digital control, Haferkorn (P.), Schwarz (W.), *9187*

- channel flow, conduction (heat), heat addition, heat exchangers, Sultanian (B.K.), Sastri (V.M.K.), *3813*
- cooling, liquid fuels, Price (H.G.), *3884*
- aerodynamic performance, ballistics (exterior), control stability, missiles, Murphy (C.H.), *3926*
- airplanes, flight path, optimization, supersonic flow, wing body combinations, Large (E.), *4671*
- acoustics, energy spectrum, vortex shedding, wave energy, Brown (R.S.), Dunlap (R.), (et al.), *4769*
- exhaust gases, particles, plumes, solid propellants, Strand (L.D.), Bowyer (J.M.), (et al.), *5809*
- nozzles, propulsion, space vehicles, supersonic flow, Ellis (R.A.), Hammond (R.N.), (et al.), *6851*
- higher order theories, nonlinear waves, solid propellants, Culick (F.E.C.), *7425*
- aerodynamic interference, nozzles, side forces, space vehicles, staging, Sadunas (J.A.), French (E.P.), (et al.), *7893*
- attitude control, guidance systems, vibration, Cochran (J.E.) Jr., Christensen (D.E.), *7921*
- computing techniques, flexible bodies, launching, spinning bodies, Weeks (G.E.), Cost (T.L.), *7922*
- guidance optimization, optimal control, steering, Dvornychenko (V.N.), *7928*
- chemical kinetics, chemically reactive flow, combustion, fluid mechanics, Markatos (N.C.), Spalding (D.B.), (et al.), *8796*
- hypersonic flow, missiles, propulsion, ramjets, Billig (F.S.), Waltrup (P.J.), (et al.), *8810*
- flow measurement, liquid fuels, longitudinal stability, pogo phenomenon, unsteady flow, Dordain (J.-J.), *9661*
- gust loads, stochastics, Smith (O.E.), Adelfang (S.I.), *9819*
- ignition, solid propellants, space shuttle, thrust, transient effects, Caveny (L.H.), Kuo (K.K.), (et al.), *10723*
- design, impulse, solid propellants, Landsbaum (E.M.), Salinas (M.P.), (et al.), *10728*
- missiles, ramjets, solid propellants, testing equipment, Readey (H.J.) Jr., Cobb (E.R.), *10729*
- bubbly flow, dynamic effects, liquid fuels, liquid vapor mixture, longitudinal stability, Kinelev (V.G.), Shkapov (P.M.), *11801*

Rockey (K.C.), see Narayanan (R.), *7322*

rocks, anisotropic media, compression, failure, Nova (R.), *425*

- fracture, joints, mining, photography, Hagan (T.O.), *426*
- fracture angle, triaxial tests, Seya (K.), *427*
- failure, wedges, Lucas (J.M.), *428*
- joints, scale effects, shear strength, Barton (N.), Bandis (S.), *429*
- cutting, jets, water, Rehbinder (G.), *431*
- deformation, pore pressure, pressure, Blanton (T.L.) III, *432*
- acoustic emission, triaxial tests, yield condition, Gowd (T.N.), *433*
- creep, finite element methods, thermal loading, Anderson (C.A.), Bridwell (R.J.), *965*
- fracture, porous media, pressure, Gowd (T.N.), Rummel (F.), *1336*
- boreholes, fracture, strength, Stimpson (B.), *1337*
- buckling, faults, plates, tectonics, Golecki (J.J.), *2311*
- failure, slopes, Wyllie (D.C.), *2386*
- explosive loading, microcracks, porous media, shock waves, Siegfried (R.W.), Mcqueen (R.G.), (et al.), *2388*
- strength, Yoshinaka (R.), Yamabe (T.), *2389*
- anisotropic media, porous media, Smith (M.B.), Cheatham (J.B.) Jr., *2390*
- friction, strength, Stimpson (B.), *2391*
- point load testing, rock mechanics, size effects, Brook (N.), *2478*
- armor, impact, strength, Lutton (R.J.), Houston (B.J.), (et al.), *3414*
- strain gages, strain measurement, stress strain relationships, Duncan Fama (M.E.), Pender (M.J.), *3487*
- permeability, porous media, Brace (W.F.), *4024*
- storage, transport phenomena, water pollution, Hohlfelder (J.J.), Hadley (G.R.), *4030*
- conical bodies, penetration, porous media, Forrestal (M.J.), Longcope (D.B.), (et al.), *4457*
- excavation, prediction, sliding, stability, walls, Priest (S.D.), *4467*
- flaws, fracture, permeability, Goodman (R.E.), Sundaram (P.N.), *4834*
- cylindrical waves, layered media, White (J.E.), Tongtaow (C.), *5241*
- materials properties, shock waves (normal), Vaal (A.A.), Zhukov (A.V.), (et al.), *5242*
- anisotropic media, dilatancy, strain, Lerau (J.), Saint-Leu (C.), (et al.), *5263*
- deformation, fracture, joints, pore pressure, Dhowian (A.W.), *5264*
- anisotropy, hardening, porous media, Celle (C.C.), Cheatham (J.B.), *5265*
- permeability, porous media, Neuzil (C.E.), Cooley (C.), (et al.), *5266*
- buckling, slopes, Cavers (D.S.), *5267*
- drilling, ocean bed, Ryall (P.J.C.), *5268*
- tunneling, Nazir (C.P.), *5269*
- sclerography, tests, Wijk (G.), *5270*
- conduction (heat), thermal measurements, thermodynamic properties, Topolnicki (J.), *5623*
- heat transfer, mass transfer, mines, Kremnev (O.A.), Zhuravlenko (V.Ya.), (et al.), *5609*
- adsorption, dispersion, porous media, transport phenomena, Satter (A.), Shum (Y.M.), (et al.), *5834*
- heat transfer, microcracks, Shurchkov (A.V.), Prikhodko (N.K.), (et al.), *5858*
- field tests, fluid injection, fracture, geothermal energy, hydraulics, Solberg (P.), Lockner (D.), (et al.), *5884*
- conical bodies, penetration, porous media, Longcope (D.B.), Forrestal (M.J.), *6358*
- fluid injection, fracture, pressure, Nolte (K.G.), Smith (M.B.), *6398*
- cavities, rupture, stress analysis, Dunin (S.Z.), Sirotkin (V.K.), (et al.), *6400*
- acoustic emission, fracture, tests, Radu (C.), Rugina (I.), (et al.), *6401*
- models, strength, time dependence, Kaiser (P.K.), Morgenstern (N.R.), *6402*
- electrical properties, induced polarization, Sidorov (V.A.), Yakhin (A.M.), *6403*
- finite element techniques, interfaces, Pande (G.N.), Sharma (K.G.), *6404*
- bolts, roof bolts, strain gages, triaxial tests, Haas (C.J.), *6405*
- constitutive equations, elastoplasticity, porous media, Yamada (S.E.), Schatz (J.F.), (et al.), *7017*
- density, elastic waves, high pressure, high temperature, Levykin (A.I.), Vavakin (V.V.), *7026*
- elastic constants, porous media, Digby (P.J.), *7448*
- blasting, indentation, Khalaf (F.), Abouzeid (A.-Z.M.), *7449*
- deformation, models, porous media, saturation, Abey (A.E.), *7450*
- joints, statistical theory, stereological interpretation, Warburton (P.M.), *7451*
- joints, statistical theory, stereological interpretation, Warburton (P.M.), *7452*
- point load test, tensile strength, Wijk (G.), *7453*
- crack propagation, fatigue, low temperature, steel, Mubeen (A.), *7480*
- experimental methods, permeability, porous media, Batycky (J.P.), Mccaffery (F.G.), (et al.), *7990*
- acoustic waves, anisotropy, high pressure, Levitova (F.M.), *8010*
- fracture mechanics, microfracture, strain rate, strength, Lankford (J.), *8351*
- crack growth, fracture mechanics, strength, time dependence, Wilkins (B.J.S.), *8352*
- absorption, chemical kinetics, drilling, Mills (J.J.), Westwood (A.R.C.), *8353*
- fluid injection, fracture, hydraulic fracturing, hydraulics, simulation, Settari (A.), *8354*
- finite element methods, fracture mechanics, Ingraffea (A.R.), Heuze (F.E.), *8355*
- bending, fracture, strength, Swan (G.), *8357*
- electro fluid dynamics, fluid mechanics, permeability, porous media, Kormiltsev (V.V.), Khachay (O.A.), *8921*
- drilling, elastic waves, optimization, rods, Gupta (R.), *9335*
- elastic behavior, joints, models, Gerrard (C.M.), *9366*
- modeling, strain rate, strength, Nishimatsu (Y.), Yamaguchi (T.), (et al.), *9367*
- elastoplasticity, inverse problems, tunnels, Gioda (G.), Maier (G.), *9369*
- drilling, dynamic loads, experimental results, impact, Goldsmith (W.), Wu (W.-Z.), *9370*
- bed thickness, fracture, joint spacing, joints, models, Ladeira (F.L.), Price (N.J.), *9371*
- joints, limit analysis, wedges, Chan (H.C.), Einstein (H.), *9372*
- deformation, faults, fluid injection, geothermal energy, Hayashi (K.), Abe (H.), *9373*
- analytical methods, multiple degree of freedom, seismic loading, Gheorghiu (Z.), *9921*
- deformation, strain rate, tectonics, Pfiffner (O.A.), Ramsay (J.G.), *10261*
- experimental results, faults, micromechanics, Wong (T.-F.), *10262*
- strength, tensile strength, Wijk (G.), *10263*
- abrasion, experimental methods, schmidt hammer, Janach (W.), Merminod (A.), *10264*
- acoustic emission, experimental methods, monitoring, Koerner (R.M.), Mccabe (W.M.), (et al.), *10265*
- acid penetration, exothermic reactions, fracture, thermal effects, Lee (M.H.), Roberts (L.D.), *10679*
- fracture, poiseuille flow, viscous flow, Neuzil (C.E.), Tracy (J.V.), *10832*
- excavation, rock breaking devices, Ryhming (I.), Cooper (G.A.), (et al.), *11180*
- field tests, nondestructive tests, ultrasonics, Mckenzie (C.K.), Stacey (G.P.), (et al.), *11181*
- joint spacing, joints, Beyer (F.), *11182*

Rockwell (D.), cavities, pressure measurement, vortex flow, Knisely (C.), *2683*

- see Naudascher (E.), *2717*
- see Naudascher (E.) eds., *2906, book*
- see Conlisk (A.T.), *8536*

Rod (D.L.), see Churchill (R.C.), *1078*

Roder (H.W.), boilers, digital simulation, dynamic analysis, mathematical models, nonlinear theory, Rosel (G.S.), *74*

Rodger (A.A.), piles, soils, vibration, vibratory driving, Littlejohn (G.S.), *10252*

Rodger (J.G.), see Jordinson (R.), *3674*

Rodgers (G.G.), see Page (J.K.), *2835*

Rodhe (H.), deposition, estimation, pollution, *7968*

Rodi (W.), see Ljuboja (M.), *1571*

- see Leschziner (M.A.), *1581*
- see Gibson (M.M.), *2691*
- boussinesq equation, hydraulics, reynolds stresses, turbulence model, turbulent flow, *4570, book*
- see Launder (B.E.), *10459*

Rodkiewicz (C.M.), boundary layer, hypersonic flow, interaction, laminar flow, Gupta (R.N.), *599*

- see Venkateswarlu (K.), *4898*

Rodnishchev (N.E.), see Bodner (V.A.), *5052*
rods, deformation (finite), Panayotounakos (D.E.), Theocaris (P.S.), *299*
- buckling, contact problems, rails, Vielsack (P.), *333*
- bifurcation, buckling, Vielsack (P.), *338*
- bending, nonlinear theory, Panayotounakos (D.E.), Theocaris (P.S.), *1222*
- cold working, extrusion, metals, Ghosh (T.P.), *1340*
- beams (curved), bending (elastic), elastica, elasticity (nonlinear), Fosdick (R.L.), James (R.D.), *2216*
- beams (torsional), elastic bodies, torsion, Jenkins (J.T.), *2220*
- elastic foundations, Parnes (R.), *2260*
- follower forces, nonconservative systems, pfluger rod, Leipholz (H.H.E.), *2291*
- drilling, dynamic properties, vibration (forced), Carivik (I.), *2340*
- conduction (unsteady), perturbation theory, Kenig (K.E.), Korostelev (A.P.), *3120*
- asymptotic behavior, flexible bodies, large displacement, Olshevsky (K.U.), *3288*
- compressible flow, cylindrical bodies, damping, oscillating bodies, wave absorbers, Lin (W.H.), Chen (S.S.), *3931*
- finite element techniques, plastic waves, Yokoyama (T.), Tsuzuki (M.), *4446*
- elastic constants, vibration (viscoelastic), viscoelastic waves, Pritz (T.), *4447*
- elastodynamics, fracture, magnetic field, Golovin (Yu.I.), Finkel (V.M.), (et al.), *5087*
- compression, follower forces, nonconservative systems, plates, Leipholz (H.H.E.), *5170*
- dynamic response, shear stress, vibration, wave equations, Kiyasbeili (T.N.), *5207*
- bending, dissipation, stresses (normal), vibration (torsional), Khilchevskii (V.V.), Vasilevich (D.I.), *5208*
- acoustic loading, ducts, dynamic response, vibration (forced), Lin (W.-H.), *6308*
- plastic waves, plates, rate sensitivity, strain rate, Stepanov (G.V.), Serbin (A.A.), *6326*
- collapse, imperfections, trusses, Badala (A.), Marinetti (A.), (et al.), *7353*
- elastic bodies, lyapunov's functions, stability theory, Chiorescu (G.), *7354*
- bifurcation, flexural waves, impact, plastic waves, Lee (L.H.N.), *7419*
- impact, plates, Johnson (W.), Sengupta (A.K.), (et al.), *7435*
- dislocations, relaxing media, stress relaxation, yield criteria, Merzhievskii (L.A.), Shamonin (S.A.), *8200*
- impact, viscoelastic waves, waves, Gaiduk (S.I.), *8343*
- large displacement, numerical analysis, Faulkner (M.G.), Mioduchowski (A.), (et al.), *9257*
- drilling, elastic waves, optimization, rocks, Gupta (R.), *9335*
- impulse, time dependence, Gaiduk (S.I.), *10029*
- bifurcation, buckling, prestressed structures, Vielsack (P.), *10170*
- buckling, viscoelastic materials, Gurtin (M.E.), Mizel (V.J.), (et al.), *10182*
- elastic waves, nonlinear structures, similarity methods, Seshadri (R.), Singh (M.C.), *10227*
- cylindrical bodies, plastic waves, Swegle (J.W.), Ting (T.C.T.), *10233*
- dynamic properties, experimental results, impact, strain rate, Sengupta (A.K.), Wigglesworth (C.J.), (et al.), *10241*
- electro fluid dynamics, particle fluid flow, suspensions, Sherwood (J.D.), *11384*
- bending, drilling, drilling rods, ocean bed, vibration, Aso (K.), Kan (K.), *11659*
- dispersed flow, hydrodynamics, tube bundles, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12028*

Roe (P.L.), conservation laws, hyperbolic equations, initial value problems, riemann problem, *6082*
Roetzel (W.), approximation methods, convection (forced), heat exchangers (crossflow), Furst (J.), *784*
Rogacheva (N.N.), edge effects, shells, thermoelasticity (steady), *4813*
Rogala (R.), aeration, free boundary, gravity waves, jets, weirs, *10392*
Rogankov (V.B.), empirical methods, equations of state, gases, thermodynamic properties, Chumachenko (A.V.), *1654*
Roger (D.V.), flow measurement, polymers, stresses (normal), viscoelastic fluids, Denn (M.M.), *2579*
Rogers (A.C.), mining, ocean bed, pipelines, vibration (flow induced), Abramson (H.N.), *4665*
Rogers (C.), dynamic response, elastodynamics, hyperelastic materials, tubes, vibration (forced), vibration (free), Baker (J.A.), *1262*
Rogers (J.T.), film flow, heat transfer, integral methods, laminar flow, nuclear reactors, tubes, *10565*
Rogers (P.H.), nonlinear theory, propagation, shock waves, Weiner (A.M.), *1614*
Rogers (R.C.), chemical kinetics, hydrogen, ignition, reaction rates, Schexnayder (C.J.) Jr., *4735*
Rogers (R.J.), see Ko (P.L.), *11624*
Rogers (T.G.), see Pipkin (A.C.), *1385*
Roginskii (S.L.), composite materials, fracture, glass, glass fibers, strength, Kanovich (M.Z.), *7307*
Rogovtsov (N.N.), green function, radiant interchange, reflection, scattering, *9720*
Rogowska (J.), see Gustkiewicz (J.), *1320*
Rohde (S.M.), see Li (C.-H.), *5981*
- see Mcallister (G.T.), *8445*

Rohde (S.M.) eds., friction (sliding), lubrication (boundary), lubrication (hydrodynamic), roughness, steam turbines, Cheng (H.S.), *4895, book*
Rohm (H.-J.), interface phenomena, mass transfer, multicomponent flow, two phase flow, Vogelpohl (A.), *7876*
Rohn (D.A.), contact stresses, fatigue, friction drives, rolling contact, traction, Loewenthal (S.H.), (et al.), *8473*
Roizman (V.P.), probability theory, reliability analysis, statistical theory, Vaingortin (L.D.), *2021*
Roj (J.), deformation, granular media, strain analysis, *7134*
- continuum mechanics, deformation, functional analyis, kinematics, motion, *8084*

Rojey (A.), cycles, heat pumps, mixtures, Meyer (C.), (et al.), *5591*
Rokhlin (S.I.), cracks, diffraction, elastic waves, fracture, lamb problem, *9347*
Rokicki (J.), see Prosnak (W.J.), *8541*
- see Prosnak (W.J.), *8640*

Rokne (J.), cracks, elastic bodies, inclusions, stress concentration, thermal stresses, Dhaliwal (R.S.), (et al.), *3990*
Rokne (J.G.), see Singh (B.M.), *3243*
Rolfes (L.), aquifers, drainage, numerical methods, *8949*
Rolin (M.N.), blunt bodies, convection, heat transfer (combined modes), hypersonic flow, radiant interchange, reflection, Soloukhin (R.I.), (et al.), *9728*
- ablation, boundary layer, heat transfer, injection, mass transfer, radiant interchange, radiating flow, stagnation point, Soloukhin (R.I.), (et al.), *10608*

Rollberg (D.), bearing capacity, piles, soils, *1326*
Rolle (K.C.), high pressure, lubricants (dry film), phase changes, thermophysical properties, Crisp (J.N.), (et al.), *10564*
rolling, control, optimization, process control, rolling, Dobronravov (D.N.), Kun (L.A.), (et al.), *207*
- anisotropy, elastic constants, steel, Kitagawa (H.), *256*
- dynamic analysis, mathematical models, vibration, Dobrucki (W.), Swiatoniowski (A.), *389*
- contact problems, elastica, folding, strips, Wang (C.-Y.), *1221*
- chip formation, drawing, friction, plastic flow, Dobrucki (W.), Odrzywolek (E.), *1341*
- computer aided design, plates, stress analysis, Lahoti (G.D.), Akgerman (N.), (et al.), *1342*
- numerical analysis, wrapping, Kawaguchi (K.), *1343*
- energy, optimization, temperature, Herendi (R.), Voith (M.), (et al.), *2395*
- dies, drawing, material testing, Al-Makky (M.M.), Woo (D.M.), *2397*
- mechanical analysis, shaping, straighteners, Das Talukder (N.K.), Johnson (W.), *3425*
- finishing, gear teeth, surface profiles, Ozaki (T.), Imamura (A.), *3574*
- anisotropic media, cold working, deformation (plastic), sheet metal, Honda (K.), Hosokawa (N.), (et al.), *5271*
- materials properties, sheet metal, Scrutton (R.F.), Lenard (J.G.), *5276*
- materials processing, overlap formation, slabs, Stahlberg (U.), Soderberg (J-O.), (et al.), *5277*
- mechanical properties, metals, Kato (K.), Saito (Y.), (et al.), *5278*
- contact problems, cylindrical bodies, Soong (T.-C.), Li (C.), *6168*
- anisotropy, fatigue, heat treatment, life expectancy, strength, Nisitani (H.), Kage (M.), *6422*
- cylindrical bodies, elastoplasticity, half space, Zarka (J.), Frelat (J.), *7295*
- computing techniques, high temperature, plastic flow, steel, stochastics, Murthy (A.), Lenard (J.G.), *7456*
- deformation (plastic), foil, materials properties, Kouzuma (M.), *7458*
- cold working, interface phenomena, pressure peaks, strips, Lenard (J.G.), *8361*
- acoustic measurements, acoustoelasticity, beams, residual stresses, transducers, Fukuoka (H.), Toda (H.), (et al.), *8428*
- cylindrical bodies, stress concentration, thermal stresses, thermoelasticity (transient), Takeuti (Y.), Ishida (R.), *8876*
- forming, pipes, wrinkling, Kiuchi (M.), Shintani (K.), (et al.), *9374*
- alloys, ausforming, fatigue, forming, steel, Ohmori (M.), Yokokawa (S.), (et al.), *9378*
- dynamic loads, misalignment, Kozachok (A.A.), *9473*
- inspection, magnetic field, mechanical properties, sheet metal, Timoshenko (N.N.), Pyatunin (G.A.), (et al.), *10322*
- airfoils, three dimensional flow, trailing edge, vortex sheets, Schwartz (L.W.), *11360*

rolling contact, contact stresses, continuum mechanics, friction, lubrication (elastohydrodynamic), wear, Cheng (H.S.) eds., Keer (L.M.), *996, book*
- gears, lubrication (elastohydrodynamic), oil films, wear, Flamand (L.), Foucher (D.), (et al.), *1027*
- contact problems, lubrication (elastohydrodynamic), micropitting, roughness, surface profiles, Berthe (D.), Flamand (L.), (et al.), *1931*
- film thickness, lubrication (elastohydrodynamic), viscosity, Gecim (B.), Winer (W.O.), *1941*
- elastic bodies, lubrication (elastohydrodynamic), magneto fluid dynamics, Pytko (S.), Wierzcholski (K.), *4900*
- contact problems, cylindrical bodies, elasticity (linear), Martirosyan (Z.A.), *5092*
- film thickness, friction (rolling), friction (sliding), lubrication (elastohydrodynamic), Conry (T.F.), *5984*
- film thickness, lubrication (elastohydrodynamic), rotating cylinders, squeeze films, Wada (S.), *5987*

- film thickness, lubrication (elastohydrodynamic), Koye (K.A.), Winer (W.O.), *5988*
- fatigue, film thickness, lubrication (elastohydrodynamic), surface profiles, Tallian (T.E.), *7100*
- contact problems, finite element techniques, friction (rolling), Zeid (I.), Padovan (J.), *7210*
- contact stresses, fatigue, friction drives, traction, Rohn (D.A.), Loewenthal (S.H.), (et al.), *8473*
- failure, hardness, thermal effects, wear, Rozeanu (L.), Pnueli (D.), *9022*
- bearings (ball), fatigue, lubrication (elastohydrodynamic), lubrication (hydrodynamic), Hamrock (B.J.), Dowson (D.), *9032, book*
- bearings (roller), couple stresses, lubrication (elastohydrodynamic), non newtonian flow, Sinha (P.), Singh (C.), *9033*
- film thickness, lubrication (elastohydrodynamic), roughness, surfaces, Terauchi (Y.), Nonishi (T.), *9035*
- reynolds equation, rolling contact, temperature, viscosity, Mahdavian (S.M.), *9040*
- reynolds equation, rolling contact, temperature, viscosity, Mahdavian (S.M.), *9040*
- fatigue, friction (rolling), friction (sliding), Dawson (P.H.), *9946*
- additives, antiwear films, chemical reactions, fatigue, films, lubrication (elastohydrodynamic), wear, Sakurai (T.), *9961*
- adhesion, friction (rolling), rails, wheels, Furmanik (K.), *9978*
- contact stresses, fatigue, grinding, microstructures, Dudragne (G.), Fougeres (R.), (et al.), *12096*

rolling motion, missiles, stability theory, Ling (Y.L.), Han (K.W.), *693*
- hulls, lateral stability, ship design, waves, Burcher (R.K.), *1922*
- aerodynamic loads, sideslip, vortex lines, wings, Javed (M.A.), Hancock (G.J.), *2727*
- damping, friction (skin), roughness, ship motion, Myrhaug (D.), *4098*
- capsizing, failure, ocean waves, ship design, ship motion, stability, Dahle (E.A.), Kjaerland (O.), *5964*
- canard, mechanical systems, missiles, remote control, Blair (A.B.) Jr., *6728*
- nonlinear analysis, ocean waves, ship motion, Haddara (M.R.), *8038*
- capsizing, ocean waves, resonance, ship motion, stochastics, Blocki (W.), *8041*
- capsizing, models, resonance, safety, ship motion, Kuo (C.), Welaya (Y.), *8043*
- aerodynamic interference, airplanes, dynamic behavior, Sachs (G.), Fohrer (W.), *9659*
- balance system, blowdown, supersonic flow, wind tunnels, Murthy (H.S.), *9681*
- damping, nonlinear theory, ship motion, Cardo (A.), Francescutto (A.), (et al.), *10877*
- heaving, pitching, ship motion, virtual mass, yawing, Troesch (A.W.), *10878*
- airplanes, design, spin recovery, wind tunnels, Bihrle (W.) Jr., Bowman (J.S.) Jr., *11734*

Rom (J.), see Brandeis (J.), *1548*

Roman (O.V.), explosive forming, metals, powders, Nesterenko (V.F.), (et al.), *4474*

Roman (P.), crossflow, discharges, dispersion, rivers, water pollution, *3609*

Romanchenkov (V.P.), see Polezhaev (Yu.V.), *7499*

Romanenko (L.G.), minimization, optimal control, regulator problem, synthesis, *4305*

Romaniv (O.N.), crack arrest, cyclic loading, cyclic testing, fatigue, residual stresses, Siminkovich (V.N.), (et al.), *6420*
- corrosion fatigue, crack growth, heat treatment, steel, Voldemarov (A.V.), (et al.), *7493*
- corrosion fatigue, crack growth, microcracks, steel, *7494*

Romankevich (A.M.), see Ostafin (V.A.), *103*

Romano (A.), see Iannece (D.), *5088*
- see Esposito (R.), *11758*

Romanov (G.S.), compressible flow, hurled bodies, numerical methods, Urban (V.V.), *11414*

Romanov (O.Ya.), see Buldakov (V.F.), *1752*

Romanov (V.G.), see Penev (P.B.), *148*

Romanovskii (G.K.), see Budtov (V.P.), *6578*

Romanovskii (V.R.), see Makarov (A.M.), *11769*

Romashkevich (Yu.I.), see Popov (S.P.), *6631*

Romashov (R.V.), correlation, fatigue, life expectancy, strength, Fedorov (V.V.), (et al.), *9385*

Romberg (T.M.), acoustic properties, boiling, channel flow, hydrodynamic stability, two phase flow, Rees (N.W.), *11540*

Romhanyi (G.), beams (variable cross section), deflections, matrix methods, *2264*

Romie (F.E.), heat exchangers, regenerators, resistance, thermal effects, *3839*
- energy storage, heat exchangers, regenerators, *5596*

Romilly (N.), elastic bodies, plates, vibration (free), *4403*

Romov (A.I.), meteorology (physical), weather forecasting, *5968*

Ronca (P.), bridges (arch), reinforced concrete, shakedown structures, Cohn (M.Z.), *5369*

Ronen (T.), see Studnicki (A.), *3733*
- aerodynamic interference, aerodynamic loads, airplane structures, airplanes, external stores, stress analysis, Henin (M.), *7789*

roofs, design (optimum), nonlinear programming, portal frames, Crawford (A.B.), Jenkins (W.M.), *503*
- cable supported structures, second order analysis, Valente (G.), *524*
- beams, dynamic analysis, ponding, vibration (free), Mansouri (A.H.), Chinn (J.), *3290*
- floating structures, plates (circular), tanks, Epstein (H.I.), *3317*
- cable supported structures, design, Clarke (D.), *4537*
- design (optimum), space frames, Stenker (H.), Michael (A.), (et al.), *4543*
- wind loads, Hazelwood (R.A.), *5363*
- buckling, plates (folded), space frames, structural stability, Subramanian (N.), Ganapathy Chettiar (C.), *6532*

Rooke (D.P.), approximations, green function, stress concentration, stress intensity factor, strips, Baratta (F.I.), (et al.), *2431*
- crack growth, cracking, design, holes, plates (holed), pressure vessels, stress intensity factor, *10332*

Rooney (D.H.), see Simpson (H.C.), *1517*

Rooney (D.M.), cylindrical bodies, pressure distribution, shear flow, transition flow, vortex shedding, Peltzer (R.D.), *5453*
- cylindrical bodies, roughness, shear, vortex shedding, Peltzer (R.D.), *9594*

Roos (F.W.), airfoils, pressure distribution, separated flow, shock waves, transonic flow, unsteady flow, *9805*

Roose (D.), algorithms, computer programming, integration, singularities, De Doncker (E.), *6094*

root loci, multivariable systems, nyquist theory, pole placement, Brockett (R.W.), Byrnes (C.I.), *11041*

ropes, cables, strength, wires, Matanzo (F.) Jr., Metcalf (J.T.) Jr., *536*
- dynamic response, networks, perturbation methods, vibration (nonlinear), Ivovich (V.A.), *3351*
- failure, fatigue, nylon, Bitting (K.R.), *3444*
- dynamic properties, pendulums, polymers, torsion, transducers (displacement), Rind (E.), Bryant (E.L.), *3510*
- impact, net, networks, projectiles, submerged bodies, Wortman (A.), *10881*

Roppo (M.N.), see Ganic (E.N.), *8686*

Rose (J.L.), adhesives, algorithms, bonded joints, nondestructive tests, ultrasonics, Thomas (G.H.), *1479*
- flaw detection, microprocessors, nondestructive tests, ultrasonics, welded joints, Nestleroth (J.B.), (et al.), *2481*

Rose (L.R.F.), analogies, bonded joints, inclusions, *3474*
- acoustic emission, brittle fracture, brittle materials, cracks, inclusions, surface waves, *9436*

Rose (R.), see Reijnhart (R.), *6826*

Rose (R.E.), attitude control, orbit correction, space vehicles, x ray techniques, Berkery (E.A.), *1794*

Rosseau (M.), dynamic analysis, mathematical methods, vibration (nonlinear), *9297*

Rosel (G.S.), see Roder (H.W.), *74*

Rosen (A.), design (optimum), imperfections, trusses, Schmit (L.A.) Jr., *507*
- beams (curved), nonlinear analysis, Abramovich (H.), *4364*

Rosen (M.), see Baram (J.), *7559*

Rosenbaum (M.), equilibrium, generators, hall effect, magneto fluid dynamics, nonuniform flow, Shamma (S.E.), (et al.), *8830*

Rosenberger (F.), see Olson (J.M.), *578*

Rosenblat (S.), buoyancy, convection, eigenvalues, hydrodynamic stability, liquids, surface tension, Homsy (G.M.), (et al.), *8603*
- bifurcation, perturbation theory, stability theory, Cohen (D.S.), *9110*

Rosenblatt (M.), see Ito (Y.M.), *9418*

Rosenfeld (A.M.), boundary conditions, cylindrical bodies, fredholm equations, perturbation methods, potential theory, Timsit (R.S.), *4957*

Rosenfield (A.R.), see Barnes (C.R.), *455*
- elasticity, energy methods, fracture, fracture mechanics, pressure vessels, steel, Shetty (D.K.), *4518*
- fracture mechanics, friction (solid solid), models, stress intensity factor, wear, *12090*

Rosengren (M.), geosynchronous orbits, orbit mechanics, orbit transfer, *10775*

Rosenhouse (G.), acoustic waves, elastic waves, joints, structural elements, transmission, Ertel (H.), (et al.), *8857*
- acoustics (architectural), barriers, noise abatement, Bar-Ilan (M.), *11932*

Rosenkranz (G.), composite structures, high cycle fatigue, low cycle fatigue, reinforced bodies, Gerold (V.), *9245*

Rosenman (M.A.), dynamic programming, optimization, penalty function, Radford (A.D.), (et al.), *7178*

Rosenthal (F.), cables, dynamic response, vibration (free), *6285*

Roshchin (N.V.), lorentz model, lyapunov's functions, mechanical systems, stability theory, *30*

Rosman (R.), buckling, cantilevered structures, structural analysis, vibration (free), *10224*

Ross (C.T.F.), computer programming, computing techniques, continuum mechanics, structural analysis, *8139*

Ross (D.F.), acoustics, energy methods, finite element techniques, noise abatement, perforated bodies, *11997*

Ross (E.L.), cracks, photoelasticity (dynamic), plane stress, scattered light, stress intensity factor, Kaminski (G.), (et al.), *10312*

Ross (J.D.), see Ahuja (L.R.), *10831*

rossby waves, atmospheric circulation, Thomas (J.H.), Lux (R.A.), *4053*
- eddies, oceanography, Henrotay (P.), *4854*

- eddy viscosity, ekman layer, oceanography, Radach (G.), *4881*
- atmospheric circulation, Shapiro (L.J.), *5929*
- ocean air interaction, resonance, tides, Ivanovskii (A.I.), Krivolutskii (A.A.), *5941*
- solitary waves, Antipov (S.V.), Nezlin (M.V.), (et al.), *7051*
- gravity waves (internal), nonlinear analysis, wave interactions, Ripa (P.), *7761*
- gravity waves, rotating fluids, Bridger (A.F.C.), Stevens (D.E.), *8989*
- currents, ocean air interaction, oceanography, spectra, wind-wave interaction, Willebrand (J.), Philander (S.G.H.), (et al.), *9000*
- annular flow, cylindrical bodies, nonlinear theory, rotating cylinders, Davey (M.K.), *10410*
- oceanography, Kozlov (V.F.), *10855*
- currents, hydrodynamic stability, Hall (R.E.), *10857*
- circulation, ekman layer, geostrophic flow, ocean air interaction, oceanography, Semtner (A.J.) Jr., Holland (W.R.), *10863*
- rotating fluids, stratified flow, two component flow, viscous flow, Boyer (D.L.), *11376*
- dispersion relation, rotating bodies, turbulent flow, Legras (B.), *11616*
- hydrodynamic stability, nonlinear analysis, solitary waves, Malanotte Rizzoli (P.), Hendershott (M.C.), *11617*
- bottom irregularities, nonlinear analysis, solitary waves, Malanotte Rizzoli (P.), *11618*

Rosselaar (L.), see Chivers (R.C.), *2952*

Rossi (M.), see Gran (R.), *4297*

Rossing (T.D.), plates (circular), vibration (free), *8303*

Rossler (J.), control, design, hydraulic machinery, robotics, suboptimal control, *9188*

Rossmanith (H.P.), crack initiation, crack propagation, photoelasticity (dynamic), rayleigh waves, Fourney (W.L.), *2465*
- crack tip geometry, photoelasticity, stress intensity factor, *2467*
- crack opening displacement, crack propagation, photoelasticity (dynamic), stress intensity factor, *3453*
- crack propagation, fracture mechanics, photoelasticity (dynamic), wave interactions, Shukla (A.), *3481*
- caustics, cracks, fracture mechanics, stress intensity factor, *6462*
- analysis, crack opening displacement, error, stochastics, stress intensity factor, *7540*

Rosso (J.C.), see Persoz (B.), *1837*

Rostafinski (W.), attenuation, ducts (curved), sound propagation, *10785*

Rostamian (R.), boundary value problems, constraints, elasticity (linear), functional analyis, *3228*
- see Alikakos (N.D.), *6831*

Rostanina (N.B.), see Lizarev (A.D.), *378*

rotary inertia, beams (plastic), dynamic behavior, shear stress, Gomes De Oliveira (J.), Jones (N.), *407*
- galerkin method, plates (circular), shear, vibration (nonlinear), Chia (C.Y.), Sathyamoorthy (M.), *4423*
- plates (sandwich), vibration (forced), vibration (free), Grover (A.S.), Kapur (A.D.), *4434*
- beams (variable cross section), eigenvalues, stiffness matrix, vibration, To (C.W.S.), *5033*
- galerkin method, plates (circular), plates (orthotropic), shear, vibration (nonlinear), Sathyamoorthy (M.), *7393*
- dynamic analysis, plates, shear, vibration (nonlinear), Sathyamoorthy (M.), *8308*
- modal analysis, shear, shells (spherical), vibration (forced), Shenderov (E.L.), *9337*
- beams, dynamic properties, shear, vibration (free), Doyle (J.F.), *10199*
- beams (cantilever), bending, blades, shear, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- beams (curved), dynamic analysis, shear, vibration (free), Suzuki (K.), Takahashi (S.), *11148*

rotating bodies, dynamic analysis, mathematical methods, Koshlyakov (V.N.), *10*
- dynamic analysis, elastic bodies, mathematical methods, Vilke (V.G.), *11*
- flexible bodies, rotating shafts, stability theory, Samsonov (V.A.), *13*
- plates (rectangular), Calvini (P.), *326*
- blades, dynamic stresses, vibration (free), Ramamurti (V.), Sreenivasamurthy (S.), *372*
- eigenvalues, vibration, Muller (P.C.), *381*
- convection (free), magneto fluid dynamics, plates (perforated), slip flow, Vidyanidhi (V.), Raju (G.K.), (et al.), *859*
- deformation, friction (sliding), seals, Metcalfe (R.), *1017*
- dynamic stability, rigid bodies, Chudnenko (A.N.), *1068*
- dynamic properties, vibration, Wildheim (J.), *1288*
- non newtonian flow, simple fluids, spherical bodies, viscoelastic fluids, Fosdick (R.L.), Kao (B.G.), *1484*
- finite difference methods, navier stokes equation, spherical bodies, viscous flow, Dennis (S.C.R.), Ingham (D.B.), (et al.), *1507*
- inertial waves, ray method, shells (fluid-filled), spherical bodies, London (S.), Shen (M.C.), *1599*
- dynamic programming, nonlinear systems, time optimal systems, Akulenko (L.D.), *2089*
- biaxial loading, fibers, multiaxial fatigue, Calli (S.F.), Goswami (B.C.), (et al.), *2255*
- bodies of revolution, drag, navier stokes equation, secondary flow, Majhi (S.N.), Vasudeviah (M.), *2603*
- bodies of revolution, boundary layer, laminar flow, Suwono (A.), *2627*
- delta wings, separated flow, supersonic flow, Staicu (S.), *2734*
- approximations, magneto fluid dynamics, spherical bodies, torque, Natyaganov (V.L.), *2888*
- dynamic analysis, lyapunov's functions, Arkhangelskaya (M.Yu.), *3089*
- dynamic analysis, Essen (H.), *3091*
- beams, vibration (free), Takeyama (H.), *3373*
- conical bodies, laminar flow, navier stokes equation, viscous flow, Patni (G.C.), Rawat (M.L.), *3620*
- stokes flow, toroids, Majumdar (S.R.), O'Neill (M.E.), *3624*
- membranes, porous surfaces, Mikhlin (J.A.), Tanny (G.B.), *3852*
- ferrous metals, magneto fluid dynamics, seals, suspensions, Morris (W.D.), *3888*
- dynamic analysis, gyrodynamics, maneuverability, Chen (J.), Kane (T.R.), *3923*
- earth, elastic behavior, oscillations, Molodenskiy (M.S.), *4035*
- dynamic analysis, rigid bodies, Johnston (G.W.), *4143*
- damping, optimal control, time optimal systems, Zubov (V.I.), *4271*
- aerospace vehicles, design, regulator problem, structural response, Baioev (A.A.), *4307*
- approximations, beams, vibration, Hodges (D.H.), *4414*
- beams (timoshenko), resonance, vibration (forced), Victor (F.), Ellyin (F.), *4431*
- transient effects, vibration (forced), Yanabe (S.), *4432*
- dynamic stability, helicopters, Yen (J.G.), Mclarty (T.T.), *4439*
- convection (forced), porous media, Chakrabarti (A.), Gupta (A.S.), *4940*
- beam columns, structural optimization, Adali (S.), *5173*
- beams, finite element methods, vibration (free), Hodges (D.H.), Rutkowski (M.J.), *5213*
- damping, dynamic response, vibration (forced), Matveev (V.V.), Zinkovskii (A.P.), *5214*
- moment coefficient, stokes flow, toroids, viscous flow, Bhattacharyya (T.K.), *5406*
- heat transfer, laminar flow, spherical bodies, Suwono (A.), *5559*
- libration theory, orbit mechanics, space vehicles, three body problem, Barkin (Yu.V.), *5699*
- dynamic analysis, gyrodynamics, Galiullin (I.A.), *6054*
- dynamic stability, gyrodynamics, Kovalev (A.M.), *6057*
- contact problems, irregular elements, machine design, stress analysis, Bagci (C.), Wong (J.C.), (et al.), *6117*
- critical speed, resonance, vibration (forced), Matsuura (K.), *6305*
- cylindrical bodies, friction, spherical bodies, viscous flow, Greenstein (T.), Zocco (J.G.), *6623*
- dynamic response, gyrodynamics, Bogaevskii (V.N.), Ostrer (L.A.), *7149*
- dynamic analysis, gyrodynamics, Zakrzhevskii (A.E.), *7150*
- gyrodynamics, rings, structural response, vibration (nonlinear), Maewal (A.), *7368*
- blades, experimental mechanics, frequencies, turbines, vibration (free), Beckmann (J.), Wachter (J.), *7399*
- dynamic response, vibration (nonlinear), Adams (M.L.), *7403*
- blades, heat transfer, slots, turbomachinery, Kogan (G.A.), Dergach (A.A.), *7842*
- continental drift, displacement, earth, Sconzo (P.), *7999*
- earth, oscillations, Odaka (T.), *8005*
- control, dynamic analysis, dynamic properties, feedback, rotors, vibration, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- critical speed, vibration (forced), Markert (R.), Pfutzner (H.), *8283*
- bending, critical speed, flexible bodies, vibration (forced), Markert (R.), *8320*
- couple stresses, micropolar media, polar fluids, spherical bodies, Lakshmana Rao (S.K.), Iyengar (T.K.V.), *8487*
- bodies of revolution, reynolds number (small), secondary flow, separated flow, Smith (S.H.), *8527*
- perturbation methods, stokes flow, toroids, viscous flow, Murray (J.C.), *8530*
- couette flow, hydrodynamic stability, spherical bodies, vortices, Hocking (L.M.), *8605*
- conical bodies, heat transfer, rotating fluids, spinning bodies, Vira (N.R.), Fan (D.-N.), *8716*
- boussinesq equation, convection, hydrodynamic stability, rotating fluids, Buhler (K.), Oertel (H.) Jr., *8719*
- annular flow, convection (forced), secondary flow, shells (spherical), Dallman (R.J.), Douglass (R.W.), *8720*
- cooling towers, heat exchangers, rotary dry cooling towers, Valenzuela (J.A.), Glicksman (L.R.), *8755*
- earth, magneto fluid dynamics, modes, spherical bodies, Gubbins (D.), *8816*
- heat transfer, shells (spherical), Belvedere (G.), Paterno (L.), (et al.), *8960*
- dynamic stability, wheels, Goncharenko (V.I.), Lobas (L.G.), (et al.), *9068*
- dynamic stability, spinning bodies, vibration (self excited), Rimrott (F.), *9089*
- beams (flexural), vibration (free), Bauer (H.F.), *9306*
- elastoplasticity, interference fits, machine design, Kollmann (F.G.), *9467*
- internal flow, reynolds number (small), spherical bodies, Rumez (W.), *9536*
- conical flow, diffusers, visualization, Kikuyama (K.), Murakami (M.), (et al.), *9591*
- boundary layer, conical bodies, hydrodynamic stability, Kobayashi (R.), *9601*

- gravity waves (shallow water), numerical methods, spherical bodies, Gilliland (R.L.), *10484*
- friction, pressure distribution, roughness, surfaces, Sansonov (V.A.), *10885*
- bearings (liquid lubricated), dynamic analysis, experimental mechanics, stability theory, Iwatsubo (T.), Kawai (R.), (et al.), *11144*
- annular flow, numerical methods, reynolds number (high), spherical bodies, Nakabayashi (K.), Nishida (H.), (et al.), *11375*
- force, rarefied gases, Ivanov (S.G.), Yanshin (A.M.), *11449*
- boundary layer (turbulent), separation, three dimensional flow, turbomachinery, Ugryumov (M.L.), *11551*
- basins, channel flow, critical flow, weirs, Shen (C.Y.), *11614*
- dispersion relation, rossby waves, turbulent flow, Legras (B.), *11616*

rotating cylinders, incompressible flow, internal flow, viscous flow, Bertela (M.), *1516*

- inertial waves, shells (fluid-filled), tanks, Wood (W.W.), *1587*
- end effects, hydrodynamic stability, stability theory, taylor vortices, Walton (I.C.), *2685*
- fluid-structure interaction, separated flow, Volmir (A.S.), Gulyaev (V.V.), (et al.), *2718*
- film flow, froude number, reynolds number, surface tension, weber number, Kovac (J.), Balmer (R.T.), *3628*
- cylindrical bodies, heat transfer, laminar flow, tubes, Woods (J.L.), Morris (W.D.), *4711*
- hydrodynamic stability, rotational flow, stability theory, thin films, Iwasaki (Y.), Hasegawa (E.), *5462*
- film thickness, lubrication (elastohydrodynamic), rolling contact, squeeze films, Wada (S.), *5987*
- entrainment, shear flow, viscoelastic fluids, viscoplasticity, Shulman (Z.P.), Baikov (V.I.), *6572*
- couette flow, heat transfer, rollers, slots, Miesch (H.), *6650*
- free boundary, rheology, viscoelastic fluids, Beavers (G.S.), Yoo (J.Y.), (et al.), *7642*
- annular flow, asymptotic methods, cylindrical bodies, singularities, Conlisk (A.T.), Walker (J.D.A.), *9535*
- annuli, compressible flow, irrotational flow, pipe flow, swirl flow, Neuberger (A.W.), *9586*
- flexible bodies, perturbation methods, vibration, Lakin (W.D.), Nachman (A.), *10198*
- annular flow, cylindrical bodies, nonlinear theory, rossby waves, Davey (M.K.), *10410*
- annular flow, couette flow, magneto fluid dynamics, stability theory, Antimirov (M.Ya.), Kolyshkin (A.A.), *10746*
- vibration (nonlinear), vibration (torsional), Inoue (Y.), Shibata (T.), (et al.), *11142*
- eccentric rotating cylinders, navier stokes equation, stokes flow, two dimensional flow, Suematsu (Y.), Ito (T.), (et al.), *11374*
- annuli, hydrodynamic stability, laminar flow, Hall (P.), *11496*
- inertial waves, shells (fluid-filled), spectra, Scott (W.E.), *11597*
- ballistics, cylindrical bodies, ricochet, water, water surface, Bai (Y.L.), Johnson (W.), *11652*
- bodies (liquid filled), inertial waves, reynolds number, Whiting (R.D.), *11684*

rotating disks, singular integral equations, Filshtinskii (L.A.), Lyubchak (V.A.), *325*

- contact problems, rings, Babloyan (A.A.), Engibarian (A.A.), *327*
- rotating shafts, vibration, Forrai (L.), *382*
- inertia, navier stokes equation, reynolds number (small), Bar-Yoseph (P.), Salan (A.), (et al.), *579*
- annular flow, friction (internal), heat transfer, laminar flow, pressure drop, Mochizuki (S.), Yang (W.-J.), *761*
- mass transfer, sublimation, Koyama (H.), Ohsawa (S.-I.), (et al.), *794*
- blades, centrifugal turbines, orthotropic materials, thermal loading, Paul (A.K.), *1243*
- design (optimum), shape factors, Bhavikatti (S.S.), Ramakrishnan (C.V.), *1428*
- finite difference methods, friction (skin), internal flow, viscous flow, Kullen (A.), *1510*
- boundary layer (thermal), heat transfer, stanton number, turbulent flow, Johnson (M.C.), *2803*
- convection (free), porous walls, rotating fluids, Soundalgekar (V.M.), Pop (I.), *2904*
- laminar flow, mass transfer, turbulent flow, Law (C.G.) Jr., Pierini (P.), (et al.), *2949*
- differential equations (ordinary), magneto fluid dynamics, nonlinear theory, viscoelastic fluids, Bhatnagar (R.K.), *2887*
- bearing capacity, rotors, thermal effects, Kozlov (I.A.), *3341*
- finite element techniques, vibration (forced), Nigh (G.L.), Olson (M.D.), *3369*
- crack initiation, ductile fracture, plasticity, rings, Tomkins (B.), Atkins (A.G.), *3431*
- oscillating bodies, particle fluid flow, velocity profiles, Mitra (P.), *3618*
- cylindrical bodies, finite difference methods, internal flow, navier stokes equation, Schultz (D.H.), Shah (V.L.), *3621*
- bubble dynamics, swirl flow, Wang (J.H.), Yang (W.-J.), *4019*
- diffusion, mass transfer, polymers, Lal (P.), Mishra (P.), (et al.), *4729*
- couette flow, hall effect, heat transfer, magneto fluid dynamics, Vidyanidhi (V.), Krishnam Raju (G.), (et al.), *4745*
- anisotropic media, nonhomogeneous media, plates (annular), thermal stresses, Misra (J.C.), Achari (R.M.), *4815*
- deposition, particles, suspensions, Adamczyk (Z.), Pomianowski (A.), *4822*
- composite structures, reinforced bodies, Tsuda (S.), Shiratori (E.), (et al.), *5129*
- plates (holed), plates (orthotropic), stress concentration, Genta (G.), Gola (M.), *5167*
- flywheels, plates (thick), stress analysis, Pardoen (G.C.), Nudenberg (R.D.), (et al.), *5168*
- thermal stresses, vibration (thermally excited), Chen (L.-T.), Dugundji (J.), *5797*
- films, fluid-structure interaction, vibration (forced), viscous effects, Anikeev (G.I.), Blokhin (I.L.), (et al.), *6306*
- critical speed, vibration (forced), Iwatsubo (T.), *7402*
- cavitation, erosion, testing equipment, wear, Nikulin (V.A.), Konovalov (V.M.), (et al.), *7573*
- galerkin method, navier stokes equation, stream function, vorticity, Adams (M.L.), Szeri (A.Z.), *7665*
- integral methods, navier stokes equation, plates, viscous flow, Datta (S.), *7670*
- drag reduction, laminar flow, laser doppler velocimeters, polymers, Ulbrecht (J.J.), Gasparetto (C.A.), *7675*
- anisotropic media, stress analysis, Genta (G.), Gola (M.), (et al.), *8255*
- dynamic analysis, gas turbines, Dondoshanskii (V.K.), *8317*
- film flow, lubrication (hydrodynamic), perturbation methods, stokes flow, Phan-Thien (N.), Antonia (R.A.), (et al.), *8533*
- boundary layer,compressible flow, edge effects, laminar flow, Toren (M.), Solan (A.), *8718*
- conveyors, granular media, screws, Rademacher (F.J.C.), *8916*
- blades, dynamic analysis, vibration (free), Irretier (H.), *9316*
- inertia, non newtonian flow, second order fluids, Rajagopal (K.R.), *9581*
- hydrodynamic stability, rheology, Rajagopal (K.R.), Gupta (A.S.), *9603*
- boundary layer (thermal), magneto fluid dynamics, similarity methods, Glazov (O.A.), *9710*
- elastodynamics, elastoplasticity, plates (annular), Weber (H.), Dreher (A.), *10161*
- plates (annular), plates (nonhomogeneous), stress analysis, Bhaduri (S.), *10162*
- plates, vibration (forced), Sreenivasamurthy (S.), Ramamurti (V.), *10205*
- complex variables, cracks, Isida (M.), *10296*
- cylindrical bodies, internal flow, navier stokes equation, torque, Bertela (M.), Gori (F.), *10404*
- fluid mechanics, thermodynamics (irreversible), variational methods, Singh (P.), Ram (P.), *10435*
- cascades, compressible flow, finite element techniques, Shirahata (H.), Daiguji (H.), *10451*
- heat transfer, integral methods, laminar flow, mass transfer, rotating fluids, Feisch (K.-O.), Piesche (M.), *10580*
- fluid injection, fluid mechanics, heat transfer, numerical methods, suction, Agarwal (R.S.), Bhargava (R.), *10685*
- axial turbines, blades, dynamic response, vibration, Michimura (S.), Nagamatsu (A.), (et al.), *11130*
- critical speed, dynamic response, vibration, Hinkel (H.M.), *11153*
- internal flow, secondary flow, unsteady flow, vortex flow, Kurokawa (J.), Toyokura (T.), (et al.), *11377*
- heat transfer, magneto fluid dynamics, porous walls, Sarojamma (G.), Krishna (D.V.), *11508*
- boundary layer (thermal), heat transfer, viscous effects, Vira (N.R.), Fan (D.-N.), *11552*

rotating fluids, boundary layer, nonlinear analysis, spin-up, Smith (S.H.), *580*

- conduction (heat), heat exchangers, heat transfer, nusselt number, Ramdas (V.), Uhl (V.W.), (et al.), *790*
- magneto fluid dynamics, nonlinear characteristics, spherical bodies, vessels, Kiriushin (V.V.), *858*
- boundary layer, induced drag, magneto fluid dynamics, perturbation methods, Sneyd (A.D.), *860*
- convection (free), geostrophic flow, heat, magneto fluid dynamics, Soward (A.M.), *1514*
- convection (free), porous walls, rotating disks, Soundalgekar (V.M.), Pop (I.), *2904*
- axisymmetric flow, equilibrium, gravity, Friedman (A.), Turkington (B.), *3627*
- blades, heat transfer, similarity methods, simulation, turbomachinery, Eckert (E.R.G.), *3802*
- bounded media, linearization, magneto fluid dynamics, stratified flow, Prasada Rao (D.R.V.), Krishna (D.V.), *3891*
- experimental methods, metals, plasma, spectroscopy, Brand (G.F.), James (B.W.), (et al.), *3903*
- ducts (variable area), extended surfaces, heat exchangers, heat exchangers (cartridge), Margittai (T.B.), *4717*
- channel flow, estuaries, Nof (D.), *4869*
- barotropic models, finite element techniques, oceanography, Platzman (G.W.), *4872*
- annular flow, thermal instability, variable fluid properties, Jonas (P.R.), *5557*
- convection, geophysics, geostrophic flow, geostrophic models, thermal instability, Glukhovskiy (A.B.), Dolzhanskiy (F.V.), *5558*
- baroclinic instability, hydrodynamic stability, oceanography, stratified flow, Killworth (P.D.), *5919*

- convection, hydrodynamic stability, rayleigh number, shells (spherical), Geiger (G.), Busse (F.), *6787*
- baroclinic waves, convection, geophysics, Leach (H.), *6788*
- channel flow, currents, estuaries, Nof (D.), *7053*
- containers, flow irregularities, spin-up, stratified flow, vortices, Greenspan (H.P.), *7674*
- boundary layer, computing techniques, cyclones, laminar flow, navier stokes equation, Bhattacharyya (P.), Ghosh (A.), *7704*
- boundary layer (turbulent), computing techniques, cyclones, navier stokes equation, Bhattacharyya (P.), Ghosh (A.), *7705*
- coriolis forces, hydrodynamic stability, Gledzer (Ye.B.), Makarov (A.L.), (et al.), *7743*
- mass transfer, stratification, vortex lines, vorticity, Gill (A.E.), Smith (J.M.), (et al.), *8020*
- currents, ekman layer, ocean air interaction, Pearce (B.R.), Cooper (C.K.), *8032*
- currents, ekman layer, mixing layers, ocean air interaction, Csanady (G.T.), Shaw (P.T.), *8033*
- hydrodynamic stability, poiseuille flow, Cotton (F.W.), Salwen (H.), *8607*
- bounded media, cellular flow, convection, hydrodynamic stability, Daniels (P.G.), *8710*
- conical bodies, heat transfer, rotating bodies, spinning bodies, Vira (N.R.), Fan (D.-N.), *8716*
- annular flow, boundary layer (thermal), convection, ekman layer, thermal instability, Hignett (P.), Ibbetson (A.), (et al.), *8717*
- boussinesq equation, convection, hydrodynamic stability, rotating bodies, Buhler (K.), Oertel (H.) Jr., *8719*
- convection, radiant interchange, thermal instability, Onyegegbu (S.O.), *8752*
- hall effect, magneto plasma dynamics, models, plates (perforated), Shivamoggi (B.K.), *8817*
- bottom irregularities, oceanography, stratification, vorticity, Eliassen (A.), *8973*
- atmospheric circulation, meteorology (physical), stratification, Held (I.M.), Hou (A.Y.), *8988*
- gravity waves, rossby waves, Bridger (A.F.C.), Stevens (D.E.), *8989*
- boundary layer (atmospheric), ekman layer, geostrophic flow, James (I.N.), *8990*
- eddies, ocean air interaction, oceanography, stratification, Muller (P.), Frankignoul (C.), *8996*
- eddy diffusivity, turbulence (geophysical), vorticity, Haidvogel (D.B.), Held (I.M.), *9004*
- films, interface phenomena, liquid vapor interface, two phase flow, Siekmann (J.), Johann (W.), *9877*
- atmospheric circulation, coriolis forces, Zeng (Q.-C.), Ye (D.-Z.), *9936*
- internal waves, ocean air interaction, stratified flow, Klinck (J.M.), Pietrafesa (L.J.), (et al.), *9938*
- energy conversion, ocean, singularities, sinks, stratified flow, Whitehead (J.A.) Jr., Gershenfeld (N.), *10411*
- heat transfer, integral methods, laminar flow, mass transfer, rotating disks, Felsch (K.-O.), Piesche (M.), *10580*
- centrifugation, jets, layered media, magneto plasma dynamics, Levin (V.B.), *10741*
- experimental methods, layered media, magneto fluid dynamics, stabilization, Klyukin (A.A.), Kolesnikov (Yu.B.), (et al.), *10742*
- alfven number, equilibrium, magneto fluid dynamics, theory, Zeitunyan (R.Kh.), *10743*
- ocean air interaction, oceanography, Gent (P.R.), Semtner (A.J.) Jr., *10961*
- axisymmetric flow, hydrodynamic stability, inviscid fluid, Vladimirov (V.A.), Tarasov (V.F.), *11373*
- rossby waves, stratified flow, two component flow, viscous flow, Boyer (D.L.), *11376*
- laplace transform, magneto fluid dynamics, porous surfaces, unsteady flow, Seth (G.S.), Jana (R.N.), (et al.), *11812*

rotating shafts, flexible bodies, rotating bodies, stability theory, Samsonov (V.A.), *13*

- dynamic response, vibration (torsional), Pouyet (J.M.), Lataillade (J.L.), *379*
- beams (timoshenko), vibration (torsional), Nelson (N.D.), *380*
- rotating disks, vibration, Forrai (L.), *382*
- differential equations (partial), integration, transient effects, Chu (F.H.), Pilkey (W.D.), *1114*
- elastic bodies, hydroelasticity, surface profiles, Zak (M.), *1174*
- dynamic behavior, mechanisms, Stuhler (W.), *1280*
- dynamic response, nonlinear mechanics, vibration (forced), Yamamoto (T.), Ishida (Y.), (et al.), *2341*
- eigenvalues, modal analysis, vibration, Matsushita (O.), Kikuchi (K.), (et al.), *2342*
- high speed, lubrication (hydrodynamic), tools, Gaillard (M.), Boudet (R.), *3048*
- bearings (journal), lubrication (hydrodynamic), turbomachinery, vibration, Ruddy (A.V.), Summers-Smith (D.), *3051*
- dynamic response, dynamic stability, stability theory, vibration (forced), Iwatsubo (T.), Kawai (R.), (et al.), *3372*
- experimental mechanics, flexible bodies, vibration (forced), Flack (R.D.), Leader (M.E.), (et al.), *4433*
- dynamic analysis, nonlinear characteristics, vibration (nonlinear), Yamamoto (T.), Ishida (Y.), (et al.), *5227*
- diesel engines, dynamic stresses, failure, vibration (torsional), Pasricha (M.S.), Carnegie (W.D.), *6303*
- gyrodynamics, vibration (forced), Yanabe (S.), *6304*
- balancing, high speed, machinery, pitching, yawing, Freudenstein (F.), Macey (J.P.), (et al.), *6563*
- control, flexible bodies, vibration isolation, Stanway (R.), Burrows (C.R.), *8318*
- frequency response, vibration (free), Bauer (V.O.), *8319*
- containers, particulate flow, transport phenomena, Abouzeid (A.Z.M.), Fuerstenau (D.W.), (et al.), *8917*
- dynamic analysis, torque, vibration (parametric), Unger (A.), Brull (M.A.), *9324*
- balancing, dynamic behavior, vibration (forced), Shiohata (K.), Fujisawa (F.), (et al.), *10216*
- balancing, dynamic response, flexible bodies, Van De Vegte (J.), *10217*
- bearings (journal), dynamic response, Prabhu (B.S.), Rao (B.V.A.), *10218*
- balancing, dynamic response, flexible bodies, torque, Markert (R.), Pfutzner (H.), (et al.), *10220*
- damping, dynamic analysis, vibration (forced), Muller (A.A.), *11140*
- dynamic stability, vibration, Iwatsubo (T.), Okaue (M.), (et al.), *11141*
- critical speed, damping, dynamic analysis, vibration (forced), Yanabe (S.), *11143*
- balancing, dynamic analysis, Woomer (E.), Pilkey (W.), *11145*
- balancing, dynamic analysis, flexible bodies, Shiohata (K.), Fujisawa (F.), *11146*

rotating stall, centrifugal compressors, diffusers, unsteady flow, Abdelhamid (A.N.), *1633*

- axial compressors, measurements (dynamic), rotors, Sharma (P.B.), Railly (J.W.), *1635*
- centrifugal compressors, diffusers, oscillatory flow, Abdelhamid (A.N.), Bertrand (J.), *3744*
- axial compressors, inlet flow, velocity profiles, Grahl (K.), Neuhoff (H.G.), *10529*

rotational flow, compressible flow, plane flow, streamlines, subsonic flow, vortex flow, Nikolskiy (A.A.), *568*

- navier stokes equation, numerical analysis, pipe flow, Pareschi (A.), Montanelli (P.), *1565*
- magneto fluid dynamics, streamlines, theory, two dimensional flow, Chandna (O.P.), Toews (H.), (et al.), *2875*
- shear flow, solitary waves, stratified flow, Gibbon (J.D.), James (I.N.), (et al.), *4653*
- hydrodynamic stability, rotating cylinders, stability theory, thin films, Iwasaki (Y.), Hasegawa (E.), *5462*
- pipe flow, turbulent flow, wavy walls, Silberman (E.), *7717*
- inertial waves, numerical analysis, vortices, Thompson (R.O.R.Y.), *7766*
- interface phenomena, porous media, Verruijt (A.), *8928*
- boundary layer (three dimensional), disks, fluid mechanics, machinery, Toren (M.), Solan (A.), (et al.), *9559*
- drops, shape, stability, Brown (R.A.), Scriven (L.E.), *10827*
- gravity waves (finite depth), korteweg de vries equation, radial waves, similarity methods, Djordjevic (V.D.), Pavlovic (M.), *11569*
- approximations (higher order), gravity waves (surface), lakes, ocean, Bennett (J.R.), Schwab (D.J.), *11573*
- drops, oscillations, zero g phenomena, Radyakin (N.K.), *11596*
- boundary value problems, existence theorems, gravity waves (finite depth), Yolkin (N.N.), *11615*
- gravity waves (internal), ocean waves, stratified flow, Friedlander (S.), Siegmann (W.L.), *11619*
- gravity waves (internal), ocean waves, Bunimovich (L.A.), *11622*

Rotem (A.), see Altus (E.), *5312*

Rotenberg (Y.), see Abdelmessih (A.H.), *10577*

Roth (B.), see Nayak (J.H.), *4932*

- see Mccarthy (J.M.), *6061*
- see Ohwovoriole (M.S.), *8094*
- see De Sa (S.), *9091*
- see De Sa (S.), *9092*

Roth (E.A.), artificial satellites, orbit mechanics, perturbation methods, potential theory, *7915*

Roth (R.), analysis, deterministic systems, identification, systems, *8110*

Roth (W.H.), analytical methods, earth pressure, experimental results, soil mechanics, walls, Crandall (L.), *9364*

Rothe (F.), bifurcation, diffusion, existence theorems, perturbation theory, reaction diffusion equations, *4961*

Rothe (P.H.) eds., heat transfer, power plants, processing, two phase flow, Lahey (R.T.) Jr., *8901, book*

Rothwell (A.), experimental results, panels (stiffened), plates (stiffened), postbuckling behavior, *6238*

rotors, bearings (journal), lubricants (liquid), machine design, pumps, Ruddy (A.B.), *1028*

- bearings (liquid lubricated), dynamics, vibration, Dowson (D.), Taylor (C.M.), *1029*
- bearings (gas lubricated), dynamics, vibration, Marsh (H.), *1030*
- axial compressors, measurements (dynamic), rotating stall, Sharma (P.B.), Railly (J.W.), *1635*
- blades, dynamic response, vibration, Shaw (J.), Albion (N.), *2337*
- damping, dynamic behavior, vibration isolation, Kravtsova (E.V.), Poznyak (E.L.), *2356*

- turbulence (freestream), wakes, Hah (C.), Lakshminarayana (B.), *2663*
- control, helicopters, springs, vibration, Drees (J.M.), Dooley (L.W.), (et al.), *2745*
- dynamic analysis, hydraulic machinery, hydrodynamics, scale models, Bachmann (P.), *2760*
- laser doppler velocimeters, turbomachinery, velocity measurement, Schodl (R.), *2766*
- bearings (journal), flexible bodies, lubrication (hydrodynamic), Leader (M.E.), Flack (R.D.), (et al.), *3047*
- bearings, damping, dynamic stability, Lund (J.W.), *3053*
- bearing capacity, rotating disks, thermal effects, Kozlov (I.A.), *3341*
- alloys, crack growth, fatigue, low cycle fatigue, Shih (T.T.), Donald (J.K.), *3439*
- damping, design, squeeze films, Simandiri (S.), Hahn (E.J.), *3576*
- centrifugal pumps, experimental methods, geometrical properties, thrust, Okamura (T.), *3743*
- axial compressors, axisymmetric flow, mathematical models, stalling, Al-Daini (A.J.), Railly (J.W.), *3747*
- bearings (magnetic), bearings (thrust), dynamics, Ulbrich (H.), Schweitzer (G.), (et al.), *4115*
- aerodynamic interference, airplane structures, fuselages, geometrical properties, helicopters, Wilby (P.G.), Young (C.), (et al.), *4673*
- lasers, optical techniques, turbomachinery, velocity measurement, Smart (A.E.), Wisler (D.C.), (et al.), *4687*
- noise, turbines, turbulence, Trunzo (R.), Lakshminarayana (B.), (et al.), *4809*
- bearings (foil), bearings (gas lubricated), dynamics, high speed, Licht (L.), Anderson (W.J.), (et al.), *4905*
- generators, machine design, retaining rings, steel, Viswanathan (R.), *5372*
- axial compressors, stalling, three dimensional flow, waves, Al-Daini (A.J.), Railly (J.W.), *5500*
- bearings (hydrodynamic), dynamic properties, finite element methods, reynolds equation, Birembaut (Y.), Peigney (J.), *5997*
- failure, finite element techniques, nonlinear analysis, nonlinear materials, turbines, Nyssen (C.), *6118*
- balancing, flexibility, impedance, Shimada (K.), Miwa (S.), *6558*
- algorithms, controllability, helicopters, Du Val (R.W.), *6731*
- aerodynamic performance, flight, helicopters, Azuma (A.), Saito (S.), (et al.), *6732*
- axial turbines, cascades, mathematical models, separated flow, Ablamskii (V.A.), *6733*
- centrifugal compressors, diffusers, entrance region, laser doppler velocimeters, optical analysis, Krain (H.), *6735*
- axial compressors, shock waves, transonic flow, visualization, Strazisar (A.J.), Powell (J.A.), *6742*
- stress analysis, thermal stresses, turbines, Strunkin (V.A.), Sagadeev (R.G.), (et al.), *6950*
- bearings (gas lubricated), bearings (journal), dynamic stability, lubrication (hydrostatic), Gudskaya (E.G.), *7101*
- aerodynamic performance, downwash, helicopters, hovering, wakes, Andrew (M.J.), *7796*
- aerodynamic loads, control, helicopters, Mccloud (J.L.) III, *7797*
- airships, design, flight stability, helicopters, Nagabhushan (B.L.), Tomlinson (N.P.), *7799*
- blockage, boundary layer, centrifugal compressors, pressure distribution, Pampreen (R.C.), *7803*
- axial turbines, blades, leaks, Booth (T.C.), Dodge (P.R.), (et al.), *7890*
- axial turbines, blades, leaks, numerical analysis, Wadia (A.R.), Booth (T.C.), *7891*
- bearings (tilted pad), dynamics, lubrication (hydrodynamic), Malik (M.), Sinhasan (R.), *8059*
- bearings, dynamics, turbomachinery, Fleming (D.P.), *8068*
- control, dynamic analysis, dynamic properties, feedback, rotating bodies, vibration, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- balancing, flexible bodies, machine design, variable mass, vibration, Cveticanin (L.J.), *8476*
- automatic control, electrical components, fiber optics, helicopters, hydraulics, Kretz (M.), Larche (M.), *8649*
- fans, hot wire, incompressible flow, turbomachinery, wakes, Lakshminarayana (B.), Govindan (T.R.), (et al.), *9653*
- centrifugal compressors, dynamic stability, unsteady flow, Vance (J.M.), Laudadio (F.J.), *9655*
- aerodynamics, axial compressors, blades, pressure distribution, three dimensional flow, Dring (R.P.), Joslyn (H.D.), (et al.), *9656*
- axial turbines, blades, heat transfer, thermal measurements, Pochuev (V.P.), Shcherbakov (V.F.), *9806*
- gas turbines, thermoelasticity (nonlinear), thermoelasticity (transient), Hagen (K.), Sandsmark (N.), *9872*
- bearings (journal), damping, lubrication (hydrodynamic), stiffness, vibration (self excited), Michalopoulos (D.), Dimarogonas (A.), *9020*
- bearings (tilted pad), design, dynamics, high speed, Martelli (F.), Manfrida (G.), *9028*
- blades, helicopters, lift, turbulence (geophysical), turbulent flow, Fijimori (Y.), *9664*
- aerodynamic interference, cascades, centrifugal compressors, diffusers, Fisher (E.H.), Inoue (M.), *9670*
- aeroelasticity, blades, finite element techniques, helicopters, Straub (F.K.), Friedmann (P.P.), *9806*
- balancing, bearings (gas lubricated), bearings (spherical), lubricants (gas), Karpov (V.S.), Prokulevich (L.A.), *9973*
- boundary layer (turbulent), cascades, integral methods, turbomachinery, Lakshminarayana (B.), Govindan (T.R.), *10449*
- composite materials, design, helicopters, tails, Huber (H.), Frommlet (H.), (et al.), *10515*
- aerodynamic interference, aerodynamics, airfoils, blades, wind turbines, Klimas (P.C.), *10520*
- film cooling, turbines, Dring (R.P.), Blair (M.F.), (et al.), *10687*
- bearings, damping, flexible bodies, squeeze films, vibration isolation, Cookson (R.A.), Kossa (S.S.), *11240*
- blades, turbulence, turbulence (structure), wakes, Lakshminarayana (B.), Reynolds (B.), *11553*
- bodies (liquid filled), damping, dynamic stability, Hendricks (S.L.), *11688*
- blades, damping, flapping, helicopters, Gaonkar (G.H.), Peters (D.A.), *11737*
- aerodynamic performance, centripetal flow, radial turbines, Gracheva (S.M.), Tikhonov (A.N.), (et al.), *11745*
- generators, magnetic field, models, spherical bodies, Barash (Yu.S.), Kropachev (E.P.), *11830*
- helicopters, propellers, sound generation, Farassat (F.), *11944*
- helicopters, noise, Dahan (C.), Gratieux (E.), *11994*

Rott (N.), acoustics, ducts, nonlinear characteristics, resonance, *9845*

Rott (W.), dynamic analysis, plates (circular), shells (cylindrical), vibration (free), *9319*

Roufaeil (O.L.), beams (timoshenko), mindlin plates, plates (rectangular), vibration (free), Dawe (D.J.), *2335*

Rougee (P.), continuum mechanics, kinematics, lagrangian formulation, thermodynamics (nonequilibrium), *1049*

roughness, boundary roughness, cylindrical bodies, surface flow, Buresti (G.), *604*

- boiling, channel flow, critical heat flux, surface effect, Styrikovich (M.A.), Leontev (A.I.), (et al.), *742*
- measurements, skid, surface profiles, Ishigaki (H.), Kawaguchi (I.), *999*
- contact problems, friction, surface profiles, wear, Kragelskii (I.V.), *1002*
- friction, lubricants (solid), polymers, Ainbinder (S.B.), *1003*
- adhesion, contact resistance, metals, wear, Chowdhury (S.K.R.), Pollock (H.M.), *1007*
- forming, plastic behavior, sheet metal, surfaces, Yamaguchi (K.), Nishimura (S.), (et al.), *1345*
- bed load, resistance, sediment transport, Mantz (P.A.), *1496*
- boundary layer (turbulent), fluid injection, permeability, Alimpiyev (A.I.), Alimpiyev (V.I.), *1552*
- analysis, ducts, friction factor, Pyle (R.), Novak (P.), *1563*
- friction factor, natural surfaces, reynolds number, Musker (A.J.), *1564*
- contact problems, lubrication (elastohydrodynamic), micropitting, rolling contact, surface profiles, Berthe (D.), Flamand (L.), (et al.), *1931*
- hardness, surfaces, wear, Ryzhov (E.V.), Gorlenko (O.A.), *1932*
- polymers, surface profiles, wear, Ryzhov (E.V.), *1933*
- boundary layer (turbulent), gas turbines, heat exchangers, heat transfer, Coleman (H.W.), Moffat (R.J.), (et al.), *2629*
- pressure distribution, slots, stokes flow, Phan-Thien (N.), *2649*
- friction factor, pipelines, Kumar (A.), *2650*
- boundary layer, hydrodynamic stability, orr sommerfeld equation, shear flow, stability theory, Lewkowicz (A.K.), *2681*
- hydrology, runoff, watersheds, Ellis (F.W.), Ramsey (F.V.), (et al.), *3013*
- film thickness, gears, oil films, surfaces, Tudor (A.), *3050*
- automobiles, dissipation, dynamic response, highways, Velinsky (S.A.), White (R.A.), *3384*
- cooling, duct flow, heat transfer, plates (parallel), turbulent flow, Ichimiya (K.), Hasegawa (S.), (et al.), *3788*
- damping, friction (skin), rolling motion, ship motion, Myrhaug (D.), *4098*
- biomechanics, channel flow, channels, darcy flow, river beds, vegetation, Kouwen (N.), Li (R.-M.), *4569*
- boundary layer (turbulent), flow measurement, pressure gradient, Aswatha Narayana (P.A.), *4601*
- friction (sliding), lubrication (boundary), lubrication (hydrodynamic), steam turbines, Rohde (S.M.) eds., Cheng (H.S.), *4895, book*
- boiling, critical heat flux, pipe flow, Chernobai (V.A.), *5546*
- hydrology, turbulent flow, wavy walls, Melekhova (N.A.), Mikhailova (N.A.), *5915*
- bearings (journal), magnetic fluids, magneto fluid dynamics, surfaces, Wierzcholski (K.), *6000*
- contact stresses, deformation (plastic), Kato (T.), Kato (S.), (et al.), *6182*
- dynamic response, oscillations, vehicles, Hammond (J.K.), Harrison (R.F.), *6543*
- algorithms, conduits, resistance, Kumar (S.), Roberson (J.A.), *6594*
- critical flow, cylindrical bodies, drag coefficient, strouhal number, vortex shedding, wakes, Achenback (E.), Heinecke (E.), *6621*
- flow irregularities, shear flow, turbulent flow, Schofield (W.H.), *6641*
- boundary layer (atmospheric), boundary layer (thermal), environmental tests, stratified flow, Ogawa (Y.), Diosey (P.G.), *6646*
- mach reflection, reflection, shock waves, unsteady state, Takayama (K.), Ben-Dor (G.), (et al.), *6711*

- hulls, propellers (marine), propulsion, surfaces, Schenzle (P.), *7072*
- friction, surface profiles, tires, Taneerananon (P.), Yandell (W.O.), *7082*
- elasticity, friction (sliding), surface profiles, Phan-Thien (N.), *7083*
- boundary layer (turbulent), friction (skin), spherical bodies, stanton number, transpiration cooling, velocity profiles, Ligrani (P.M.), Kays (W.M.), (et al.), *7824*
- snow, wind tunnels, Kikuchi (T.), *7959*
- lubrication (hydrodynamic), poiseuille flow, reynolds number, stokes flow, surfaces, Phan-Thien (N.), *8063*
- boiling, critical heat flux, nucleate boiling, surface effect, Avksentyuk (B.P.), *8690*
- sound propagation, stratified flow, surface waves, Tolstoy (I.), *8859*
- boundary layer (atmospheric), drag coefficient, friction coefficient, friction velocity, ocean air interaction, reynolds stresses, turbulence (geophysical), Wu (J.), *8980*
- bottom irregularities, internal waves, stratification, surface waves, tsunami, Yermakov (S.A.), Pelinovskiy (Ye.N.), *8982*
- film thickness, lubrication (elastohydrodynamic), rolling contact, surfaces, Terauchi (Y.), Nonishi (T.), *9035*
- contact problems, deformation, friction (sliding), surface profiles, thermal effects, Burton (R.A.), *9041*
- acceleration, friction factor, pipe flow, Baibikov (B.S.), Oreshkin (O.F.), (et al.), *9574*
- cylindrical bodies, shear, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *9594*
- adhesion, friction (rolling), rubber, surfaces, Fuller (K.N.G.), Roberts (A.D.), *9950*
- counterflow, duct flow, film flow, heat transfer, mass transfer, Fujita (H.), Takahama (H.), (et al.), *10581*
- friction (sliding), surface profiles, surfaces, Koura (M.M.), Omar (M.A.), *10883*
- friction (sliding), friction (solid solid), surface profiles, surfaces, Zmitrowicz (A.), *10884*
- friction, pressure distribution, rotating bodies, surfaces, Sansonov (V.A.), *10885*
- adhesion, viscoelastic materials, Greenwood (J.A.), Johnson (K.L.), *10886*
- bearings (porous metal), lubrication (hydrodynamic), squeeze films, surfaces, Prakash (J.), Tiwari (K.), *10889*
- computer analysis, holography, surface profiles, wear, Groves (D.), Lalor (M.J.), (et al.), *10897*
- channel flow, diffusion, mass transfer, Polyakova (L.A.), Shakhov (V.G.), *11486*
- experimental methods, friction (sliding), sound generation, Yokoi (M.), Nakai (M.), *11945*
- surface profiles, surfaces, tool wear, turning, Vajpayee (S.), *12088*
- lubrication (hydrodynamic), reynolds equation, seals, surfaces, thermoelasticity, Wu (Y.-T.), Burton (R.A.), *12092*

Rouha (L.), see Muller (J.), *4680*

Roumeliotis (J.A.), acoustic waves, scattering, spherical bodies, Fikioris (J.G.), *11980*

Round (G.F.), pipelines, pulsatile flow, slurries, *10822*
- hydraulic transport, pipelines, slurries, surveys, *79999*

Rousseau (J.C.), mathematical models, separated flow, two phase flow, Ferch (R.L.), *12033*

Rousselet (B.), see Haug (E.J.), *1070*

Rousselet (J.), articulated structures, dynamic stability, pipe flow, pipelines, vibration (parametric), Herrmann (G.), *2719*

Roussillon (G.), automobiles, drag coefficient, friction (rolling), resistance, *6726*

Rout (B.), bearings, inertia, lubrication (hydrostatic), viscoelastic fluids, Sinha Roy (J.), *7102*

Routaboul (F.), anisotropy, concentration, dispersion, mixed flow, porous media, Quintard (M.), *7973*

Roux (J.A.), combustion products, contamination, exhaust gases, interferometry, optical techniques, propellants, spectral analysis, Wood (B.E.), (et al.), *6817*

Rovetta (A.), man machine systems, manipulators, prosthetic devices, robotics, *7121*

Rowbottom (M.D.), damping, optimization, vibration (self excited), vibration isolation, *2323*

Rowe (A.), cavitation, hydrofoils, inviscid fluid, supercavitating hydrofoils, supercritical flow, Kueny (J.-L.), *5968*

Rowe (R.K.), anchors, elastic behavior, influence charts, soil structure interaction, Booker (J.R.), *2384*

Rowe (W.B.), see Koshal (D.), *5979*

Rowlands (R.E.), see Wilkinson (T.L.), *5378*
- see Wilkinson (T.L.), *7214*

Roy (A.), diffraction, edge cracks, elastic bodies, shear waves, Visalakshi (N.), *8340*

Roy (J.S.), inertia, lubrication (hydrodynamic), oscillating bodies, plates (parallel), squeeze films, viscoelastic fluids, Biswal (B.), *9026*
- channel flow, heat transfer, porous surfaces, pulsatile flow, viscoelastic fluids, Nayak (P.), (et al.), *11509*

Roy (P.), finite difference methods, navier stokes equation, numerical methods, spectral analysis, *5410*

Royer (J.), see Robert (A.), *7547*

Royles (R.), see Ibidapo-Obe (O.), *5344*
- bending, finite element techniques, membrane theory, shear loading, tanks, Sofoluwe (A.B.), *11114*

Royster (D.M.), see Mcwithey (R.R.), *3281*

Rozeanu (L.), failure, hardness, rolling contact, thermal effects, wear, Pnueli (D.), *9022*

Rozenband (V.I.), see Chernenko (E.V.), *5627*

Rozentsvaig (A.K.), see Pergushev (L.P.), *5816*

Rozenvasser (E.N.), see Volovodov (S.K.), *4240*
- excitation, oscillations, sensitivity, *4247*

Rozhdestvenskiy (A.Ye.), see Lappo (S.S.), *4064*

Rozhdestvensky (B.L.), channel flow, galerkin method, simulation, turbulent flow, Priymak (V.G.), *8569*

Rozin (L.A.), elasticity (linear), singularities, solid mechanics, variational methods, *4338, book*

Ruas (V.), elasticity, finite element techniques, mooney-rivlin materials, rubber elasticity, *4190*

Ruban (A.I.), asymptotic methods, boundary layer, incompressible flow, reynolds number (high), separation, surveys, Sychev (V.V.), *1550*
- see Kukhtenkov (L.P.), *8167*

Rubanov (I.L.), boundary value problems, cylindrical bodies, oscillating bodies, sound fields, *11951*

Rubanov (V.V.), see Gorev (B.V.), *5103*

Rubanovich (E.M.), dynamic analysis, mathematical methods, mechanical systems, *6059*

rubber, lubrication (elastohydrodynamic), oscillations, squeeze films, variational methods, Hori (Y.), Kato (T.), (et al.), *4897*
- contact stresses, dynamic properties, friction (rolling), tires, Sakai (H.), *5367*
- fracture criteria, low cycle fatigue, polymers, probability, Valanis (K.C.), Yilmazer (U.), *6456*
- bearings, damping, earthquake resistant structures, Derham (C.J.), Thomas (A.G.), *8016*
- adhesion, friction (rolling), roughness, surfaces, Fuller (K.N.G.), Roberts (A.D.), *9950*

rubber elasticity, elasticity, finite element techniques, mooney-rivlin materials, Ruas (V.), *4190*
- continuum mechanics, elastic waves, Tokuoka (T.), *5234*

Rubel (A.), finite difference methods, impingement, inviscid fluid, jets, plates, stagnation point, *5394*

Rubenstein (C.), see Yossifon (S.), *438*
- hardness, indentation, plastic flow, residual stresses, *6480*

Rubi (J.M.), see Lebon (G.), *719*
- micropolar media, poiseuille flow, polar fluids, variational methods, Casas-Vasquez (J.), *1974*
- see Perez-Garcia (C.), *7644*

Rubin (I.K.), control stability, equilibrium, magnetic field, thermonuclear energy, tokamak, *2903*

Rubin (M.E.), see Naghdi (P.M.), *554*

Rubin (S.), offshore structures, surveys, vibration, *1452*

Rubin (S.G.), finite difference methods, navier stokes equation, reynolds number (small), stream function, vorticity, Khosla (P.K.), *4588*
- see Khosla (P.K.), *6084*
- finite difference methods, marching procedures, mesh generation, navier stokes equation, parabolic equations, stability theory, *7191*
- see Plostins (P.), *10495*
- see Davis (R.T.), *11432*

Rubini (F.), see Napolitano (M.), *3119*

Rubinovich (E.Ya.), estimation, stochastic control, trajectories, *1156*

Rubinstein (I.), channels, laminar flow, suspensions, *4009*

Rubio (J.E.), algorithms, approximation methods, hilbert space, linear programming, optimal control, *11051*

Rubtsov (N.A.), see Baltsevich (Ya.A.), *1707*

Ruckenstein (E.), convection (free), nusselt number, plates (vertical), turbulent flow, Felske (J.D.), *3796*

rudders, controllability, maneuverability, ship maneuvers, steering, Van Amerongen (J.), De Goeij (W.F.), (et al.), *4102*
- cavitation, hulls, propellers (marine), towing tanks, water tunnels, Rutgersson (O.), *8044*

Ruddick (B.R.), see Griffiths (R.W.), *8781*
- convection, diffusion, liquids, mixtures, optical techniques, two component flow, *11755*

Ruddy (A.B.), bearings (journal), lubricants (liquid), machine design, pumps, rotors, *1028*

Ruddy (A.V.), bearings (journal), lubrication (hydrodynamic), rotating shafts, turbomachinery, vibration, Summers-Smith (D.), *3051*

Ruddy (B.L.), diesel engines, leaks, piston rings, pressure, Dowson (D.), (et al.), *8301*

Rudenko (O.G.), adaptive systems, algorithms, estimation, stochastic processes, Bodyanskii (E.V.), (et al.), *4270*

Rudenko (O.V.), see Gusev (V.E.), *6915*

Rudev (A.N.), asymptotic methods, buckling, elasticity (nonlinear), plates, *11121*

Rudgers (A.J.), see Dubbeldav (P.S.), *5209*

Rudman (S.), see Marconi (F.), *9873*

Rudnick (I.), acoustic measurements, acoustics, calibration, transducers, *1828*
Rudnicki (J.W.), fluid mechanics, mathematical methods, porous media, *950*
Rudolph (L.K.), contamination, discharges, particles, plasma, thrusters, Piess (L.C.), (et al.), *5665*
Rudraiah (N.), convection (forced), large displacement, nonlinear characteristics, porous media, saturation, Srimani (P.K.), *12069*
Rudy (D.H.), boundary conditions, compressible flow, navier stokes equation, subsonic flow, Strikwerda (J.C.), *3642*
Ruescher (E.H.), cracks, flaw detection, nondestructive tests, pressure vessels, radiography, welded joints, x ray techniques, Graber (H.C.), *3507*
Ruge (P.), approximation methods, beam columns, eigenvalue problems, *1245*
Ruggeri (T.), discontinuities, polytropic processes, shock waves, waves, *679*
Rugina (I.), see Radu (C.), *6401*
Ruhwedel (J.), see Niemann (H.-J.), *4542*
Rukmangadachari (E.), noncircular pipes, oldroyd fluid, pressure gradient, viscoelastic fluids, *7722*
Rumez (W.), internal flow, reynolds number (small), rotating bodies, spherical bodies, *9536*
Rummel (F.), see Gowd (T.N.), *1336*
Rumyantsev (S.V.), see Artyukhin (E.A.), *1701*
- see Artyukhin (E.A.), *5581*
- see Alifanov (O.M.), *7859*

Rundesanstalt Fur Materialprufung, friction, lubrication, survey, wear, *1925, book*
Runesson (K.), finite element methods, flow, soil structure interaction, Tagnfors ((H.), (et al.), *6385*
runge kutta method, differential equations (ordinary), differential equations (partial), numerical analysis, perturbation theory, Ixaru (L.G.), *1112, book*
- crack growth, deformation (plastic), impact, stiffness, testing equipment, Zhitenev (V.V.), Markochev (V.M.), *2495*
- difference differential equations, stability theory, van der pol equation, Bastin (H.), Delchambre (M.), *3102*
- dynamic loads, gear trains, transmissions (planetary), Jarchow (F.), Vonderschmidt (R.), *3575*
- algorithms, computing techniques, differential equations (ordinary), Krinke (D.C.), Huston (R.L.), *4183*
- stability (numerical), stiffness, stiffness matrix, Eitelberg (E.), *5016*
- control, convergence, digital simulation, Tuschak (R.), *6100*
- matrix methods, stability (numerical), Strehmel (K.), *7189*
- channel flow, laminar flow, pressure drop, viscous flow, wavy walls, Vajraveku (K.), Nayfeh (A.H.), *7714*
- damping, design, dynamic loads, gears (spur), stiffness, Kasuba (R.), Evans (J.W.), *8471*

runoff, hydrology, roughness, watersheds, Ellis (F.W.), Ramsey (F.V.), (et al.), *3013*
- infiltration, rainfall, sediment transport, Smith (R.E.), *4573*
- flood routing, flood waves, floods, Meynink (W.J.C.), *5905*
- infiltration, Sherman (B.), *5914*
- internal flow, near ground effects, saturation, soil mechanics, Ahuja (L.R.), Ross (J.D.), (et al.), *10831*

runways, friction, landing, space shuttle, Yager (T.J.), Horne (W.B.), *1332*
- airplane performance, design criteria, engine failure, runway (critical length), Powers (S.A.), *1625*

Ruppert (M.), computer aided design, design (optimum), optimization, stochastics, *9440*
Rupprecht (S.), see Williams (R.J.), *4942*
rupture, composite materials, dynamic stresses, fibers, Moskvitin (V.V.), Ovchinskii (A.S.), *285*
- casting, cooling, freezing, shells, stefan problem, Oki (S.), *440*
- acoustic emission, crack growth, nondestructive tests, pressure vessels, Ohtsuka (N.), Nakano (M.), (et al.), *1398*
- boiling, critical heat flux, transition boiling, two phase flow, Borchevkin (Yu.S.), Korolkov (B.P.), *1675*
- characteristic methods, hyperbolic equations, pipelines, shock tubes, Cronje (J.S.), Bishnoi (P.R.), (et al.), *3721*
- material testing, simulation, thermal fatigue, Cailletaud (G.), Culie (J.-P.), (et al.), *3996*
- brittle materials, experimental mechanics, pipes, Baum (M.R.), Elston (M.J.H.), *4548*
- elastoplasticity, experimental results, yield criteria, Mozharovskii (N.S.), Bobyr (N.I.), (et al.), *5110*
- cavities, rocks, stress analysis, Dunin (S.Z.), Sirotkin (V.K.), (et al.), *6400*
- design (minimum weight), design (optimum), plates, De Oliveira (P.), *6505*
- crack propagation, earthquake source, earthquakes, Miyatake (T.), *8961*
- dikes, hazardous liquids, impoundments, tanks, unsteady flow, Greenspan (H.P.), Johansson (A.V.), *10450*

Rusanov (V.V.), conical bodies, shock waves, stability theory, supersonic flow, wedges, Sharakshanae (A.A.), *2680*
Ruschak (K.J.), finite element techniques, fluid mechanics, free boundary, incompressible flow, surface tension, *97*
Ruschau (J.J.), see Petrak (G.J.), *10272*
Ruscheweyh (H.), aerodynamic interference, smoke stacks, strakes, vibration (flow induced), wind loads, wind tunnels, *2910*
Rushfeldt (P.D.), bones, cartilage, human body, ultrasonics, Mann (R.W.), *4907*
Rusinko (K.N.), anelasticity, continuum mechanics, creep, metals, viscoplasticity, Ivasyuk (V.V.), *5114*
Rusishvili (D.G.), see Shekrildza (I.G.), *10649*
Rusovic (N.), approximation methods, ceramics, empirical methods, quartz, thermal expansion, Godecke (T.), *6757*
Russak (I.B.), algorithms, mathematical programming, numerical methods, optimization, *11074*
Russell (G.T.), adaptive systems, control, stability theory, synthesis, Malcolm (J.M.), *4322*
Russo (E.P.), fatigue, offshore structures, vortex shedding, wave loads, Loiacono (N.J.), (et al.), *2545*
Russo (R.), bifurcation, micropolar media, polar fluids, viscous flow, Padula (M.), *1491*
Ruster (R.), see Klostermeyer (J.), *5933*
Rutenberg (A.), p-delta analysis, second order analysis, structural analysis, *9458*
Rutgersson (O.), cavitation, hulls, propellers (marine), rudders, towing tanks, water tunnels, *8044*
- cavitation, hull propeller interaction, propellers (marine), wakes, water tunnels, *10880*

Ruth (D.W.), cellular flow, convection (free), slots, *2789*
Rutherford (S.R.), bottom irregularities, ocean bed, sound propagation, underwater acoustics, Hawker (K.E.), (et al.), *5759*
Rutkevich (I.M.), see Regirer (S.A.), *11690*
Rutkowski (J.), alfven number, generators, magneto fluid dynamics, pinch effect, pumps, *9799*
Rutkowski (M.J.), see Hodges (D.H.), *5213*
Rvachev (V.L.), axial pumps, thermal measurements, three dimensional flow, Slesarenko (A.P.), (et al.), *3811*
Ryabinkov (G.M.), aerodynamic performance, diffusers, optimization, *2653*
Ryabol (V.M.), dynamic analysis, elastic bodies, linear systems, structural response, structures, vibration isolation, Genkin (M.D.), (et al.), *7244*
Ryabukha (Yu.N.), see Guz (A.N.), *11914*
Ryadno (A.A.), channel flow, convection (forced), slots, thermal stresses, turbulent flow, Franko (N.V.), *9683*
- see Karimov (I.K.), *11810*

Ryall (P.J.C.), drilling, ocean bed, rocks, *5268*
Ryan (M.E.), closed conduit flow, polymers, unsteady flow, viscoelastic fluids, Dutta (A.), *544*
Ryasin (V.A.), forecasting, meteorology (physical), ocean air interaction, weather forecasting, *4071*
Ryason (P.R.), see Lewis (D.H.) Jr., *8899*
Rybak (V.I.), artificial intelligence, computer aided design, robotics, *2182*
Rybakova (L.M.), see Kragelskii (I.V.), *1021*
Rybashov (M.V.), algorithms, gradient techniques, optimal control, tracking, *2151*
Rybicki (E.F.), see Brust (F.W.), *8367*
Rybin (A.A.), adhesion, fibers, high speed, hopkinson bar, matrices, strain rate, testing equipment, *2496*
- adhesion, composite materials, shear, strength, *7569*

Rybin (V.V.), brittle fracture, cold working, failure, steel, Morozov (A.M.), (et al.), *6424*
Rychkov (A.D.), coagulation, nozzles, two phase flow, *627*
Ryhming (I.), excavation, rock breaking devices, rocks, Cooper (G.A.), (et al.), *11180*
Rykov (V.A.), see Larina (I.N.), *4726*
- see Bishaev (A.M.), *11450*

Rylander (R.), see Ahrlin (U.), *1816*
Ryley (D.J.), condensation (dropwise), electric effects, steam turbines, wet steam, Loftus (F.P.), *2752*
Rymarz (C.), see Idczak (W.), *3314*
Rynaski (E.G.), see Govindaraj (K.S.), *193*
Ryskin (G.), dilute solutions, particle fluid flow, suspensions, viscosity, *8496*
Ryvkin (V.B.), computing techniques, parabolic equations, singularities, Kopeliovich (B.L.), *10837*
Ryzhkov (A.F.), see Buevich (Yu.A.), *8936*
Ryzhov (E.V.), hardness, roughness, surfaces, wear, Gorlenko (O.A.), *1932*
- polymers, roughness, surface profiles, wear, *1933*

Ryzhov (O.S.), boundary layer, eigenvalues, internal waves, unsteady state, Zhuk (V.I.), *2634*
- see Zhuk (V.I.), *5431*
- see Zhuk (V.I.), *7707*
- asymptotic behavior, boundary layer (three dimensional), pressure gradient, unsteady state, *9566*
- see Ni (A.L.), *11424*
- induced drag, viscous flow, vortex sheets, wakes, wings, Terentev (E.D.), *11730*

Rzhanitsyn (A.R.), probabilistic design, probability theory, random loading, *2513, book*
Rzheplinskiy (D.G.), see Sarkisyan (A.S.), *4879*
Rzhevkin (S.N.), beams, sound generation, vibration, *11950*
Rzhikov (Yu.I.), algorithms, analytical methods, erlang queuing, queue theory, *4263*

S

Saab (A.E.), atmosphere, mass transfer, turbulent flow, *10460*

Saadat (H.), acoustic waves, diffraction, elastic bodies, plates, spherical bodies, Filippi (P.), *11989*

Saakyan (L.S.), artificial satellites, spinning bodies, stability theory, *879*

Saakyan (Yu.Z.), see Grigoryan (S.S.), *8077*

Saanouni (K.), crack initiation, elastoplasticity, fatigue, Bathias (C.), *10270*

Saari (D.G.), mathematical methods, n body problems, orbit mechanics, Hulkower (N.D.), *8836*

Saatdjian (E.), convection (free), decomposition, exothermic reactions, porous surfaces, Caltagirone (J.P.), *8721*

Sabbagh (H.A.), cracks, elastodynamics, electroelasticity, piezoelectrics, scattering, shear waves, *3240*

Sabelfeld (K.K.), see Mikhaylov (G.A.), *10480*

Sabersky (R.H.), see Sherman (D.C.), *8693*

Sabinin (O.Y.), see Minyaeva (L.N.), *4267*

Sabodash (P.F.), see Rimskii (V.K.), *405*

- see Rimskii (V.K.), *11176*

Sabuncu (T.), cylindrical bodies, damping, gravity waves (surface), submerged bodies, virtual mass, Calisal (S.), *8630*

Sacchi (G.), see Cinquini (C.), *6270*

Sachdev (A.S.), see Arora (K.L.), *1338*

Sachdev (P.L.), airfoil theory, integral methods, numerical methods, transonic flow, *8652*

Sachdeva (T.D.), algorithms, contact problems, finite element methods, machine design, mechanical joints, Ramakrishnan (C.V.), *541*

- contact problems, elastic behavior, finite element techniques, Ramakrishnan (C.V.), (et al.), *6114*
- computing techniques, contact problems, elastic behavior, friction (solid solid), stiffness matrix, Ramakrishnan (C.V.), *6115*
- algorithms, contact problems, friction (solid solid), mechanical joints, tools, Ramakrishnan (C.V.), *9945*

Sachenkov (A.V.), see Galimov (K.Z.) eds., *6215, book*

- dynamic stability, shells (cylindrical), shells (thin), Bakhtieva (L.U.), *8270*

Sachs (G.), camber, drag, minimization, wings, *1623*

- aerodynamic interference, airplanes, dynamic behavior, rolling motion, Fohrer (W.), *9659*

Sachse (W.), see Sancar (S.), *7433*

Sackheim (R.L.), see Macklis (H.), *7892*

- design, propulsion, space shuttle, systems, Fritz (D.E.), (et al.), *10725*

Sackinger (W.M.), ice mechanics, stresses, Nelson (R.D.), *10670*

Sadasivan (N.), fluidized beds, frequencies, pressure drop, Barreteau (D.), (et al.), *7011*

Sadasivan (S.), see Rangaiah (V.P.), *9314*

Sadek (E.A.), computer programming, computing techniques, mesh generation, triangular elements, *4195*

- see Mohsin (M.E.), *4427*

Sadhal (S.S.), contact resistance, thermal contact resistance, unsteady flow, *1696*

- condensation, drops, evaporation, *2841*

Sadhna Khare (K.), fluid injection, laminar flow, porous surfaces, *7709*

Sadkowski (W.), see Radzikowski (J.), *9104*

Sadokov (V.P.), finite difference methods, meteorology (physical), Kucherenko (I.K.), *990*

Sadovskiy (M.A.), earthquake resistant structures, prediction, Nersesov (I.L.), *5867*

Sadunas (J.A.), aerodynamic interference, nozzles, rockets, side forces, space vehicles, staging, French (E.P.), (et al.), *7893*

Saegrov (S.), see Mcclimans (T.A.), *10399*

Saeki (M.), large scale systems, lyapunov's functions, stability theory, Araki (M.), *3168*

Safai (N.M.), aquifers, subsidence, Pinder (G.F.), *6377*

Safak (E.), see Foutch (D.A.), *3378*

Safaneev (D.Z.), see Grigorev (Yu.M.), *9748*

Safar (Z.S.), bearings (thrust), bearings (tilted pad), design, lubrication (hydrostatic), *8061*

- bearings (thrust), film thickness, friction, lubrication (hydrodynamic), pressure distribution, *9043*
- bearings (gas lubricated), bearings (thrust), design, reynolds equation, *9957*

safety, beam columns, columns (variable cross section), probability theory, Frangopol (D.), Nguyen Dang Hung, *335*

- cylindrical bodies, design (optimum), plates, Patnaik (S.N.), Srivastava (N.K.), *1430*
- mechanical components, probabilistic design, reliability, Moss (T.R.) ed., *1434, book*
- boiling, condensation, multiphase flow, nuclear reactors, Veziroglu (T.N.) ed., *3794, book*
- fuel elements, nuclear reactors, thermal effects, Minashin (V.E.), Gorelov (I.N.), (et al.), *3886*
- hydrogen, metal-hydrogen systems, storage, Veziroglu (T.N.) ed., *4121, book*
- failure, structural optimization, Blockley (D.I.), *4529*
- critical heat flux, nuclear power, nuclear reactors, thermal loading, Hochreiter (L.E.) eds., Sozzi (G.L.), *4693, book*
- airplane structures, crash dynamics, dynamics, Wittlin (G.), *5369*
- buildings, earthquake engineering, seismic loading, Aizenberg (Ya.M.), Neiman (A.I.), (et al.), *5894, book*
- shock, ski bindings, snow, Brossard (J.P.), Pascal (R.), (et al.), *6360*
- probability theory, reliability analysis, structural design, Baba (S.), Nakagawa (K.), (et al.), *6516*
- offshore structures, reliability analysis, wave loads, Bea (R.G.), *6535*
- offshore structures, Leroy (A.), *6537*
- heat transfer, nuclear power, nuclear reactors, Jones (O.C.) Jr. ed., *6810*
- condensation, two phase flow, Bankoff (S.G.), *6983*
- limit analysis, probabilistic design, random loading, structural design, Murzewski (J.), *7588*
- condensation, two phase flow, Block (J.A.), *7963*
- capsizing, models, resonance, rolling motion, ship motion, Kuo (C.), Welaya (Y.), *8043*
- probabilistic design, reliability analysis, structural design, Hohenbichler (M.), Rackwitz (R.), *8456*
- reliability analysis, structural analysis, Baratta (A.), *10356*
- multiphase flow, reactors, transport, Veziroglu (T.N.), *10819*
- design, failure, fatigue, fracture, materials properties, piping systems, pressure vessels, Fong (J.T.) eds., Dobbyn (R.C.), (et al.), *11315, book*
- disabled ships, dynamic analysis, ship performance, ship towing, Butt (J.A.), Lawrie (S.T.), (et al.), *12085*

Saffman (P.G.), gravity waves, permanent form, three dimensional flow, Yuen (H.C.), *671*

- euler equations, flow obstructions, vortex flow, vortex sheets, vorticity, *2600*
- see Chen (B.), *11595*

Safonov (M.G.), design, feedback, multivariable systems, sensitivity, stability theory, Laub (A.J.), (et al.), *4226*

Sagadeev (R.G.), see Strunkin (V.A.), *6950*

- axial turbines, blades, geometrical properties, optimization, Strunkin (V.A.), *10355*

Sagalakov (A.M.), see Bukatyi (V.I.), *9769*

Sagar (B.), see Singh (S.R.), *8927*

Sagomonyan (A.Ya.), cylindrical bodies, penetration, plates, *6362*

- fluid boundaries, impact, shells (spherical), Dvorkin (Ya.P.), *6371*
- fluid boundaries, impact, shells (cylindrical), Dvorkin (Ya.P.), *6372*

Saha (D.C.), algorithms, identification, lumped systems, time varying systems, Rao (G.P.), *2088*

- algorithms, identification, linear systems, lumped systems, poisson moment functionals, Rao (G.P.), *4256*
- algorithms, identification, linear systems, lumped systems, time delay systems, Rao (G.P.), *7246*

Saha (P.) eds., scale effects, suspensions, two phase flow, Farukhi (N.M.), *6956, book*

Saha (R.K.), computing techniques, matrix methods, series, Boriotti (J.R.), *10047*

Saha (S.), see Guzelsu (N.), *6026*

- foundations, soil structure interaction, vibration, Chattopadhyay (B.C.), *11150*

Sahal (D.), algorithms, pattern recognition, similarity methods, *155*

Sahay (C.), see Dubey (R.N.), *1272*

Sai (K.S.), channels, porous walls, pressure gradient, unsteady flow, *10446*

Saiga (N.), acoustic waves, diffraction, optical techniques, scattering, sound fields, Suzuki (T.), *5792*

Saini (S.S.), dams, earthquake effects, finite element techniques, pressure, reservoirs, *9514*

saint venant principle, boundary value problems, elasticity (linear), strain energy, Biollay (Y.), *237*

- composite materials, sandwich construction, strips, Rao (N.R.), Valsarajan (K.V.), *2210*
- cylindrical bodies, elasticity (three dimensional), torsion, Khatiashvili (G.M.), *7259*
- boundary value problems, cylindrical bodies, elasticity (nonlinear), Horgan (C.O.), Knowles (J.K.), *8181*

saint venants equation, channel flow, gravity waves (surface), propagation, rivers, tides, Chatterjee (A.K.), *2707*

- choked flow, compressible flow, flow measurement, nozzles, Mollenbruck (W.), *7814*
- channels, discharges, flood waves, free boundary, Sridharan (K.), Mohan Kumar (M.S.), *8506*

Saint-Leu (C.), see Lerau (J.), *5263*

Saito (A.), approximation methods, conductivity, experimental methods, mathematical models, radiant interchange, *9722*

Saito (H.), frequency response, plates (rectangular), plates (stiffened), vibration (free), Yamaguchi (H.), *1275*

- coatings, film flow, finite element techniques, navier stokes equation, viscous flow, Scriven (L.E.), *6616*

Saito (K.), see Shimahashi (Y.), *1399*

Saito (S.), see Azuma (A.), *6732*

Saito (Y.), see Kato (K.), *5278*

Saito-O (M.), see Tanaka (H.), *2713*

Saix (C.), dissipation, material testing, plastic behavior, plastic flow, Jouanna (P.), *3995*

S

Sajben (M.), boundary layer, diffusers, oscillatory flow, transonic flow, Kroutil (J.C.), *8586*

Saka (M.), crack initiation, ductile fracture, yield condition, Shoji (T.), (et al.), *1380*

Saka (M.P.), design (optimum), frames, *504*

- optimization, shape factors, trusses, *7598*

Sakai (H.), contact stresses, dynamic properties, friction (rolling), rubber, tires, *5367*

Sakai (T.), endurance limit, estimation, fatigue, weibull statistics, Iwaya (T.), (et al.), *7511*

- see Battjes (J.A.), *11586*

Sakai (Y.), fuzzy control, grinding, optimization, stochastics, Tanaka (Y.), (et al.), *439*

Sakamoto (S.), see Matsumoto (Y.), *4538*

Sakamoto (Y.), recirculation, three dimensional flow, turbulence model, ventilation, Matsuo (Y.), *10643*

Sakata (H.), see Yokobori (T.), *3494*

- see Yokobori (T.), *3495*
- see Ukeguchi (N.), *8551*

Sakata (M.), see Aoki (S.), *464*

- see Kimura (K.), *4405*
- see Aoki (S.), *8422*

Sakata (T.), approximation methods, plates (simply supported), plates (skew), vibration (free), *6294*

Sakharova (E.N.), composite materials, dynamic stresses, fibers, fracture, Ovchinskii (A.S.), *1210*

Sakhnovskii (M.Yu.), particles, powders, scattering, Kunetskii (M.G.), *12059*

Sakurai (A.), compressible flow, mathematical models, navier stokes equation, one dimensional flow, viscous effects, Kukuyu (A.), *7685*

- compressible flow, conformal mapping, cylindrical bodies, two dimensional flow, Arai (T.), *8544*

Sakurai (S.), see Kitamura (Y.), *1284*

Sakurai (T.), centrifugation, gases, thin wing theory, turbomachinery, *702*

- additives, antiwear films, chemical reactions, fatigue, films, lubrication (elastohydrodynamic), rolling contact, wear, *9961*

Salah El Din (A.S.), see Lovegrove (J.M.), *2420*

- crack growth, fatigue, reinforced concrete, Lovegrove (J.M.), *7489*

Salama (K.), aluminum alloys, residual stresses, thermal effects, ultrasonics, Ling (C.K.), (et al.), *10321*

Salamon (N.J.), composite structures, delamination, effective elastic moduli, interlaminar stresses, micromechanics, *288*

Salan (A.), see Bar-Yoseph (P.), *579*

Salas (L.J.), see Singh (H.B.), *1918*

Salat (G.), axial loading, bearing capacity, reinforced concrete, ultimate strength, *3535*

Salathe (E.P.), oscillatory flow, unsteady flow, viscoelastic fluids, viscous flow, *1485*

Salcudean (M.), channel flow, conduction (heat), rewetting, Rahman (M.), *8731*

Salem (A.), asymptotic methods, cylindrical bodies, film flow, liquid vapor interface, plates, Trad (A.), *9542*

Salem (E.A.), see El-Kayar (A.), *1013*

- see El-Kayar (A.), *1014*
- see El-Kayar (A.), *1015*

Salem (F.B.), see El-Sherbiny (M.G.), *7088*

Salhani (D.), see Rasmussen (H.), *8920*

Salih (A.M.A.), bubble dynamics, entrainment, two phase flow, water, *9878*

Salik (J.), erosion, heat treatment, particles, steel, wear, Buckley (D.H.), *3504*

Salinas (D.), see Franke (R.), *2045*

Salinas (M.P.), see Landsbaum (E.M.), *10726*

Salisbury (J.I.), ocean bed, processing, seismic waves, *3008*

Sallam (T.M.), channels (closed), jets, return flow, Kaji (M.), (et al.), *2660*

- see Kaji (M.), *2764*

Salmanova (N.G.), see Tsybizov (Yu.I.), *5669*

Salmin (V.V.), adaptive systems, aerospace vehicles, optimal control, synthesis, trajectories, *7248*

Salmon (J.R.), contamination, dispersion, finite element techniques, lakes, water pollution, Liggett (J.A.), (et al.), *7661*

- gravity waves (surface), integral methods, numerical methods, Liu (P.L.-F.), (et al.), *11698*

Salmond (D.J.), aerodynamic loads, airfoils, damping, oscillating bodies, subsonic flow, *7904*

Salokhin (V.F.), conduction (heat), conductivity, radiation, thermal measurements, thermal properties, Spirin (G.G.), *1705*

Saltanov (N.V.), euler equations, stratified flow, variational methods, vorticity, *11372*

Saltzman (B.), climatology, clouds, heat transfer, ice, ocean air interaction, Moritz (R.E.), *9940*

Salwen (H.), hydrodynamic stability, orr sommerfeld equation, shear flow, stability theory, Grosch (C.E.), *4639*

- see Cotton (F.W.), *9607*

Salychev (O.S.), algorithms, filters, stability theory, *4278*

Salzborn (F.J.M.), see Bhaskaran (S.), *1165*

Samanta (S.), see Misra (J.C.), *6944*

Samarskii (A.A.), approximation theory, compressible flow, difference equations, iterative methods, stability theory, *4169*

Sambanthan (T.G.), concrete, experimental mechanics, modeling, shells (hyperbolic paraboloid), Aravindan (P.K.), (et al.), *3309*

Samie (F.), see Sparrow (E.M.), *9736*

Sammakia (B.), convection (free), plates (vertical), thermal loading, transient effects, Gebhart (B.), *6763*

Samokhvalov (I.V.), see Matvienko (G.G.), *4093*

sampled data systems, continuous systems, controllability, linear systems, Gibson (J.A.), Ha (T.T.), *109*

- automatic control, digital control, Jury (E.I.), *135*
- discrete systems, maximum principle, optimal control, stochastic processes, De Koning (W.L.), *175*
- discrete systems, maximum principle, optimal control, Kuntsevich (V.M.), Lychak (M.M.), *176*
- airplane performance, digital control, flight loads, Keskar (D.A.), Slater (G.L.), *1626*
- design, digital control, multivariable systems, Rao (G.V.), *2093, book*
- algorithms, computer aided manufacturing, numerical control, optimal control, tools, Schlueter (R.A.), Retford (E.T.), (et al.), *2194*
- design, model reduction, process control, Atluri (R.), Kao (Y.K.), *5044*
- design, digital control, Oz (H.), Meirovitch (L.), (et al.), *5045*
- synthesis, time delay systems, zero-order-hold, Yekutiel (O.), *6135*
- nonlinear theory, optimal control, Miller (B.M.), *6143*
- frequency domain techniques, frequency response, simulation, Frisch (H.P.), *7232*
- design, frequency domain techniques, time delay systems, Schnieder (E.), Kraft (K.H.), *9162*

sampling, estimation, identification, noise (random), Semesenko (M.P.), *163*

- foundations, optimization, soils, Rats (M.V.), Pyrchenko (V.A.), *409*
- acoustic measurements, airplanes, noise (traffic), Schomer (P.D.), De Vor (R.E.), *1814*
- harmonic analysis, special functions, walsh functions, Kawamura (M.), Tanaka (S.), *2022*
- measurements, turbulence, Antonia (R.A.), *2701*
- data analysis, laser doppler velocimeters, particulate flow, Edwards (R.V.), *4686*
- disturbance, experimental methods, soils, Broms (B.B.), *6373*
- aerosols, measurements (dynamic), El-Shobokshy (M.S.), *12061*

Samson (A.), dynamic analysis, mathematical methods, pendulums, vibration (nonlinear), *3092*

Samsonov (V.A.), flexible bodies, rotating bodies, rotating shafts, stability theory, *13*

- see Vasenin (V.A.), *115*

Samuel (A.T.), see Dey (S.S.), *5357*

Samuels (P.G.), see Price (R.K.), *3613*

Samuelsen (M.R.), see Olsen (O.H.), *10018*

Sancar (S.), cavities, elastic waves, scattering, spectral analysis, Pao (Y.-H.), *7432*

- cavities, elastic waves, scattering, spectral analysis, Sachse (W.), *7433*

Sanchez (D.A.), see Gisser (M.), *172*

- computing techniques, periodic orbits, riccati equation, *9121*

Sanchez-Palencia (E.), see Geymonat (G.), *3104*

sand, failure, plastic behavior, yield criteria, Desai (C.S.), *419*

- cyclic testing, shear strength, strength, Tatsuoka (F.), Silver (M.L.), (et al.), *1316*
- cyclic testing, shear strength, strength, stress strain relationships, Tatsuoka (F.), Silver (M.L.), (et al.), *1317*
- oscillatory flow, ripples, shape, Kaneko (A.), *2382*
- foundations, stress strain relationships, Gudehus (G.), *2383*
- fluid mechanics, hydraulic transport, stratified flow, Smith (L.), *3004*
- constitutive relations, experimental methods, shear strength, Vardoulakis (I.), *3398*
- elastic constants, saturation, strength, triaxial tests, Ricceri (G.), Soranzo (M.), *3399*
- field tests, piles, uplift, Prakash (C.), *3411*
- foundations, tanks, Abbs (A.F.), Sinclair (T.J.E.), *3413*
- concrete, field tests, highways, subgrade design, Barber (S.D.), Knapton (J.), *3417*
- bifurcation, plane strain, soil stability, Vardoulakis (I.), *4389*
- compressibility, experimental results, loading rate, Jackson (J.G.) Jr., Ehrgott (J.Q.), (et al.), *4465*
- attenuation, porous media, saturation, sound propagation, viscosity, Hovem (J.M.), Ingram (G.D.), *5733*
- compressional waves, fluid mechanics, porous media, saturation, Allen (N.F.), Richart (F.E.) Jr., (et al.), *5836*
- half space, rayleigh waves, submerged bodies, Vardoulakis (I.), *6334*
- cyclic testing, saturation, shear stress, Ishihara (K.), Yamazaki (F.), *6379*
- analytical methods, experimental results, trap-door problem, Vardoulakis (I.), Graf (B.), (et al.), *6380*
- attenuation, shear waves, Brunson (B.A.), Johnson (R.K.), *7430*
- densification, liquefaction, texture, Nemat-Nasser (S.), Tobita (Y.), *7437*
- constitutive relations, critical state, endochronic theory, Dungar (R.), Nuh (S.), *9355*
- energy methods, liquefaction, seismic loading, Davis (R.O.), Berrill (J.B.), *9922*

- liquefaction, Gupta (M.K.), Prakash (S.), *9923*
- constitutive relations, cyclic loading, liquefaction, strain softening, Tatsuoka (F.), Silver (M.L.), *11177*

Sandell (N.R.) Jr., see Nuzman (D.W.), *6130*
Sanders (J.L.) Jr., shells (cylindrical), shells (long), *314*
Sanders (M.G.), see Stone (L.W.), *4329*
Sanderse (A.), see Van Der Vooren (J.), *10630*
Sandgren (E.), algorithms, design, nonlinear programming, Ragsdell (K.M.), *58*
Sandler (B.Z.), design (optimum), fourier transform, laplace transform, mechanisms, nonlinear mechanics, *6565*
Sandler (I.S.), see Dimaggio (F.L.), *9628*
Sandor (B.I.), see Biegler (K.K.), *6412*
Sandoval-Robles (J.G.), mass transfer, spherical bodies, Riba (J.P.), (et al.), *10681*
Sandri (R.), heat engines, real gas effects, thermodynamic processes, *721*
Sandroni (S.), mixing, plumes, smoke stacks, Bacci (P.), (et al.), *2679*
Sandru (N.), see Camenschi (G.), *5279*
Sandsmark (N.), see Hagen (K.), *8872*
Sandstrom (S.), see Akesson (B.), *6870*
Sandt (A.), crack propagation, fatigue, polymers, Hornbogen (E.), *8371*
sandwich construction, acoustic measurements, noise abatement, Jones (R.E.), *911*

- composite materials, saint venant principle, strips, Rao (N.R.), Valsarajan (K.V.), *2210*
- compression, panels, Camarda (C.J.), *3539*
- brazed joints, composite structures, honeycomb structures, Hepler (A.K.), Arnquist (J.), (et al.), *3540*
- beam columns, design (optimum), Parbery (R.D.), Karihaloo (B.L.), *4528*

Sanfeld (A.), see Dalle Vedove (W.), *11379*
Sanger (D.J.), see Green (W.L.), *6734*
Sangiovanni (J.J.), see Kesten (A.S.), *3871*
Sanguineti (G.), boundary value problems, plastic behavior, plates (annular), yield condition, *4354*
Sani (R.L.), data analysis, existence theorems, finite element techniques, galerkin method, navier stokes equation, penalty function, Gresho (P.M.), (et al.), *10072*
Sanin (P.I.), additives, chemical reactions, friction, lubrication (boundary), metals, *1022*
Sankar (S.), see Guntur (R.), *1456*

- see Hoa (S.V.), *5019*
- analog computation, analog simulation, design (optimum), digital analog computation, hydraulic machinery, Svoboda (J.V.), *6123*
- see Osman (M.O.M.), *10370*

Sankaran (K.S.), dynamic response, foundations, vibration (forced), vibration (torsional), Krishnaswamy (N.R.), (et al.), *6310*
Sankhla (V.D.), astrophysics, convection, magneto plasma dynamics, models, stability theory, Bhatia (P.K.), *6867*
Sanna (S.), see Corriga (G.), *8509*
Sano (H.), see Mori (Y.H.), *1693*
Sano (O.), acoustic emission, crack growth, rock mechanics, *3467*
Sano (T.), asymptotic methods, reynolds number (small), spherical bodies, unsteady flow, *9530*
Sansonov (V.A.), friction, pressure distribution, rotating bodies, roughness, surfaces, *10685*
Santarelli (F.), see Stramigioli (C.), *11766*
Santoro (R.J.), axisymmetric flow, diagnostics, jets, optical techniques, Semerjian (H.G.), (et al.), *3762*
Sanz-Serna (J.M.), dispersion, finite element techniques, galerkin method, korteweg de vries equation, waves, Christie (I.), *6088*
Saprykin (A.I.), see Baronets (P.N.), *4667*
Sardesai (R.G.), see Webb (D.R.), *7870*
Sargent (D.M.), bubble dynamics, buoyant flow, flow measurement, pipes, river beds, *564*
Sargent (J.P.), absorption, adhesives, bonded joints, composite materials, laminates, optical techniques, swelling stresses, water, Ashbee (K.H.G.), *11343*
Sarhan (A.), see El-Shaarawi (M.A.I.), *2790*
Sarisley (E.F.), see Dewolf (J.T.), *2284*
Sarkar (P.), see Ramanaiah (G.), *5986*
Sarkisian (N.E.), creep, dynamic stresses, glass fibers, laminates, Martirosian (M.M.), (et al.), *4359*
Sarkisyan (A.S.), circulation, currents, heat transfer, oceanography, Rzheplinskiy (D.G.), *4879*
Sarlet (W.), dynamic analysis, hamilton principle, linear systems, variational methods, Engels (E.), (et al.), *9086*
Sarma (P.R.L.), channel flow, end effects, magneto fluid dynamics, numerical methods, walled structures, Mittal (M.L.), (et al.), *10752*
Sarmiento (G.S.), see Laura (P.A.A.), *5025*

- see Laura (P.A.A.), *11765, book*

Sarna (S.P.), plates (rhombic), plates (simply supported), Ali (S.M.J.), *3318*
Sarnovsky (J.), iterative methods, large scale systems, optimal control, regulator problem, time optimal systems, *8165*
Sarofim (A.F.), see Mitchell (R.E.), *5635*
Sarojamma (G.), heat transfer, magneto fluid dynamics, porous walls, rotating disks, Krishna (D.V.), *11508*
Sarpkaya (T.), dynamic analysis, offshore structures, statics, wave loads, Isaacson (M.), *2543, book*

- cylindrical waves, hydroelasticity, oscillatory flow, vibration (flow induced), *8834*

Sarra (M.), see Dragani (R.), *8325*
Sarrak (V.I.), see Baranov (S.M.), *6425*
Sarrantonio (A.), see Renshaw (T.), *9486*
Sarychev (V.A.), dynamic properties, human body, mass determination, measurements (dynamic), zero g phenomena, Sazonov (V.V.), (et al.), *1064*

- lyapunov's functions, oscillations, periodic orbits, satellites, Sazonov (V.V.), (et al.), *2918*

Sasada (T.), friction (sliding), metals, wear, work hardening, x ray techniques, Norose (S.), (et al.), *1009*
Sasai (Y.), magnetic field, piezomagnetic field, volcanology, *973*

- earth, elasticity, magnetic field, tectonics, *8000*

Sasaki (H.), steel, strength, stress strain relationships, surfaces, yield condition, Sato (Y.), *5327*
Sasaki (K.), see Sato (T.), *1829*

- machinery, noise, simulation, spectra, Sato (T.), (et al.), *2957*
- see Sato (T.), *3976*

Sasaki (Y.K.), circulation, duct flow, pulsatile flow, two dimensional flow, Reddy (J.N.), *6659*
Sassy (L.), culverts, discharges, head, pipe flow, scale models, *5387*
Sastri (V.M.K.), see Sultanian (B.K.), *3813*
Sastry (M.S.K.), see Wen (S.-L.), *11571*
Sastry (S.), coherent structure, perturbation methods, power generation, power plants, Varaiya (P.), *124*
Sastry (S.R.N.), insulation, magneto fluid dynamics, numerical methods, panels (flat), shear flow, *9789*
Sasyo (Y.), see Matsuo (T.), *5614*

- see Matsuo (T.), *5615*

Satake (A.), see Reddy (J.N.), *8726*
Satake (M.), see Hirai (H.), *1365*
Satapathy (P.K.), see Mahapatra (R.B.), *3473*
satellites, control, modal control, Ganiev (R.F.), Zakrzhevskii (A.E.), (et al.), *192*

- dynamic analysis, flexible bodies, Lips (K.W.), Modi (V.J.), *1067*
- artificial satellites, control, space vehicle structures, structural response, Lightner (E.B.), *2178*
- design, launching, O'Neill (G.K.), Kolm (H.H.), *2874*
- lyapunov's functions, oscillations, periodic orbits, Sarychev (V.A.), Sazonov (V.V.), (et al.), *2918*
- dynamic analysis, gyrodynamics, Hiller (M.), Lehrle (T.), *3082*
- dynamic analysis, gyrodynamics, Rath (P.C.), Pal (J.), *4142*
- orbit mechanics, perturbation methods, planetary theory, second order analysis, Gooding (R.H.), *5700*
- cratering, dimensional analysis, impact, Holsapple (K.A.), Schmidt (R.M.), *9351*

Sathyamoorthy (M.), see Chia (C.Y.), *4423*

- galerkin method, plates (circular), plates (orthotropic), rotary inertia, shear, vibration (nonlinear), *7393*
- dynamic analysis, plates, rotary inertia, shear, vibration (nonlinear), *8308*

Sato (H.), elastic waves, nonhomogeneous media, scattering, Matsumura (S.), *6351*
Sato (J.), arrays, diagnostics, piezoelectrics, transducers (ultrasonic), ultrasonics, Kawabuchi (M.), (et al.), *2955*
Sato (K.), boundary conditions, buckling, compression, elliptical bodies, plates, *4396*
Sato (M.), algorithms, bayesian approach, decision theory, markov processes, stochastic processes, Abe (K.), (et al.), *4317*
Sato (R.), see Tanimoto (T.), *1879*
Sato (T.), acoustic measurements, acoustics, arrays, holography, Sasaki (K.), (et al.), *1829*

- see Oyane (M.), *2446*
- see Sasaki (K.), *2957*
- arrays, imaging systems, ultrasonics, Sasaki (K.), (et al.), *3976*
- arrays, imaging systems, turbulence, ultrasonics, Linzer (M.), (et al.), *4810*

Sato (Y.), see Sasaki (H.), *5327*

- see Shima (A.), *12043*
- bubble dynamics, collapse, walls, Shia (A.), *12048*

Sator (F.G.), axial compressors, blades, cascades, transonic flow, viscous flow, *2756*
Satter (A.), adsorption, dispersion, porous media, rocks, transport phenomena, Shum (Y.M.), (et al.), *5834*
saturation, clay, semi infinite media, soil consolidation, Deresiewicz (H.), *412*

- clay, modeling, plane strain, strength, Mitachi (T.), Kitago (S.), *414*
- convection (free), infiltration, porous media, Plumb (O.A.), Huenefeld (J.C.), *958*
- critical region, heavy water, vapor pressure, water, Hill (P.G.), Macmillan (R.D.C.), *1655*
- chains, diffusion, drops, mass transfer, Polianin (A.D.), *1738*
- load transfer, loads, piles, porous media, soils, Niumpradit (B.), Karasudhi (P.), *2385*
- condensation (dropwise), kinetics, multiphase flow, supersaturation, Bazarov (S.M.), Shpenzer (G.G.), *2845*

- elastic waves, granular media, porous media, Berryman (J.G.), *3000*
- elastic constants, sand, strength, triaxial tests, Ricceri (G.), Soranzo (M.), *3399*
- field tests, piles, soils, stress strain relationships, Bartolomei (A.A.), Yushkov (B.S.), (et al.), *3408*
- bubble dynamics, diffusion, stability, Isay (W.H.), *4827*
- attenuation, porous media, sand, sound propagation, viscosity, Hovem (J.M.), Ingram (G.D.), *5733*
- compressional waves, fluid mechanics, porous media, sand, Allen (N.F.), Richart (F.E.) Jr., (et al.), *5836*
- heat transfer, mass transfer, moving media, porous media, Verigin (N.N.), Khabibullin (I.L.), (et al.), *5853*
- cyclic testing, sand, shear stress, Ishihara (K.), Yamazaki (F.), *6379*
- charged particles, currents, diagnostics, plasma, Benilov (M.S.), Tirskii (G.A.), *6858*
- acoustic measurements, bubble dynamics, ocean bed, sedimentation, Anderson (A.L.), Hampton (L.D.), *6899*
- deforation, models, porous media, rocks, Abey (A.E.), *7450*
- compression, concrete, strength, tension, Karapetian (K.S.), Kotikian (R.A.), (et al.), *7566*
- mathematical models, porous media, two component flow, Kowalski (S.J.), *7978*
- internal flow, near ground effects, runoff, soil mechanics, Ahuja (L.R.), Ross (J.D.), (et al.), *10831*
- one dimensional flow, porous media, travelling waves, Nakano (Y.), *10834*
- elastic waves, porous media, propagation, Berryman (J.G.), *10841*
- convection, heat addition, hydrodynamic stability, porous media, rayleigh number, Straus (J.M.), Schubert (G.), *11367*
- convection (forced), large displacement, nonlinear characteristics, porous media, Rudraiah (N.), Srimani (P.K.), *12069*

Satyamurthy (K.), collapse, panels, plates (rectangular), stability theory, Khot (N.S.), (et al.), *6252*
- convection, cylindrical bodies, thermal stresses, thermoelasticity (transient), Singh (J.P.), (et al.), *6943*

Satyanarayana (B.), bearing capacity, footings, layered media, soils, Garg (R.K.), *3405*

Satyaprakash (B.R.), see Antonia (R.A.), *11546*

Sauer (H.J.) Jr., see Chongrungreong (S.), *7831*

Sauer (J.A.), crack initiation, crack propagation, cyclic loading, fatigue, micromechanics, polymers, Richardson (G.C.), *8377*

Saul (A.J.), see Halliwell (A.R.), *7544*

Saunders (L.R.), see Collings (A.G.), *2050*
- modal analysis, numerical methods, vibration (forced), Collings (A.G.), *3380*

Saut (J.C.), existence theorems, incompressible flow, navier stokes equation, three dimensional flow, Temam (R.), *41*

Sauty (J.-P.), aquifers, groundwater, transport phenomena, *10675*

Savage (G.J.), computing techniques, discrete systems, electrical analogies, graph theory, mathematical models, Kesavan (H.K.), *8137*

Savage (M.), bearings (roller), dynamic response, kinematics, Loewenthal (S.H.), *10929*

Savage (S.B.), granular media, gravity, hoppers, transport mechanisms, Sayed (M.), *8915*
- granular media, shear flow, stresses, Jeffrey (D.J.), *12062*

Savaryenskiy (Ye.F.), interpolation, processing, seismic waves, Kendzera (A.V.), *7021*

Savchenkov (G.A.), critical heat flux, energy conversion, heat transfer, refrigeration, thermosyphons, Kunakov (V.G.), *3836*

Savelev (M.V.), see Leznov (A.N.), *6063*

Savelev (V.N.), see Orlov (V.K.), *5543*

Savelev (V.P.), see Kondratev (V.V.), *4310*

Savidis (S.A.), dynamic response, plates, soil structure interaction, Richter (T.), *2346*

Savikovskii (L.A.), see Melnikov (I.V.), *6491*

Savitskii (A.I.), composite materials, copper, friction, polymers, *3046*

Savkar (S.D.), see So (R.M.C.), *4755*

Savkin (V.G.), see Sviridenok (A.I.), *1004*

Savostyanov (V.A.), see Georgiev (K.G.), *7000*

Savulescu (S.N.), see Dumitrescu (H.), *7706*

Savulescu (T.N.), boundary layer (turbulent), prediction, separation, turbulent flow, Dumitrescu (H.), *8611*

Sawada (H.), airfoils, lift, porous walls, two dimensional flow, wind tunnels, *2769*

Sawada (R.), see Terao (K.), *883*

Sawada (T.), duct flow, non newtonian flow, polar fluids, Tanahashi (T.), *11503*

Sawamiphakai (K.), see Chang (T.Y.), *3311*

Sawan (M.E.), cladding, nuclear reactors, rewetting, Temraz (H.M.), *730*

Sawczuk (A.), see Litewka (A.), *3257*
- see Anisimowicz (M.), *7275*
- see Bandyszewski (W.), *8438*
- see Dolinski (K.), *10176*

Sawicki (A.), composite materials, layered media, yield condition, *1212*

Sawyer (J.W.), adhesives, bonded joints, fatigue, finite element methods, strength, Cooper (P.A.), *10383*

Sawyers (K.N.), deformation (finite), elasticity (nonlinear), finite strain, stability, Rivlin (R.S.), *232*

Saxena (A.), crack growth, fatigue, high temperature, low cycle fatigue, *2417*
- crack growth, high temperature, material testing, steel, *2427*

Saxena (S.C.), see Grewal (N.S.), *7013*

Sayar (B.A.), containers (partially filled), nonlinear analysis, pendulum analogy, shells (spherical), sloshing, Baumgarten (J.R.), *9632*

Sayed (M.), see Savage (S.B.), *8915*

Sayer (P.), cylindrical bodies, floating bodies, gravity waves (finite depth), virtual mass, waves (long), *11681*
- floating bodies, gravity waves (finite depth), heaving, integral methods, oscillating bodies, *11682*

Sayers (C.M.), dispersion, porous media, sound speed, ultrasonics, *11925*

Sayhi (M.N.), numerical methods, sound generation, transducers, Ousset (Y.), (et al.), *12006*

Sazonov (V.V.), see Sarychev (V.A.), *1064*
- see Sarychev (V.A.), *2918*
- see Zlatoustov (V.A.), *4404*

Sazontov (A.G.), spectra, statistical theory, stratified flow, turbulence, *651*
- hydrodynamic stability, thermal instability, variable fluid properties, viscosity, *6761*

scale effects, joints, rocks, shear strength, Barton (N.), Bandis (S.), *429*
- finite element techniques, mathematical models, Dow (J.O.), Byrd (D.E.), *1131*
- anemometers, heat transfer (atmospheric), turbulence (transport), Test (F.L.), Lessmann (R.C.), (et al.), *1662*
- airfoils, oscillating bodies, transonic flow, Davis (S.S.), *1784*
- finite element methods, stress analysis, Nath (B.), Nath (P.), *2069*
- bending, powder metallurgy, strength, Fridman (V.M.), Shcherban (N.I.), *3480*
- gradient techniques, multivariable systems, nonlinear characteristics, optimization, Bruet (B.), *4944*
- bubble dynamics, cavitation flow, cavitation inception, Billet (M.L.), Holl (J.W.), *5390*
- ceramics, thermal shock, thermoelasticity (transient), Glandus (J.C.), Boch (P.), *5803*
- atomization, drops, El-Shanawany (M.S.), Lefebvre (A.H.), *5822*
- suspensions, two phase flow, Saha (P.) eds., Farukhi (N.M.), *6956, book*
- models, siphons, surface tension, weirs, Goldring (B.T.), *7542*
- crossflow, jets, Rajaratnam (N.), Gangadharaiah (T.), *8601*
- flow measurement, suspensions, two phase flow, Lee (J.), Crowe (C.T.), *8891*
- cavitation inception, noise, pumps, Mcnulty (P.J.), Pearsall (I.S.), *10530*
- cavitation, cavitation inception, hydraulic machinery, hydraulic structures, surface effect, Arndt (R.E.A.), *10531*

scale models, centrifugation, centrifuge tests, clay, foundations, gravity platform, Andersen (K.H.), Selnes (P.B.), (et al.), *1313*
- clay, foundations, Das (B.M.), *1314*
- clay, piles, Ranjan (G.), Ramasamy (G.), (et al.), *1328*
- centifuge tests, centrifugation, embankments, stability, Malushitsky (Yu.N.), *1329, book*
- design, dimensional analysis, hydraulic turbines, Etinberg (I.E.), *2753*
- dynamic analysis, hydraulic machinery, hydrodynamics, rotors, Bachmann (P.), *2760*
- foundations, piles, soil structure interaction, soils, Wiesner (T.J.), Brown (P.T.), *3409*
- acoustic waves, diffraction, electromagnetic waves, scattering, Mei (C.C.), Tuck (E.O.), *4967*
- culverts, discharges, head, pipe flow, Sassy (L.), *5387*
- air conditioning, cooling, radiant interchange, variational methods, Miyagawa (Y.), *5564*
- combustion chambers, gas turbines, Dan-Zhi (C.), *5641*
- combustors, emissions, gas turbines, Roberts (P.B.), Kubasco (A.J.), (et al.), *7883*
- catalyzed ignition, emissions, gas turbines, Anderson (S.J.), Friedman (M.A.), (et al.), *7885*
- cylindrical bodies, damping, vibration (flow induced), Mulcahy (T.M.), *11626*
- hydroelasticity, shells (axisymmetric), submerged bodies, Takeuchi (K.), Desanto (D.F.), *11672*
- buoys, dynamic stability, gravity waves (breaking), Nath (J.H.), Chester (S.T.), (et al.), *11695*

Scarth (D.A.), see Popplewell (N.), *8277*

Scarton (H.), see Papadakis (C.) eds., *5476, book*

scattered light, cavitation inception, holography, optical techniques, Billet (M.L.), Gates (E.M.), *1638*
- lasers, photoelasticity, photoelasticity (three dimensional), Berghaus (D.G.), *3482*
- atmosphere, mathematical models, radiant interchange, Ganapol (B.D.), *3828*
- drops, reflection, water, Popov (Yu.A.), *5583*
- coatings, mie scattering, radiant interchange, radiation properties, spherical bodies, thin films, Shafey (H.M.), Kunitomo (T.), *6804*
- coatings, mie scattering, radiant interchange, radiation properties, spherical bodies, thin films, Kunitomo (T.), Shafey (H.M.), (et al.), *6805*
- airy stress function, photoelasticity, plane stress, Pindera (J.T.), *7546*
- birefringent materials, photoelasticity (three dimensional), Robert (A.), Royer (J.), *7547*
- birefringence, dilute solutions, visualization, Krishnamurthy (A.R.), Pindera (J.T.), *9678*

- cracks, photoelasticity (dynamic), plane stress, stress intensity factor, Ross (E.L.), Kaminski (G.), (et al.), *10312*
- concentration, jets, mixing, particle fluid flow, Long (M.B.), Chu (B.T.), (et al.), *10539*
- photoelasticity, photoelasticity (three dimensional), stress analysis, Ascough (J.), *11313*

scattering, mathematical theory, wave equations, Lax (P.D.), Phillips (R.S.), *35*
- discontinuities, finite element techniques, rayleigh waves, Fuyuki (M.), Matsumoto (Y.), *401*
- discontinuities, elastic waves, half space, Neerhoff (F.L.), *404*
- korteweg de vries equation, surveys, Miles (J.W.), *664*
- emissivity, radiant interchange, two phase flow, Adzerikho (K.S.), Antsulevich (V.I.), (et al.), *777*
- acoustics, cylindrical bodies, resonance, spherical bodies, Flax (L.), Dragonette (L.R.), (et al.), *907*
- inhomogeneities, phase velocity, propagation, second order analysis, Gray (S.H.), *1085*
- inverse problems, mathematical methods, time domain techniques, wave equations, Burridge (R.), *1088*
- approximations, boltzmann equation, green function, Coppa (G.), Ravetto (P.), *1529*
- doppler effect, surface waves, wind-wave interaction, Tuteur (F.B.), Tung (H.), (et al.), *1646*
- absorption, radiant interchange, reflection, Yuen (W.W.), Wong (L.W.), *1706*
- differential equations (ordinary), functional analyis, inverse method, Shabat (A.B.), *1998*
- differential equations (partial), eigenvalues, inverse problems, nonlinear systems, Gerdzhikov (V.S.), Ivanov (M.I.), (et al.), *2007*
- elastic waves, random media, Bose (S.K.), Debnath (L.), *2366*
- cavities, elastic waves, half space, Bostrom (A.), Kristensson (G.), *2368*
- elastic waves, inclusions, Bostrom (A.), *2369*
- breakwater, gravity waves (finite depth), gravity waves (surface), Lozano (C.J.), *2705*
- boltzmann equation, neutrons, nuclear fusion, statistical mechanics, transport, Inonu (E.), Tezcan (C.), *2778*
- atmosphere, radiant interchange, radiation properties, spectral analysis, transmission, Arst (Kh.Yu.), Kostyanoy (G.N.), *2823*
- absorption, anisotropic media, radiant interchange, Modest (M.F.), Azad (F.H.), *2824*
- crystals, sound propagation, ultrasonics, Grigorev (O.A.), Shermergor (T.D.), *2930*
- acoustics, elastic bodies, resonance, sound fields, Flax (L.), Raju (P.K.), (et al.), *2935*
- acoustic waves, nonlinear waves, sound fields, viscous effects, Woodsum (H.C.), Westervelt (P.J.), *2945*
- acoustic waves, surface waves, Varavin (V.Yu.), Naugolnykh (K.A.), (et al.), *2946*
- cracks, elastodynamics, electroelasticity, piezoelectrics, shear waves, Sabbagh (H.A.), *3240*
- cylindrical bodies, gravity waves (surface), submerged bodies, Leppington (F.G.), Siew (P.F.), *3717*
- absorption, coatings, radiant interchange, radiation properties, reflection, Shafey (H.M.), Kunitomo (T.), *3827*
- combustion, flaes (diffusion), lasers, spectral analysis, Bard (S.), Pagni (P.J.), *3878*
- combustion, diagnostics, lasers (gasdynamic), Eckbreth (A.C.), Bonczyk (P.A.), (et al.), *3879*
- thermal effects, underwater acoustics, Andrews (R.S.), *3928*
- acoustic waves, reflection, transmission, waveguides, Bostrom (A.), *3932*
- acoustic properties, acoustic waves, Twersky (V.), *3934*
- acoustic waves, shells, Kachalov (A.P.), *3937*
- acoustic waves, elastic bodies, spherical bodies, Bostrom (A.), *3938*
- acoustic waves, reflection, Norton (S.J.), *3946*
- elastic waves, resonance, shear waves, spherical bodies, Brill (D.), Gaunaurd (G.), (et al.), *3947*
- diffusers, modes, plane waves, wave energy, Strube (H.W.), *3949*
- cylindrical bodies, elastic bodies, ultrasonics, Welton (P.J.), De Billy (M.), (et al.), *3950*
- cylindrical waves, transducers, ultrasonics, Foster (F.S.), Arditi (M.), (et al.), *3982*
- layered media, love waves, Niazy (A.), Kazi (M.H.), *4453*
- acoustic waves, fluids, spherical bodies, Gaunaurd (G.), Uberall (H.), *4774*
- acoustic waves, boundary conditions, Weaver (R.L.), Pao (Y.-H.), *4782*
- cylindrical bodies, submerged bodies, surface waves, Dragonette (L.R.), *4786*
- sound propagation, underwater acoustics, Ewart (T.E.), Ehrenberg (J.E.), (et al.), *4792*
- acoustic waves, Greenblatt (P.), *4795*
- acoustic waves, Varadan (V.V.), Varadan (V.K.), *4796*
- acoustic waves, response, waveguides, Smith (P.W.) Jr., *4797*
- acoustic measurements, calibration, underwater acoustics, Dragonette (L.R.), Numrich (S.K.), (et al.), *4801*
- cylindrical bodies, waves, Goel (G.C.), Jain (D.L.), *4803*
- aerosols, electric effects, Kapustin (V.N.), Zagainov (V.A.), (et al.), *4833*
- acoustic waves, diffraction, electromagnetic waves, scale models, Mei (C.C.), Tuck (E.O.), *4967*
- rayleigh waves, surface barrier, Biryukov (S.V.), *5244*
- drops, radiant interchange, Kolesnikov (P.M.), Cess (R.D.), *5582*
- ocean, underwater acoustics, Medwin (H.), Novarini (J.C.), *5744*
- dispersion, underwater acoustics, Zornig (J.G.), *5764*
- diffraction, ocean, surface profiles, underwater acoustics, Holford (R.L.), *5785*
- acoustic waves, diffraction, optical techniques, sound fields, Saiga (N.), Suzuki (T.), *5792*
- atmosphere, lasers, lidar, meteorology (physical), moisture, raman scattering, Zakharov (V.M.), Kalachinskii (S.F.), (et al.), *5959*
- acoustics (physiological), experimental methods, tissues, Braun (M.), Robinson (D.E.), *6012*
- random media, waves, Chow (P.L.) eds., Kohler (W.E.), (et al.), *6043, book*
- backlund transformations, evolution equations, inverse problems, korteweg de vries equation, Prikarpatskii (A.K.), *6072*
- interface waves, materials possessing memory, viscoelastic waves, Lokshin (A.A.), *6341*
- elastic waves, penny shaped crack, Visscher (W.M.), *6347*
- edge cracks, elastic waves, Mendelsohn (D.A.), Achenbach (J.D.), (et al.), *6348*
- acoustic waves, nonhomogeneous media, Lefebvre (J.), Frohly (J.), (et al.), *6349*
- rayleigh waves, surface flaws, Momoi (T.), *6350*
- elastic waves, nonhomogeneous media, Sato (H.), Matsumura (S.), *6351*
- elastic bodies, spherical bodies, torsional waves, Grilitskii (D.V.), Poddubnyak (A.P.), *6352*
- composite materials, elastic waves, inclusions, sound propagation, spherical waves, Berryman (J.G.), *6898*
- nonhomogeneous media, waves, Krylov (V.V.), *6900*
- couplings, modes, shallow water, underwater acoustics, Mcdaniel (S.T.), *6902*
- ducts, underwater acoustics, Bucker (H.P.), *6904*
- cracks, elastic waves, Shindo (Y.), *7431*
- cavities, elastic waves, spectral analysis, Sancar (S.), Pao (Y.-H.), *7432*
- cavities, elastic waves, spectral analysis, Sancar (S.), Sachse (W.), *7433*
- monte carlo analysis, radiography, x ray techniques, Smith (R.L.), *7554*
- data acquisition, lasers, velocity measurement, Hirleman (E.D.), *7815*
- emissivity, heat transfer (combined modes), Marchenko (N.V.), Venyavkina (E.A.), *7865*
- acoustic waves, bodies of revolution, cylindrical bodies, Junger (M.C.), *7940*
- acoustic measurements, acoustic waves, impulse, spherical bodies, Deprez (G.), Hazebrouck (R.), *7941*
- acoustic waves, airplane structures, jet engines, numerical methods, Bayliss (A.), *7942*
- electromagnetic waves, particles, suspensions, Bayvel (L.P.), Jones (A.R.), *8088, book*
- helmholtz equation, inverse problems, mathematical methods, sturm-liouville equation, Bojarski (N.N.), *8112*
- surface flaws, surface waves, Achenbach (J.D.), Brind (R.J.), *8333*
- absorption, radiant interchange, Ozisik (M.N.), Sutton (W.H.), *8742*
- boundary layer, radiating flow, stagnation point, Kim (K.H.), Ozisik (M.N.), *8744*
- ducts, sound propagation, Mohring (W.), *8864*
- diagnostics, muscles, tissues, ultrasonics, Engin (A.E.), Peindl (R.D.), (et al.), *9072*
- couplings, half space, rayleigh waves, viscoelastic fluids, Angel (Y.C.), Bogy (D.B.), *9338*
- emissivity, radiant interchange, schuster number, surface effect, Gorban (I.A.), *9719*
- green function, radiant interchange, reflection, Rogovtsov (N.N.), *9720*
- emissivity, radiant interchange, reflection, Adzerikho (K.S.), Blokh (A.G.), (et al.), *9721*
- mathematical models, monte carlo analysis, radiant interchange, Antyufeev (V.S.), *9723*
- acoustic waves, acoustics, surface effect, Holford (R.L.), *9849*
- boussinesq equation, differential equations (partial), korteweg de vries equation, nonlinear waves, solitary waves, Ablowitz (M.J.), Segur (H.), *10017*
- boundary integral methods, boundary value problems, existence theorems, helmholtz equation, Angell (T.S.), Kleinman (R.E.), *10019*
- half space, rayleigh waves, surface flaws, wave generation, Witos (F.), *10229*
- elastic waves, half space, layered media, reflection, Coen (S.), *10236*
- nonlinear analysis, resonance, three wave resonance, wave interactions, Kaup (D.J.), *10482*
- channel flow, convection, heat transfer (combined modes), radiant interchange, turbulent flow, Popov (Yu.A.), Polovnikov (V.I.), *10611*
- heat transfer (combined modes), magneto fluid dynamics, mie scattering, radiant interchange, radiating flow, three dimensional flow, Ahluwalia (R.K.), Im (K.H.), *10612*
- sound fields, surface barrier, Dassios (G.), *10796*
- diffraction, flow irregularities, gravity waves (finite depth), reefs, Miles (J.W.), *11578*
- resonance, wave interactions, Ma (Y.-C.), *11621*
- absorption, integral methods, radiant interchange, reflection, slabs, Stramigioli (C.), Santarelli (F.), (et al.), *11766*
- cylindrical bodies, submerged bodies, underwater acoustics, Numrich (S.K.), Varadan (V.V.), (et al.), *11900*
- bottom irregularities, ocean bed, shallow water, underwater acoustics, Ivakin (A.N.), Lysanov (Yu.P.), *11912*

- sound, vortex rings, Kambe (T.), Oo (U.M.), *11963*
- echos, reflection, sound, Ueda (M.), Ichikawa (H.), *11967*
- acoustic measurements, cylindrical bodies, spherical bodies, Quentin (G.J.), De Billy (M.), (et al.), *11974*
- acoustic waves, strips, Van Den Berg (P.M.), *11977*
- acoustic waves, ellipsoids, Dassios (G.), *11979*
- acoustic waves, spherical bodies, Roumeliotis (J.A.), Fikioris (J.G.), *11980*
- acoustics, cylindrical bodies, fluids, Bennett (C.L.), Mieras (H.), *11986*
- acoustics, numerical methods, screens, De Smedt (R.), *11987*
- particles, powders, Sakhnovskii (M.Yu.), Kunetskii (M.G.), *12059*

Schaechter (D.B.), beams, finite element methods, flexible bodies, optimal control, *2123*
- distributed parameters, estimation, flexible bodies, strings, *7239*
- beams (flexural), control, space vehicle structures, structural analysis, *7413*

Schaeffer (D.), see Golubitsky (M.), *4983*

Schaeffer (H.G.), coding, computer programming, finite element methods, finite element techniques, modal analysis, nastran, programming, *75, book*

Schaffar (M.), jets, noise, sound generation, Hancy (J.P.), *7934*

Schaffer (B.G.), composite materials, micromechanics, resins, viscoelasticity (dynamic), Adams (D.F.), *7273*

Schajer (G.S.), drilling, experimental results, finite element methods, residual stresses, strain analysis, *490*

Schapery (R.A.), see Tielking (J.T.), *8201*

Scharf (L.L.), algorithms, dynamic programming, filters, image processing, nonlinear systems, signal processing, Elliott (H.), *11064*

Scharmann (A.), see Schwabe (D.), *2807*

Schatz (J.F.), see Yamada (S.E.), *7017*

Schatzle (P.R.), aerodynamic interference, three dimensional flow, vortex lines, wind turbines, Klimas (P.C.), (et al.), *10518*

Schchedrin (A.I.), see Golubinskiy (A.I.), *10503*

Schechter (E.), difference equations, nonlinear theory, parabolic equations, *4188*

Scheffler (K.), see Straub (J.) eds., *723, book*

Scheiman (J.), honeycomb structures, reduction, screens, turbulence, turbulent flow, Brooks (J.D.), *9616*

Scheithe (W.), control, turbomachinery, vibration isolation, Trommer (W.), *3389*

Schellin (T.E.), see Ostergaard (C.), *527*

Schemensky (R.T.), see Lamar (J.E.), *8639*

Schenzle (P.), hulls, propellers (marine), propulsion, roughness, surfaces, *7072*

Schetz (J.A.), injection, mixing, turbulence, turbulent flow, *653, book*
- see Baranovsky (S.I.), *4636*

Scheurkogel (A.J.), buckling, random error, stochastic systems, structural stability, Elishakoff (I.), (et al.), *8260*

Schexnayder (C.J.) Jr., see Rogers (R.C.), *4735*

Schiehlen (W.), see Eiber (A.), *1983*

Schieve (W.C.), see Zurek (W.H.), *6748*

Schijve (J.), airplane structures, crack growth, fatigue, material testing, prediction, survey, *1350*
- crack growth, crack opening displacement, fatigue, *2428*
- crack propagation, cracks, fatigue, fractographic tests, *6413*

Schilawa (S.), see Gersten (K.), *2661*

Schiller (S.R.), control, cycles, fluid conveyance, solar collectors, Warren (M.L.), (et al.), *6822*

Schilling (C.G.), bars, beams, end effects, residual stresses, *9262*

Schilling (H.), aerodynamic performance, cascades, drag, nozzles, optimization, relaxation drag, slender bodies, *4625*

Schinkel (W.M.M.), see Linthorst (S.J.M.), *6792*

Schirmer (W.), acoustic measurements, machinery, noise abatement, sound propagation, *1818*

Schizas (L.S.), see Narayanan (R.), *6602*

schlieren methods, combustion, flames, interaction, jets, transition, Yule (A.J.), Chigier (N.A.), (et al.), *841*
- airfoil characteristics, airfoils, oscillating bodies, pressure distribution, shock waves, Benetka (J.), Pernica (Z.), *2733*
- optical techniques, refraction, thermography, Kiss (L.), *3774*
- collapse, discharges, plasma, shock waves, Baronets (P.N.), Saprykin (A.I.), (et al.), *4667*
- interferometry, laser plasma interaction, measurements (dynamic), unsteady flow, Klimkin (V.F.), Pikalov (V.V.), *5694*
- photography, visualization, Kaspar (J.), *8668*
- density, shock tubes, shock waves, thermal effects, thermal gradient, Akimov (A.I.), Piskareva (M.V.), (et al.), *10492*
- low gravity, metals, solidification, Owen (R.B.), Johnston (M.H.), *10659*

Schlosser (K.), energy storage, heat pumps, heating, mathematical models, Teislev (B.), *2837*

Schlueter (R.A.), algorithms, computer aided manufacturing, numerical control, optimal control, sampled data systems, tools, Retford (E.T.), (et al.), *2194*

Schlunder (E.-U.), conductivity, contact problems, drying, particle fluid flow, *10638*

Schlunder (N.), see Wild (G.), *1864*

Schmid (H.J.), computing techniques, finite element techniques, integration, nonlinear systems, optimization, *5008*

Schmidt (D.S.), lunar theory, oblateness, perturbation methods, planetary satellites, three body problem, *6881*

Schmidt (D.W.), see Engler (R.H.), *8663*

Schmidt (E.M.), aerodynamic interference, fins, hypersonic flow, pressure distribution, projectiles, sabot discard, wind tunnels, *10517*
- aerodynamic interference, fins, launching, projectiles, trajectories, *10519*

Schmidt (F.W.), see Kulakowski (B.T.), *3211*
- biot number, energy storage, heat exchangers, optimization, packed beds, thermal regenerators, Willmott (A.J.), *9730, book*

Schmidt (G.), see Hortel (M.), *388*
- boltzmann equation, conduction, enskog fluid, kinetic theory, pressure, viscoelasticity (dynamic), viscosity, Kohler (W.E.), (et al.), *7819*
- dynamic analysis, random excitation, vibration (forced), vibration (parametric), *9298*

Schmidt (G.T.), cruise missile, missiles, modeling, navigation, simulation, Setterlund (R.H.), *5711*

Schmidt (J.), bearings (journal), galerkin method, lubrication (hydrodynamic), reynolds equation, *3044*

Schmidt (L.C.), see Hanaor (A.), *1448*
- shear transfer, torsion, trusses, *2537*
- collapse, structural analysis, trusses, ultimate strength, Morgan (P.R.), (et al.), *3550*

Schmidt (R.), arches, buckling, hinged bodies, pressure, *2297*
- arches, hinged bodies, postbuckling behavior, *2298*
- buckling, combined loading, elasticity (linear), rings, *8262*
- imperfection sensitivity, postbuckling behavior, pressure, rings, *9282*
- arches, postbuckling theory, structural stability, *10172*

Schmidt (R.M.), see Holsapple (K.A.), *9351*

Schmidt (S.C.), see Malte (P.C.), *3877*

Schmidt (W.), anisotropy, deep drawing, deformation (plastic), drawing, mechanical properties, *7459*

Schmidt (Z.), pipelines, slug flow, two phase flow, Brill (J.P.), (et al.), *6969*
- pipe flow, risers, slug flow, two phase flow, Brill (J.P.), (et al.), *11499*

Schmieder (L.), algorithms, manipulators, robotics, *9155*

Schmit (L.A.), see Fleury (C.), *505*

Schmit (L.A.) Jr., see Rosen (A.), *507*

Schmitt (W.), see Holstein (T.), *2445*

Schmitz (G.), see Edenhofer (J.), *4666*
- see Edenhofer (J.), *11392*

Schnack (D.), finite difference methods, magneto plasma dynamics, mathematical models, nonlinear analysis, two dimensional flow, Killeen (J.), *9791*

Schnack (E.), finite element techniques, plane stress, stress concentration, structural optimization, *239*
- bolts, screws, stress analysis, stress concentration, threaded joints, *7636*

Schneeweiss (W.G.), intermittency, probability, reliability analysis, *2515*

Schneider (G.E.), conduction (steady), elliptic equations, finite difference methods, heat transfer, implicit procedure, Zedan (M.), *3118*

Schneider (G.H.), compressible flow, perturbation methods, piston driven flow, shock waves, *9549*

Schneider (J.), damping, dynamic stability, vibration, *362*
- dynamic analysis, eigenvalues, oscillating bodies, vibration, *10187*

Schneider (P.E.M.), jets, vortex rings, vortices, *6670*
- plates, reflection, visualization, vortex rings, *9525*

Schneider (R.W.), see Waters (E.O.), *3570*

Schneider (W.), entrainment, jets, plumes, *6664*
- drag, drops, two phase flow, *12044*

Schneider (W.) eds., aerodynamics, compressible flow, transonic flow, Platzer (M.), *9547, book*

Schnettler (A.), data analysis, laser doppler velocimeters, turbulent flow, *3761*

Schnieder (E.), design, frequency domain techniques, sampled data systems, time delay systems, Kraft (K.H.), *9162*

Schnobrich (W.), see Emori (K.), *5890*

Schnobrich (W.C.), see Chen (E.Y.-T.), *2450*

Schober (J.), control, feedback, linear systems, spectral analysis, stability theory, transfer functions, *9166*

Schodl (R.), laser doppler velocimeters, rotors, turbomachinery, velocity measurement, *2766*

Schoenberg (M.), discontinuities, elastic waves, interface waves, *2365*
- boreholes, ducts, sound propagation, Marzetta (T.), (et al.), *7939*

Schoenhals (R.J.), see Damerell (P.S.), *5552*

Schofield (J.), see Jost (H.P.), *9980*

Schofield (W.H.), boundary layer (turbulent), flow measurement, pressure gradient, *3650*
- flow irregularities, roughness, shear flow, turbulent flow, *6641*
- boundary layer (turbulent), pressure gradient, two dimensional flow, *7702*
- boundary layer, boundary layer (turbulent), equilibrium, pressure gradient, *10426*

Scholz (C.H.), see Das (S.), *10846*

Schomer (P.D.), acoustic measurements, airplanes, noise (traffic), sampling, De Vor (R.E.), *1814*

Schonauer (W.), see Glotz (G.), *570*

Schonbek (M.E.), boussinesq equation, existence theorems, surface waves, uniqueness, *9101*

Schonung (B.), see Durst (F.), *9524*
Schonwald (B.), boundary layer (atmospheric), heat transfer (atmospheric), radiation, *5948*
Schopf (P.S.), ekman layer, ocean air interaction, oceanography, thermodynamics, *10866*
Schrader (E.K.), concrete, experimental mechanics, impact, *9449*
Schrader (K.H.), dynamics, reliability, rigid bodies, *5036*
Schramm (S.W.), bonded joints, composite materials, delamination, laminates, ultrasonics, Daniel (I.M.), (et al.), *7557*
Schrapel (H.D.), dynamic analysis, kinematics, lagrange equations, mathematical methods, *7*
- decoupling, nonlinear systems, transformation, *1079*
- mathematical methods, vibration (free), vibration (nonlinear), *5191*

Schrecker (M.), pipelines, submerged bodies, vortex shedding, wave loads, *2584*
Schrefler (B.A.), see Odorizzi (S.), *93*
Schreiber (R.), boundary value problems, elliptic equations, finite element techniques, galerkin method, rayleigh ritz method, Eisenstat (S.C.), *2058*
Schreiber (V.), boundary layer (thermal), experimental methods, heat transfer, temperature, thermal measurements, Christ (A.), *3776*
Schreieck (R.), see Peschel (W.), *1835*
Schreier (S.), boundary layer, compressible flow, real gas effects, *6626*
Schrey (H.-G.), condensers, heat exchangers, thermal loading, tube bundles, Kern (J.), *3840*
Schreyer (H.L.), see Fedock (J.J.), *7033*
- conduction (heat), finite element techniques, nonlinear analysis, numerical methods, *7857*

Schroeder (J.W.), see Berman (I.), *4473*
Schroppel (J.), condensation (filmwise), plane surfaces, thermal effects, *808*
Schroter (J.), see Meyer (J.), *4958*
Schroter (V.), fluid-structure interaction, panels, sound generation, Fahy (F.J.), *10791*
Schubert (G.), see Straus (J.M.), *11367*
Schubert (W.H.), atmospheric circulation, vortex flow, vorticity, Hack (J.J.), (et al.), *5932*
Schuette (W.H.), biocontrol, heat transfer (biological), human body, thermal effects, Lees (D.E.), (et al.), *7125*
Schulkin (M.), acoustic waves, arctic, layered media, sound propagation, Garrison (G.R.), (et al.), *898*
Schuller (F.T.), bearings (ball), high speed, lubricants (liquid), lubrication, Signer (H.R.), *3577*
- see Coe (H.H.), *5998*

Schulson (E.M.), alloys, brittle materials, ductility, fracture, transition, *3264*
Schulte (K.), aluminum alloys, crack propagation, fatigue, materials processing, Nowack (H.), *1407*
Schulte (R.L.), see Delasi (R.J.), *3587*
Schultrich (B.), crack growth, probability, statistical theory, Posselt (M.), *10306*
Schultz (D.H.), cylindrical bodies, finite difference methods, internal flow, navier stokes equation, rotating disks, Shah (V.L.), *3621*
Schultz (J.), see Shanahan (M.E.R.), *4486*
Schultz (J.M.), see Baum (J.S.), *1403*
Schulz (B.), boundary value problems, differential equations (partial), finite difference methods, finite element techniques, generalized coordinates, Wachter (J.), *8135*
Schulze (H.), see Natke (H.G.), *4545*
Schumacher (J.M.), observers, state space techniques, synthesis, *6133*
Schumacher (R.W.), containment, experimental methods, fusio, plasma (toroidal), stabilization, Fukao (M.), (et al.), *10760*
Schutz (B.E.), oblateness, planetary theory, potential theory, torque, two body problem, *3914*
Schwab (D.J.), see Bennett (J.R.), *11573*
Schwabe (D.), capillary flow, convection, crystals, melting, radiant interchange, Scharmann (A.), *2807*
Schwahn (D.), see Palacios (J.), *1420*
Schwalbe (K.-H.), crack opening displacement, elastoplasticity, fracture mechanics, fracture toughness, residual strength, *2442*
Schwanecke (H.), bearings (thrust), damping, experimental methods, stiffness, vibration (forced), *10219*
Schwartz (A.J.), blood flow, diffusion, mass transfer, *6016*
Schwartz (F.W.), see Smith (L.), *10671*
Schwartz (L.W.), boundary integral methods, free boundary, nonlinear analysis, pressure distribution, two dimensional flow, *566*
- gravity waves (breaking), nonlinear waves, surface tension, surveys, Fenton (J.D.), *7759*
- airfoils, rolling, three dimensional flow, trailing edge, vortex sheets, *11360*

Schwarz (E.), convection (forced), interface phenomena, mass transfer, two phase flow, Waldheim (W.), (et al.), *2983*
Schwarz (J.), axial loading, bending, friction, ice, mechanical properties, tests, Frederking (R.), (et al.), *5324*
Schwarz (R.G.), estimation, identification, linear systems, matrix methods, *4254*
Schwarz (W.), see Haferkorn (P.), *9187*
Schwarz (W.H.), see Powell (R.L.), *8486*
Schwarze (H.-F.), blunt bodies, compressible flow, shock waves, supersonic flow, three dimensional flow, *10416*
Schweitzer (G.), see Ulbrich (H.), *4115*
Schweizer (F.), see Angehrn (R.), *4383*
Schwenk (W.), see Popperling (R.), *7490*
Schwerdt (H.), biomaterials, tendons, viscoelasticity (dynamic), Constantinesco (A.), (et al.), *3061*
Schwierz (K.-P.), asymptotic behavior, boundary layer, cylindrical bodies, existence theorems, gortler series, uniqueness, yawing, *5426*
Schwirian (R.E.), acoustics, dynamic effects, fluid-structure interaction, piping systems, Karabin (M.E.), *10071*
Schy (A.A.), see Singh (S.N.), *121*
- see Young (J.W.), *1161*

Scobelev (B.Yu.), hydrodynamic stability, laminar flow, poiseuille flow, transition, Molorodov (Yu.I.), *3664*
Sconzo (P.), continental drift, displacement, earth, rotating bodies, *7999*
scoring, friction (sliding), lubricants (liquid), metals, viscosity, wear, Drozdov (Yu.N.), Archegov (V.G.), *7081*
- friction (sliding), heat transfer (direct contact), lubricants (liquid), lubrication (boundary), Fujita (K.), Obata (F.), *7097*
- additives, friction, lubricants (liquid), lubrication (boundary), Matveeskii (R.M.), Buyanovskii (I.A.), (et al.), *9036, book*
- contact stresses, friction (sliding), hardness, lubrication (hydrodynamic), viscosity, Drozdov (Yu.N.), Archegov (V.G.), *10888*

Scott (A.C.), air, conduction (heat), conductivity, hot wire, Johns (A.I.), (et al.), *6754*
Scott (B.R.), see Walters (W.P.), *1011*
Scott (C.H.), algorithms, geometric programming, mathematical programming, stochastic processes, stochastic systems, Jefferson (T.R.), *6136*
Scott (J.C.), capillary waves, gravity waves (finite depth), propagation, *6698*
Scott (J.F.), see Huerre (P.), *7742*
- cylindrical waves, nonlinear waves, sound propagation, spherical waves, *12004*

Scott (M.J.), duct flow, fins, friction factor, heat transfer, turbulent flow, Webb (R.L.), *8613*
Scott (R.A.), see Verma (M.K.), *6313*
Scott (R.F.), clay, micromechanics, modeling, Craig (M.J.K.), *416*
Scott (R.W.W.) ed., electromagnetic loading, flow measurement, gases, isotope tracers, liquids, vortex shedding, *7811, book*
Scott (W.E.), inertial waves, rotating cylinders, shells (fluid-filled), spectra, *11597*
scour, rivers, sediment transport, silting, Lapshenkov (V.S.), Boguslavskaya (T.A.), *1899*
- bed load, oscillations, ripples, Honji (H.), *3611*
- channel flow, crossflow, erosion, river beds, wall jets, Rajaratnam (N.), *6596*
- bed load, piers, sediment transport, Jain (S.C.), Fischer (E.E.), *6601*
- bed load, piers, river beds, vortices, Qadar (A.), *7649*
- asymptotic methods, curve fitting, equilibrium, sediment transport, Blaisdell (F.W.), Anderson (C.L.), (et al.), *7659*
- baffles, bends, spillways, Higgins (D.T.), *9506*
- hydraulic structures, river beds, stability, Kumar (D.), Misra (G.C.), (et al.), *9515*
- bridges, cylindrical bodies, piers, Jain (S.C.), *9518*

scramjets, chemically reactive flow, inlets, numerical analysis, Kumar (A.), *7726*
- combustion, design, geometrical properties, supersonic flow, Waltrup (P.J.), Billig (F.S.), (et al.), *8809*

screens, channels, mixing layers, turbulence, wind, Kit (E.), Berent (E.), (et al.), *559*
- honeycomb structures, reduction, turbulence, turbulent flow, Scheiman (J.), Brooks (J.D.), *9616*
- acoustics, numerical methods, scattering, De Smedt (R.), *11987*
- rings, sound propagation, transmission, De Smedt (R.), *11988*

screw dislocations, cylindrical bodies, elasticity (nonhomogeneous), inclusions, Toya (M.), *1176*
- half space, viscoelastic materials, Brock (L.M.), *8338*

screws, bearings (hydrostatic), hydrostatics, Bassani (R.), *1018*
- bolted joints, split nuts, Cotterell (B.), *5379*
- dynamics, linkages, mechanisms (spatial), vector methods, Keler (M.L.), Beran (M.A.), *7626*
- bolts, stress analysis, stress concentration, threaded joints, Schnack (E.), *7636*
- kinematics, linkages, mechanisms (spatial), Ohwovoriole (M.S.), Roth (B.), *8094*
- conveyors, granular media, rotating disks, Rademacher (F.J.C.), *8916*

Scribner (C.F.), beams, decay, reinforced concrete, shear strength, Wight (J.K.), *4038*
Scriven (L.E.), see Saito (H.), *6616*
- see Brown (R.A.), *10827*

Scruby (C.B.), elastodynamics, lasers, metals, thermal effects, thermoelasticity (transient), Dewhurst (R.J.), (et al.), *8877*
Scrutton (R.F.), materials properties, rolling, sheet metal, Lenard (J.G.), *5276*
Seale (W.J.), axial flow, heat transfer, tube bundles, *736*
seals, deformation, friction (sliding), rotating bodies, Metcalfe (R.), *1017*
- high speed, magnetic fluids, magneto fluid dynamics, Raj (K.), Stahl (P.), (et al.), *1944*
- finite element methods, galerkin method, oil films, reynolds equation, Dhagat (S.K.), Sinhasan (R.), (et al.), *2569*
- design, lubrication (elastohydrodynamic), stirling cycles, Etsion (I.), *2570*

- friction, leaks, lubrication (hydrostatic), wear, Lebeck (A.O.), *3036*
- ferrous metals, magneto fluid dynamics, rotating bodies, suspensions, Morris (W.D.), *3888*
- magnetic fluids, magneto fluid dynamics, Orlov (L.P.), Fertman (V.E.), *5999*
- flexibility, lubrication (hydrostatic), squeeze films, vibration, Etsion (I.), Dan (Y.), *7628*
- elastomers, friction (solid fluid), surfaces, wear, Varga (G.), Toth (O.), *8477*
- vibration, vibration (self excited), Nau (B.S.), *9476*
- bearings (journal), cavitation, lubrication (hydrodynamic), squeeze films, Pan (C.H.T.), Ibrahim (R.A.), *9959*
- film thickness, friction (solid fluid), lubrication (elastohydrodynamic), Kalsi (M.S.), *9962*
- ferrous metals, liquid metals, magneto fluid dynamics, testing equipment, Mikhalev (Yu.O.), Orlov (D.V.), (et al.), *10755*
- axial flow, design, leaks, steam turbines, stresses, Abramov (Yu.I.), Smirnov (S.A.), *11746*
- friction (solid fluid), geometrical properties, lubrication (hydrodynamic), Dhagat (S.K.), Sinhasan (R.), (et al.), *12091*
- lubrication (hydrodynamic), reynolds equation, roughness, surfaces, thermoelasticity, Wu (Y.-T.), Burton (R.A.), *12092*

Sears (A.R.), capillary flow, electro fluid dynamics, laminar flow, oscillatory flow, Groves (J.N.), *553*

Sears (J.T.), see Lin (L.), *8937*

Sebald (A.V.), estimation, perturbation theory, singular perturbations, Haddad (A.H.), *4284*

Seborg (D.E.), digital control, frequency domain techniques, multivariable systems, process control, state space techniques, Fisher (D.G.), *205*
- see Shah (S.L.), *3186*

second order analysis, cable supported structures, roofs, Valente (G.), *524*
- heat transfer, matched asymptotic expansions, reynolds number (high), wall jets, Afzal (N.), *592*
- inhomogeneities, phase velocity, propagation, scattering, Gray (S.H.), *1085*
- eccentric loading, matrix methods, space frames, structural analysis, Subramanian (N.), Chettiar (C.G.), *3548*
- hamiltonian equations, resonance, stability theory, Ivanov (A.P.), Sokolskii (A.G.), *4947*
- beam columns, compression, structural stability, Chattoraj (D.), Bose (S.K.), *5177*
- orbit mechanics, perturbation methods, planetary theory, satellites, Gooding (R.H.), *5700*
- disks, heat transfer, navier stokes equation, oscillating bodies, Dohara (N.), *6617*
- control, feedback, nonlinear systems, sensitivity, Herbert (R.J.), *8162*
- p-delta analysis, structural analysis, Rutenberg (A.), *9458*

second order fluids, non newtonian flow, plates (parallel), pressure gradient, shear flow, Rajagopal (K.R.), Huilgol (R.R.), *3590*
- inertia, non newtonian flow, rotating disks, Rajagopal (K.R.), *9581*

secondary flow, cylindrical bodies, oscillating bodies, visualization, Tatsuno (M.), *575*
- cylindrical bodies, navier stokes equation, oscillating bodies, two dimensional flow, Kubo (S.), Kitano (Y.), *581*
- axial compressors, cascades, Thiruvengadam (J.), *705*
- bends, numerical methods, rivers, shallow water, Kalkwijk (J.P.T.), De Vriend (H.J.), *1494*
- convection, entrance region, interferometry, nusselt number, Yousef (W.W.), Tarasuk (J.D.), *1668*
- bodies of revolution, drag, navier stokes equation, rotating bodies, Majhi (S.N.), Vasudeviah (M.), *2603*
- cylindrical bodies, oscillating bodies, visualization, Tatsuno (M.), *2604*
- ducts (curved), experimental results, transition, Wolff (M.), Cognet (G.), *2651*
- cylindrical bodies, elliptical bodies, oscillating bodies, vortex shedding, Tatsuno (M.), *3626*
- ducts (curved), laminar flow, turbulent flow, Taylor (A.M.K.P.), Whitelaw (J.H.), (et al.), *3673*
- ducts (curved), laminar flow, porous surfaces, unsteady flow, Zapryanov (Z.), Matakiev (V.), *4618*
- bed load, channel flow, free boundary, Ikeda (S.), *7647*
- birefringence, polymers, Han (C.D.), Yoo (H.J.), *8493*
- bodies of revolution, reynolds number (small), rotating bodies, separated flow, Smith (S.H.), *8527*
- cascades, visualization, Kobayashi (H.), Mizutani (M.), *8592*
- annular flow, convection (forced), rotating bodies, shells (spherical), Dallman (R.J.), Douglass (R.W.), *8720*
- boundary layer, corners, viscous flow, Mojola (O.O.), *9567*
- coils, ducts (curved), heat exchangers, laminar flow, pipe flow, Balejova (M.), Cakrt (J.), (et al.), *9576*
- noncircular pipes, turbulence model, turbulent flow, Speziale (C.G.), *9578*
- annuli, cascades, numerical analysis, Glynn (D.R.), Marsh (H.), *9587*
- blades, ducts (curved), laminar flow, turbulent flow, Kreskovsky (J.P.), Briley (W.R.), (et al.), *10439*
- axial compressors, mixing, three dimensional flow, Adkins (G.G.) Jr., Smith (L.H.) Jr., *10523*
- internal flow, rotating disks, unsteady flow, vortex flow, Kurokawa (J.), Toyokura (T.), (et al.), *11377*

sediment transport, channel flow, discharges, energy transport, minimization, Chang (H.H.), *556*
- bottom irregularities, channel flow, free boundary, friction (skin), Engel (P.), Lau (Y.L.), *557*
- channel flow, discharges, free boundary, Chang (H.H.), *1492*
- bed load, resistance, roughness, Mantz (P.A.), *1496*
- bottom irregularities, rivers, shear stress, Todten (H.), Vetter (B.), *1497*
- river beds, suspensions, Higgins (R.J.), *1499*
- rivers, scour, silting, Lapshenkov (V.S.), Boguslavskaya (T.A.), *1899*
- discharges, flood flow, rivers, Williams (G.P.), *2580*
- coastal engineering, flow measurement, sloping bottom, visualization, Honji (H.), Matsunaga (N.), *2589*
- coastal engineering, currents, surf, Walton (T.E.) Jr., *2590*
- bed load, erosion, jets, shear stress, Chatterjee (S.S.), Ghosh (S.N.), *2591*
- channel flow, free boundary, froude number, Barr (D.I.H.), Alam (M.K.), (et al.), *2592*
- coastal engineering, equilibrium, Migniot (C.), Viguier (J.), *2593*
- boundary layer, channel flow, reynolds number, transition flow, Ramaprian (B.R.), Mueller (A.), *2632*
- bed load, shear stress, stability theory, Nakagawa (H.), Tsujimoto (T.), *3604*
- bed load, channels, rivers, Bagnold (R.A.), *3605*
- channel flow, free boundary, velocity profiles, Itakura (T.), Kishi (T.), *3606*
- particle fluid flow, pipes, pressure drop, slurries, Morikawa (Y.), *3607*
- channel flow, discharges, finite difference methods, Pezzoli (G.), *3608*
- infiltration, rainfall, runoff, Smith (R.E.), *4573*
- measurements, optical analysis, rivers, Ward (P.R.B.), Chikwanha (R.), *4574*
- beaches, coastal engineering, currents, ocean waves, Horikawa (K.), *4578*
- beaches, bottom irregularities, coastal engineering, piers, Hashimoto (H.), Uda (T.-A.), *5393*
- bed load, piers, scour, Jain (S.C.), Fischer (E.E.), *6601*
- particle size, particles, stochastics, streams, Troutman (B.M.), *6965*
- digital simulation, rivers, Bettess (R.), White (W.R.), *7656*
- asymptotic methods, curve fitting, equilibrium, scour, Blaisdell (F.W.), Anderson (C.L.), (et al.), *7659*
- bed load, bottom irregularities, shear stress, Ranga Raju (K.G.), Garde (R.J.), (et al.), *9519*
- bars, beaches, bottom irregularities, drag, Holman (R.A.), Bowen (A.J.), *10400*

sedimentation, field tests, pore pressure, river beds, soils, Bennett (R.H.), Faris (R.), *423*
- nonlinear waves, ocean bed, sound propagation, underwater acoustics, Hovem (J.M.), *892*
- harbors, hydraulics, models, Letter (J.V.) Jr., Mcanally (W.H.) Jr., *1500*
- electrical conductivity, Gonzalez-Caballero (F.), Pardo (G.), (et al.), *1737*
- dispersion, sprays, Kumar (A.), Vohra (D.K.), (et al.), *1867*
- blunt bodies, drag coefficient, fall velocity, stability, Mehta (A.J.), Lee (J.), (et al.), *5391*
- ocean bed, reflection, underwater acoustics, Vidmar (P.J.), *5752*
- attenuation, ocean bed, porous media, underwater acoustics, Hovem (J.M.), *5753*
- attenuation, ocean bed, underwater acoustics, Mitchell (S.K.), Focke (K.C.), *5755*
- acoustic measurements, bubble dynamics, ocean bed, saturation, Anderson (A.L.), Hampton (L.D.), *6899*
- ocean bed, sound propagation, underwater acoustics, Stoll (R.D.), *6905*
- ocean bed, reflection, shear waves, underwater acoustics, Vidmar (P.J.), *6907*
- ocean bed, penetration, underwater acoustics, Tjotta (J.N.), Tjotta (S.), *7943*
- compressional waves, ocean bed, shear waves, wave interactions, Fryer (G.J.), *10237*
- channel flow, plates (parallel), suspensions, Herbolzheimer (E.), Acrivos (A.), *11358*
- acoustic waves, ocean bed, reflection, underwater acoustics, Stoll (R.D.), Kan (T.-K.), *11907*

Sedin (Y.C.-J.), see Karlsson (K.R.), *1520*

Sedler (B.), annular flow, critical heat flux, drying, film boiling, *9688*

Sedov (L.V.), see Lyamshev (L.M.), *11915*

Sedunov (E.V.), design (optimum), experimental design, linear programming, statistical design, Trofimov (A.I.), (et al.), *4290*

Sedunov (Yu.S.), see Svirkunov (P.N.), *5584*

Seebass (A.R.), aerodynamics, compressible flow, inviscid fluid, perturbation methods, transonic flow, Yu (N.J.), (et al.), *2617*

Seed (W.A.), see Fox (B.), *4118*

Seeger (A.), crystals, differential equations (partial), sine-gordon equation, standing waves, Wesolowski (Z.), *10935*

seepage, edge effects, landslides, Barron (R.A.), *952*
- finite element methods (hybrid), mesh generation, surface flow, Bathe (K.-J.), Khoshgoftaar (M.R.), *1870*
- dams, numerical methods, Crank (J.), Ozis (T.), *3003*
- finite element techniques, free boundary, Isaacs (L.T.), *5862*
- irrigation, soils, Bruch (J.C.) Jr., *7009*
- numerical methods, porous surfaces, Karadi (G.M.), De Miguel (E.), (et al.), *7982*
- dams, numerical methods, Botezatu (N.C.), *7983*
- canals, soil mechanics, Orasanu (M.T.), *9890*
- mathematical methods, porous media, Orasanu (M.T.), *9891*

Seering (W.P.), see Piziali (R.L.), *1946*
- biological joints, biomechanics, knees, tendons, Piziali (R.L.), (et al.), *1947*

Seetharagmacharyulu (D.), burning rate, combustion, solid fuels, Pai Verneker (V.R.), (et al.), *11789*
Segal (R.B.), collision models, drops, jets, Gaysinskiy (Yu.F.), *5819*
Segall (A.), design, gauss-poisson processes, jump conditions, linear systems, stochastic control, *1154*
Segalman (D.), see Johnson (M.W.) Jr., *5386*
Segev (A.), condensation, entrance region, film flow, two phase flow, Collier (R.P.), *8698*
Seguchi (Y.), see Tomita (Y.), *3274*
- see Hamada (M.), *8444*

Segur (H.), see Ablowitz (M.J.), *10017*
- damping, gravity waves (solitary), viscous effects, *11567*
- gravity waves (internal), gravity waves (surface), wave interactions, wind-wave interaction, *11570*

Seide (P.), bending, laminates, plates (sandwich), *6228*
Seidel (E.D.), see Taya (M.), *1195*
Seidman (T.I.), convergence, ill posed problems, least squares, mathematical models, minimization, *8133*
- see Kumar (P.R.), *11091*

Seidov (D.G.), eddies, oceanography, *4878*
Seifert (H.), see Kanarachos (A.), *4564*
Seimov (V.M.), earthquake effects, fluids, oscillations, seismic loading, Trofimchuk (A.N.), *7039*
Seiner (J.M.), see Norum (T.D.), *11956*
Seireg (A.), see Arvikar (R.), *4908*
- see Benton (M.), *8324*

seismic loading, dynamic response, structural analysis, vibration, Kana (D.D.), *393*
- dynamic properties, shock, vibration (forced), Polyakov (V.S.), *1286*
- nuclear reactors, probability theory, soil structure interaction, Jaeger (T.A.) eds., Boley (B.A.), *1325, book*
- buildings, inelasticity, nonlinear analysis, structural response, Cheng (F.Y.), *1449*
- containment, reinforced concrete, slabs, stiffness, strength, White (R.N.), Perdikaris (P.C.), (et al.), *1462*
- dynamic response, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *1463, book*
- cyclic testing, frames, inelasticity, offshore structures, Popov (E.P.), Mahin (S.A.), (et al.), *2535*
- piles, soils, Nuti (C.), *3410*
- dynamic analysis, elastoplasticity, piers, reinforced concrete, Ozaka (Y.), Yanagida (T.), (et al.), *3533*
- cooling towers, finite element methods, Gran (C.S.), Yang (T.Y.), *4039*
- reliability design, structural design, Bolotin (V.V.), *4040*
- dynamic analysis, loads, structural analysis, thermal effects, wave loads, Brebbia (C.A.) eds., Gould (P.L.), (et al.), *4536, book*
- chimneys, soil structure interaction, Aranda (G.R.), *4846*
- foundations, layered media, soil structure interaction, Waas (G.), *4847*
- buildings, torsion, Kan (C.L.), Peter (Y.S.), (et al.), *4848*
- buildings (tall), stability, Ahmadi (G.), Mostaghel (N.), *4849*
- columns, Lin (Y.K.), Shih (T.-Y.), *5889*
- buildings, frames, reinforced concrete, Emori (K.), Schnobrich (W.), *5890*
- airplane structures, eccentrically braced frames, frames, Jain (A.K.), Goel (S.C.), *5891*
- beams, ductility, multistory frames, Mukudai (Y.), Matsuo (A.), *5892*
- structural response, Grigoriu (M.), *5893*
- buildings, earthquake engineering, safety, Aizenberg (Ya.M.), Neiman (A.I.), (et al.), *5894, book*
- bridges (suspension), modal analysis, piers, substructuring, Balendra (T.), *6525*
- constitutive equations, viscoelastic fluids, Nazarov (A.G.), *6575*
- dynamic response, foundations, Adeli (H.), Hejazi (M.S.), (et al.), *7032*
- foundations, modeling, soil structure interaction, Fedock (J.J.), Schreyer (H.L.), *7033*
- foundations, soil structure interaction, Ellis (B.R.), *7036*
- foundations, half space, soil structure interaction, Hamidzadeh-Eraghi (H.R.), Grootenhuis (P.), *7037*
- dynamic response, multiple degree of freedom, random loading, Der Kiureghian (A.), *7038*
- earthquake effects, fluids, oscillations, Seimov (V.M.), Trofimchuk (A.N.), *7039*
- approximation methods, multiple degree of freedom, structural response, Tansirikongkol (V.), Pecknold (D.A.), *7041*
- rayleigh waves, structural response, Gamer (U.), *7042*
- fatigue, welded structures, Kaneta (K.), Kohzu (I.), *7045*
- risk, structural response, Der Kiureghian (A.), *7049*
- beams, dynamic response, elastic behavior, Neubert (V.H.), Rangaiah (V.P.), *7383*
- containers (partially filled), finite element techniques, fluid-structure interaction, storage, Liu (W.K.), *7768*
- containers (partially filled), honeycomb structures, sloshing, Kuriyama (Y.), Fukuda (H.), *7774*
- buckling, tanks, Niwa (A.), Clough (R.W.), *8015*
- finite element techniques, soil structure interaction, Ushijima (R.), Kausel (E.), *8017*
- dynamic behavior, pinned joints, structural response, Ballio (G.), Gobetti (A.), (et al.), *8321*
- dynamic response, soils, vibration, Gazetas (G.), *8349*
- dynamic response, modal analysis, piping systems, Krause (G.), *8467*
- modeling, soil structure interaction, Balendra (T.), Tan (Y.-P.), (et al.), *8964*
- modeling, nuclear reactors, Benda (B.J.), Johnson (J.J.), (et al.), *8965*
- damping, modeling, structures, Singh (M.P.), *8966*
- buried structures, pipelines, underground, Hindy (A.), Novak (M.), *8967*
- design, Chen (C.), Moreadith (F.L.), *8968*
- piles, soil structure interaction, Kagawa (T.), Kraft (L.M.) Jr., *9919*
- beams, Ly (B.L.), *9920*
- analytical methods, multiple degree of freedom, rocks, Gheorghiu (Z.), *9921*
- energy methods, liquefaction, sand, Davis (R.O.), Berrill (J.B.), *9922*
- nuclear power, nuclear reactors, Kana (D.D.), *10727*
- dams, hydrodynamic pressure, soil structure interaction, Chopra (A.K.), Gupta (S.), *10849*
- buildings, coupled buildings, torsion, vibration, Tsicnias (T.G.), Hutchinson (G.L.), *10850*
- boilers, elastoplasticity, foundations, Nakao (Y.), Murase (Y.), (et al.), *10851*
- annuli, bodies (liquid filled), columns, fluid-structure interaction, Fujita (K.), *11637*
- submerged bodies, tube bundles, vibration, Shinohara (Y.), Shimogo (T.), *11653*
- containers (partially filled), finite element techniques, sloshing, Aslam (M.), *11662*

seismic waves, failure, propagation, radiation, Barker (T.G.), Minster (J.B.), *961*
- hodograph methods, velocity profiles, waveguides, Burmin (V.Yu.), *963*
- buried structures, pipes, soil structure interaction, underground, Parnes (R.), Weidlinger (P.), *969*
- computing techniques, ocean bed, tsunamis generation, upthrust, Lee (J.-J.), Chang (J.-J.), *974*
- displacement, explosions (underwater), ocean bed, Tanimoto (T.), Sato (R.), *1879*
- buildings, earthquake effects, prestressed concrete, Thompson (K.J.), Park (R.), *1883*
- random media, shear waves, Chu (L.), Askar (A.), (et al.), *3005*
- ocean bed, processing, Salisbury (J.I.), *3008*
- noise, spectral analysis, Kats (S.A.), Ptetsov (S.N.), *4034*
- elastodynamics, half space, Koshman (V.P.), *5079*
- fourier series, reflection, Marcoux (M.O.), *5863*
- filters, processing, Prasad (S.), Mahalanabis (A.K.), *5865*
- interfaces, rayleigh waves, reflection, refraction, Lutikov (A.I.), *5866*
- anisotropic media, displacement, free boundary, half space, Kosaryev (G.L.), Makeyeva (L.K.), (et al.), *5869*
- elastic bodies, half space, rayleigh waves, Yakovenko (M.G.), *5870*
- equipment, monitoring, Kondratev (I.K.), Christov (P.I.), *5873*
- field tests, inverse problems, processing, Alekseyev (A.S.), Dobrinskiy (V.I.), (et al.), *5875*
- interfaces, inverse problems, Fedorova (N.V.), Tsirulskiy (A.V.), *5876*
- mathematical methods, De (S.), *5880*
- analysis, half space, layered media, rayleigh waves, Cara (M.), Minster (J.B.), (et al.), *7020*
- interpolation, processing, Savaryenskiy (Ye.F.), Kendzera (A.V.), *7021*
- multiple waves, processing, Kozlov (Ye.A.), *7024*
- plane surfaces, processing, Nikolayev (I.V.), Leontyeva (T.N.), *7025*
- earth, earthquakes, structure, Antonenko (A.N.), Dubrovin (G.K.), *7029*
- processing, refraction, Palmer (D.), *8003*
- half space, inclusions, sh waves, stress analysis, Gamer (U.), *8004*
- elasticity (nonlinear), Grinfeld (M.A.), *8008*
- faults, spectral analysis, Landa (Ye.I.), Mitrofanov (G.M.), *8011*
- modeling, non-geometric effects, Hron (F.), Mikhailenko (B.G.), *8952*
- ocean, reflection, Gjoystdal (H.), Ursin (B.), *8953*
- core-mantle boundary, earth, mantle, reflection, Dey (S.), Addy (S.K.), *8954*
- elastic waves, phase changes, Grinfeld (M.A.), Movchan (A.A.), *8957*
- hysteresis, random excitation, structures, vibration (random), Baber (T.T.), Wen (Y.-K.), *9106*
- deconvolution, processing, Arya (V.K.) eds., Aggarwal (J.K.), *9907, book*
- deconvolution, inversion, processing, Kikuchi (M.), Kanamori (H.), *9908*
- faults, radiation, Shamina (O.G.), Pavlov (A.A.), (et al.), *9909*
- earthquakes, initiation, models, Okada (Y.), *9913*
- attenuation, friction (sliding), pore pressure, Winkler (K.W.), Nur (A.), *10844*
- dislocations, faults, initiation, modeling, Cornea (I.), Misicu (M.), (et al.), *10845*
- earthquakes, simulation, spectra, Doblare (M.), Alarcon (E.), (et al.), *12071*

Seisov (Iu.B.), nonlinear systems, optimal control, optimization, *4296*
Sejnoha (J.), see Marek (P.), *6185*
Seki (M.), convection (free), magnetic fluids, magneto fluid dynamics, Kawamura (H.), (et al.), *5553*
Seki (N.), annular flow, heat transfer, nusselt number, thermosyphons, Fukusako (S.), (et al.), *1718*
- fluidized beds, heat transfer, particle fluid flow, Fukusako (K.), (et al.), *8933*

Seki (S.), see Takafuji (T.), *3537*
Sekiguchi (H.), see Takayama (K.), *2721*

Sekine (H.), see Tamate (O.), *5795*
Sekiya (T.), see Matsumoto (E.), *3986*
Sekoguchi (K.), see Fukano (T.), *4825*
- boiling, high pressure, pipe flow, thermal measurements, Tanaka (O.), (et al.), *7830*
- bubbly flow, convection (forced), heat transfer, pipe flow, two phase flow, Nakazatomi (M.), (et al.), *10566*

Selen (H.J.W.), see Boermans (L.M.M.), *2746*
Selezov (I.T.), bottom irregularities, gravity waves (surface), numerical methods, rays, refraction, Sorokina (V.V.), *11589*
Self (S.A.), see Rankin (R.R.), *8815*
self excitation, acoustic waves, differential equations (ordinary), oscillations, Chernyshenko (S.I.), *4157*
- nonlinear waves, stability theory, van der pol equations, wave equations, Lardner (R.W.), Nicklason (G.), *9103*
- pulsatile flow, tanks, valves, Meier (G.E.A.), Szumowski (A.P.), *9503*
- axisymmetric flow, jets, Hasan (M.A.Z.), Hussain (A.K.M.F.), *9595*

self ignition, combustion, metals, powders, Chernenko (E.V.), Rozenband (V.I.), *5627*
- combustion, hypergolic propellants, regression rate, Paul (P.J.), Mukunda (H.S.), (et al.), *9770*
- detonative ignition, explosions, ignition, thermal explosions, viscous effects, Aleksapolskii (N.B.), Naidenov (V.I.), *9836*
- ethylene, mixtures, propylene, Tsolkovskii (T.I.), Mulyava (M.P.), (et al.), *10696*
- hypergolic propellants, solid propellants, thermal instability, Kulkarni (S.G.), Panda (S.P.), *10715*

Selgrade (J.F.), asymptotic behavior, biomathematics, differential equations (ordinary), feedback, *10015*
Selivanov (V.M.), see Opanasenko (A.N.), *8704*
Sellappan (R.), artificial satellites, attitude control, flexible bodies, modal control, space vehicle structures, Bainum (P.M.), *8847*
Sellin (R.H.J.), drag reduction, pipes, polymers, sewerage, Ollis (M.), *9604*
Selna (L.), columns, concrete, earthquake engineering, Martin (I.), (et al.), *5895*
Selnes (P.B.), see Andersen (K.H.), *1313*
Selskii (Yu.S.), shells (toroidal), theory, *3305*
Seltzer (S.M.), see Asner (B.A.) Jr., *2924*
Selvadurai (A.P.S.), deformation (finite), elasticity (nonlinear), penny shaped crack, stress rupture, *234*
- elasticity (linear), inclusions, infinite medium, *5074*
- flexure, foundations, soils, *5257*
- computing techniques, contact stresses, eccentric loading, foundations, *10254*

Selyutin (A.E.), deformation (finite), deformation (plastic), membranes, shells (plastic), Lebedev (A.A.), *2280*
Semena (M.G.), heat pipes, wick, *5600*
- heat exchangers, heat pipes, solutions (material), Myuller (R.), *8762*

Semenenko (V.P.), see Makeev (E.M.), *11111*
Semenov (A.G.), see Sokovishin (Yu.A.), *3798*
Semenov (A.M.), see Brodyanskii (V.M.), *8679*
Semenova (T.N.), see Gladshtein (V.I.), *441*
Semenyuk (E.A.), see Didyk (R.P.), *885*
Semerak (M.M.), see Kolyano (Yu.M.), *9715*
Semerjian (H.G.), see Santoro (R.J.), *3762*
Semesenko (M.P.), estimation, identification, noise (random), sampling, *163*
- algorithms, estimation, identification, model reduction, Ramazanov (S.K.), *2148*

semi infinite media, cylindrical bodies, fourier series, neumann problem, potential theory, Beliaev (S.Iu.), Kuzmin (Iu.N.), *44*
- clay, saturation, soil consolidation, Deresiewicz (H.), *412*
- boundary elements, half space, punch problems, Telles (J.C.F.), Brebbia (C.A.), *1185*
- interface cracks, propagation, viscoelasticity, wiener-hopf technique, Sills (L.B.), Benveniste (Y.), *1376*
- bounded variables, difference differential equations, oscillations, Philos (C.G.), Staikos (V.A.), *3100*
- elasticity (three dimensional), indentation, stress concentration, Fujita (T.), Tsuchida (E.), (et al.), *3235*
- explosions, isentropic processes, shock waves, Singh (P.), *3723*
- flexure, plates (rectangular), Ramachandra Rao (B.S.), Prakash (B.G.), *5155*
- boundary layer, eigenvalues, riccati equation, Bramley (J.S.), Sloan (D.M.), *6065*
- finite element techniques, mesh generation, plane stress, singularities, Shephard (M.S.), Gallagher (R.H.), (et al.), *6104*
- displacement, plasticity, stress analysis, Parvulescu (N.S.), *7260*
- edge cracks, plates, stress analysis, Hasebe (N.), Inohara (S.), *7331*
- half space, heat sources, thermal stresses, thermoelasticity (steady), Chowdhury (K.L.), Glockner (P.G.), *7948*
- conduction (heat), conductivity, heat addition, heat sources, Melamed (L.E.), *8736*
- nonhomogeneous media, thermal stresses, thermoelasticity (steady), Aderogba (K.), *8887*
- convection, magneto fluid dynamics, plates (vertical), theory, Soundalgekar (V.M.), Takhar (H.S.), *10750*

semiconductors, creep, material testing, stress relaxation, testing equipment, Kalaidzhan (S.E.), Krivoruchko (S.P.), (et al.), *496*
- high temperature, lattices, oxidation, strain, stress analysis, Franz (G.), Hartmann (W.), *9421*

Semtner (A.J.) Jr., see Gent (P.R.), *10861*
- circulation, ekman layer, geostrophic flow, ocean air interaction, oceanography, rossby waves, Holland (W.R.), *10863*

Sen (A.K.), control, feedback, plasma, stability theory, *3213*
Sen (H.), see Wellford (L.C.), *8131*
Sen Gupta (S.K.), bearings (ball), bearings (thrust), contact problems, lubrication (boundary), *10896*
Senator (M.), biocontrol, man machine systems, optimization, rowing, time optimal systems, *7258*
Senchenkov (A.S.), decomposition, heat transfer, mass transfer, radiant interchange, *797*
Senchenkov (I.K.), nonlinear materials, springs, thermoelasticity (transient), viscoelastic materials, Gumenyuk (B.P.), *927*
- see Karnaukhov (V.G.), *3771*
- deformation (finite), materials possessing memory, thermoviscoelasticity, *3997*

Senda (T.), aluminum alloys, plastic waves, strips, *3391*
Sengers (J.V.), see Basu (R.S.), *5529*
Sengupta (A.K.), see Johnson (W.), *7435*
- dynamic properties, experimental results, impact, rods, strain rate, Wigglesworth (C.J.), (et al.), *10241*

Sengupta (G.), frequency response, structural response, vibration, *1258*
Sengupta (P.R.), ducts (constant area), fourier series, magneto fluid dynamics, pressure gradient, viscoelastic fluids, Bhattacharyya (S.K.), *4746*
Senicourt (J.M.), see Bessrour (J.), *8326*
Senshu (T.), fins, heat exchangers, heat transfer, transient effects, Hatada (T.), (et al.), *763*
sensitivity, dynamic analysis, hysteresis, nonlinear systems, structural response, structures, Ray (D.), Pister (K.S.), (et al.), *106*
- feedback, stability theory, Francis (B.A.), *131*
- controllability, distributed parameters, optimal control, synthesis, temperature, thermal stresses, Poterasu (V.F.), *178*
- controllability, optimal control, synthesis, Poterasu (V.F.), *179*
- bonded joints, nondestructive tests, thermal effects, Vavilov (V.), *486*
- eigenvalue problems, eigenvalues, mathematical methods, structural analysis, Haug (E.J.), Rousselet (B.), *1070*
- frames, frequency response, vibration (free), Yaghmai (I.), Frohrib (D.A.), *1281*
- flexure, measurements, plates, strain measurement, Stepanov (V.V.), Lanin (A.G.), (et al.), *1413*
- hydrodynamic pressure, offshore structures, wave loads, Shyam Sunder (S.), Connor (J.J.), *1451*
- offshore structures, pipe laying, pipelines, wave loads, Rammant (J.P.), Backx (E.), *1453*
- design, feedback, regulator problem, state space techniques, Howze (J.W.), Cavin (R.K.) III, *2083*
- differential games, optimization, pursuit, Abramyants (T.G.), Maslov (E.P.), (et al.), *2128*
- multivariable systems, nyquist theory, robustness, stability theory, Lehtomaki (N.A.), *3151*
- adaptive systems, stability theory, variable structure systems, Ulanov (G.M.), *3169*
- design, feedback, multivariable systems, stability theory, Safonov (M.G.), Laub (A.J.), (et al.), *4226*
- excitation, oscillations, Rozenvasser (E.N.), *4247*
- linear systems, linear theory, robustness, stability theory, Solnechnyi (E.M.), *4251*
- error, strain gages, Gu (W.-M.), *4509*
- analysis, computer aided design, linkages, mechanisms, Coit (W.G.), Riley (D.R.), *4557*
- algorithms, numerical methods, optimal control, Evers (A.H.), *5058*
- inequalities, multivariable systems, robustness properties, Nuzman (D.W.), Sandell (N.R.) Jr., *6130*
- connecting rods, design, error, linkages, mechanisms, Lebedev (P.A.), *6559*
- pitot tube, yawing, Millward (A.), *7075*
- control, modal control, space vehicle structures, structural response, vibration, Hallauer (W.L.) Jr., Barthelemy (J.-F.M.), *7257*
- fatigue, fracture mechanics, life expectancy, Fukuda (S.), *7483*
- insulation, structural analysis, thermal effects, Haftka (R.T.), *7606*
- control, feedback, nonlinear systems, second order analysis, Herbert (R.J.), *8162*
- discrete systems, nonlinear systems, time delay systems, Kukhtenkov (L.P.), Ruban (A.I.), *8167*
- optimal control, time optimal systems, Becker (N.), *8171*
- suboptimal control, time delay systems, time varying systems, Malek-Zavarei (M.), *9182*
- dynamic properties, mathematical methods, transient loading, Ehle (P.E.), Haug (E.J.), *10008*
- design (optimum), geometric programming, Dembo (R.S.), *10352*
- algorithms, kalman filters, phased array, Cooke (C.C.), *11079*
- holography, interferometry, speckle interferometry, strain measurement, Dandliker (R.), *11314*

separated flow, blunt bodies, leading edge, reynolds number (small), Lane (J.C.), Loehrke (R.I.), *574*
- boundary layer, cylindrical bodies, incompressible flow, non newtonian flow, Shvets (Yu.I.), Vishnevskii (V.K.), *603*
- airplanes, separation, spin recovery, wings, Feistel (T.W.), Anderson (S.B.), (et al.), *690*
- finite amplitude, korteweg de vries equation, transient effects, two phase flow, Banerjee (S.), Chan (A.M.C.), *940*
- bodies of revolution, green function, impact jets, Shimkovich (D.G.), *1518*
- compressible flow, detection, simulation, wires, Degani (D.), Brosh (A.), (et al.), *1546*
- recirculation, stagnation point, two dimensional flow, O'Brien (V.), *1547*
- swept wings, visualization, Werle (H.), *1618*
- aerodynamic performance, axial turbines, blades, Suachev (I.P.), Neuimin (V.M.), (et al.), *1632*
- cylindrical bodies, external flow, heat transfer, hot wire, reattachment, shear flow, Ota (T.), Kon (N.), (et al.), *1665*
- boundary layer (turbulent), fences, porous surfaces, two dimensional flow, Perera (M.D.A.E.S.), *2628*
- bubble dynamics, laminar flow, leading edge, stalling, Van Den Berg (B.), *2635*
- compressible flow, three dimensional flow, Hirschel (E.H.), Kordulla (W.), *2636*
- boundary layer, convex surfaces, flow measurement, Lakshmana Gowda (B.H.), Aswatha Narayana (P.A.), *2637*
- cavitation flow, jets, Gurevich (M.I.), *2657, book*
- fluid-structure interaction, rotating cylinders, Volmir (A.S.), Gulyaev (V.V.), (et al.), *2718*
- delta wings, rotating bodies, supersonic flow, Staicu (S.), *2734*
- aeroelasticity, gust loads, pressure distribution, structural response, Forsching (H.), *2912*
- blunt bodies, heat transfer, reattachment, transition, Ota (T.), Asano (Y.), (et al.), *3654*
- axisymmetric flow, heat transfer, reattachment, thermal measurements, turbulent flow, Smyth (R.), *3780*
- blunt bodies, prandtl number, reattachment, turbulence (transport), Ota (T.), Kon (N.), *4602*
- simulation, strouhal number, vortex flow, Kiya (M.), Arie (M.), *4609*
- boundary layer, finite difference methods, laminar flow, navier stokes equation, Horton (H.P.), *4614*
- pressure distribution, vortex shedding, wings, Bublitz (P.), *4682*
- dispersion, two phase flow, Banerjee (S.), *4830*
- bubble dynamics, experimental results, reattachment, separation, turbulence, Hillier (R.), Cherry (N.J.), *5470*
- axial turbines, cascades, mathematical models, rotors, Ablamskii (V.A.), *6733*
- cylindrical bodies, external flow, heat transfer (combined modes), laminar flow, Yao (L.S.), Chen (F.F.), *6777*
- diffusion, finite difference methods, two dimensional flow, unsteady flow, vorticity, Porthouse (D.T.C.), Lewis (R.I.), *7678*
- laminar flow, moving surfaces, Inoue (O.), *7708*
- cylindrical bodies, oscillating bodies, vibration (self excited), vortex shedding, Vales (N.G.), *7793*
- oscillating bodies, parachutes, payloads, stabilization, vortex flow, Doherr (K.-F.), *7798*
- bodies of revolution, reynolds number (small), rotating bodies, secondary flow, Smith (S.H.), *8527*
- compressible flow, separation, shock waves, transonic flow, Carter (J.E.), *8547*
- boundary layer (three dimensional), flow obstructions, iterative methods, surface profiles, Sykes (R.I.), *8559*
- boundary layer (three dimensional), elliptical bodies, impulsive propulsion, Wang (K.C.), Fan (Z.Q.), *8560*
- cascades, finite difference methods, incompressible flow, viscous flow, Luu (T.S.), Ta Phuoc Loc, *8593*
- aerodynamic interference, blades, cascades, damping, oscillating bodies, turbomachinery, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- boundary layer, flow obstructions, laminar flow, singularities, Smith (F.T.), Daniels (P.G.), *9569*
- axisymmetric flow, diffusers, entrance region, supersonic flow, Vishnevetskii (S.L.), Pakhomova (Z.S.), *9589*
- cylindrical bodies, smoothing splines, supersonic flow, Bespalov (A.M.), Zhdanov (V.V.), (et al.), *9712*
- convection (forced), heat transfer, solar collectors, Sparrow (E.M.), Samie (F.), (et al.), *9736*
- airfoils, pressure distribution, shock waves, transonic flow, unsteady flow, Roos (F.W.), *9805*
- friction (skin), three dimensional flow, topological techniques, Horstman (C.C.), Settles (G.S.), (et al.), *10432*
- laminar flow, steps, Tobak (M.), Peake (D.J.), *10433*
- cavities, reattachment, Sinha (S.N.), Gupta (A.K.), (et al.), *10434*
- channel flow, conformal mapping, flow irregularities, separation, Dzugaev (V.V.), *10436*
- leading edge, lifting surfaces, slender wings, vortices, Wagner (B.), *10505*
- environmental tests, flow obstructions, near ground effects, siting considerations, vortex flow, wind turbines, Frost (W.), Shieh (C.F.), *10516*
- blunt bodies, two dimensional flow, vortex sheets, Lewis (R.I.), *11389*
- airfoils, compressible flow, numerical methods, transonic flow, viscous flow, wakes, Le Balleur (J.C.), *11395*
- mathematical models, two phase flow, Rousseau (J.C.), Ferch (R.L.), *12033*

separation, bubble dynamics, cavitation flow, laminar flow, ogives, water tunnels, Arakeri (V.H.), Carroll (J.A.), (et al.), *563*
- boundary layer, curved surfaces, shock waves (normal), Bohning (R.), *600*
- bifurcation, numerical analysis, two dimensional flow, Willie (S.O.), *622*
- airplanes, separated flow, spin recovery, wings, Feistel (T.W.), Anderson (S.B.), (et al.), *690*
- non newtonian flow, power law fluids, thermal diffusion, Tubin (A.A.), Sorokin (Yu.S.), *822*
- ferrous metals, liquids, magneto fluid dynamics, suspensions, Boguslavskii (V.A.), Dvorchik (S.E.), (et al.), *863*
- asymptotic methods, boundary layer, incompressible flow, interaction, singular perturbations, Veldman (A.E.P.), *1549*
- asymptotic methods, boundary layer, incompressible flow, reynolds number (high), surveys, Ruban (A.I.), Sychev (V.V.), *1550*
- channel flow, numerical analysis, pressure distribution, Ghia (U.), Ghia (K.N.), (et al.), *1554*
- gravity, liquid gas mixture, magneto fluid dynamics, Kirko (G.E.), *2895*
- lifting bodies, trailing edge, unsteady flow, vorticity, Zaitsev (A.A.), Tyurev (V.V.), *2913*
- bodies of revolution, boundary layer, flow measurement, transition, Meier (H.U.), Kreplin (H.-P.), *3651*
- boundary layer (three dimensional), boundary layer (turbulent), singularities, Cousteix (J.), Houdeville (R.), *3652*
- asymptotic behavior, boundary layer, computing techniques, laminar flow, pressure gradient, Curle (N.), *3653*
- diffusers, radial flow, turbulent flow, Brandt (U.), Teipel (I.), *3675*
- afterbodies, pressure gradient, trailing edge, turbulence, Solignac (J.-L.), *4610*
- afterbodies, pressure gradient, trailing edge, turbulence, Solignac (J.-L.), *4611*
- boundary layer (turbulent), friction (skin), Dumitrescu (H.), Cleja (V.), (et al.), *4612*
- three dimensional flow, transition, two dimensional flow, visualization, Werle (H.), *4685*
- bubble dynamics, experimental results, reattachment, separated flow, turbulence, Hillier (R.), Cherry (N.J.), *5470*
- mixtures, powders, Lai (F.), Hersey (J.A.), (et al.), *5824*
- airfoils, subsonic flow, Jacob (K.), *6095*
- birefringence, bottom irregularities, boundary layer, visualization, Karahan (M.E.), Peterson (A.W.), *6598*
- air, axisymmetric flow, cavitation, water tunnels, Holl (J.W.), Carroll (J.A.), *6604*
- aeration, cavitation flow, weirs, Berman (Ya.R.), *6605*
- boundary layer (turbulent), viscid inviscid flow, Whitfield (D.L.), Swafford (T.W.), (et al.), *6638*
- blunt bodies, flow measurement, shear layer, wind tunnels (environmental), Castro (I.P.), *6642*
- contraction, laminar flow, noncircular pipes, numerical analysis, steps, Dennis (S.C.R.), Smith (F.T.), *6649*
- fluidized beds, particles, Geldart (D.), Baeyens (J.), (et al.), *7986*
- bodies of revolution, cavitation inception, laminar flow, water tunnels, Pan (S.-S.), Yand (Z.-M.), (et al.), *8514*
- bodies of revolution, cavitation inception, transition, water tunnels, Huang (T.T.), *8516*
- compressible flow, separated flow, shock waves, transonic flow, Carter (J.E.), *8547*
- boundary layer (turbulent), prediction, turbulent flow, Savulescu (T.N.), Dumitrescu (H.), *8611*
- gravity waves (surface), potential flow, ships, stern waves, Vanden-Broeck (J.-M.), *8622*
- asymptotic behavior, blunt bodies, hypersonic flow, shock layer, two dimensional flow, Barantsev (R.G.), Engelgart (V.N.), *8636*
- airplanes, containers, ejectable containers, ejectors, falling bodies, trajectories, Maddox (A.R.), *8645*
- bottom irregularities, channel flow, free boundary, hydraulic jump, Bouhadef (M.), Bauche (B.), (et al.), *9510*
- oil removal, two phase flow, Gladfelter (R.E.), Gupta (S.P.), *9892*
- channel flow, conformal mapping, flow irregularities, separated flow, Dzugaev (V.V.), *10436*
- air, bubble dynamics, cavitation inception, diffusion, laminar flow, Parkin (B.R.), *11382*
- boundary layer (turbulent), rotating bodies, three dimensional flow, turbomachinery, Ugryumov (M.L.), *11551*

Sepehmoori (K.), computing techniques, differential equations (ordinary), evolution equations, integration, Carey (G.F.), *5000*

Seplyarskii (B.S.), see Aldushin (A.P.), *9757*

Sepp (V.A.), channel flow, ducts (curved), gases, three dimensional flow, *8688*

Sera (M.), see Maeda (Y.), *1136*

Serafin (R.A.), kepler orbits, mean anomaly, orbit mechanics, probability theory, *6875*

Seraji (H.), design, multivariable systems, pid, pole placement, *4220*
- control, design, feedback, linear systems, multivariable systems, pole placement, *6126*

- laplace transform, matrix methods, pole placement, *7229*

Serapioni (R.), see Beirao Da Veiga (H.), *9537*

Serbin (A.A.), see Stepanov (G.V.), *6326*

Serdyuk (A.I.), see Povkh (I.L.), *3595*

Serdyuk (V.A.), crack propagation, fatigue, low temperature, magnesium alloys, *3438*

Sergeev (A.V.), see Kharitonova (A.N.), *4565*

Sergeev (G.T.), see Batievskii (V.L.), *1753*

- differential equations (ordinary), filtration, heat transfer, injection, porous walls, *4732*
- combustion, porous surfaces, *10684*

Sergeev (O.A.), conduction (heat), thermal measurements, thermocouples, *5534*

Sergeev (S.I.), cryogenics, helium, thermal excitation, Popov (O.M.), (et al.), *5532*

Sergeev (V.L.), heat transfer, laminar flow, stagnation point, unsteady flow, Strogii (A.S.), *6762*

Sergeev (Yu.A.), see Polyanin (A.D.), *10657*

- see Polyanin (A.D.), *10676*
- see Polyanin (A.D.), *10680*

Sergeeva (V.B.), design, design criteria, heating, regenerators, steam turbines, Ivashchenko (S.S.), (et al.), *6816*

Sergev (S.S.), cables, matrix methods, vibration (free), Iwan (W.D.), *6286*

Sergienko (A.S.), arcjets, discharges, dynamic behavior, generators, plasma jets, *5696*

series, asymptotic behavior, residual stresses, sheet metal, Yagoda (H.P.), *54*

- mathematical methods, perturbation theory, transforms, Spirig (F.), *877*
- interaction, mathematical models, stochastic processes, Chan (W.-Y.T.), Wallis (K.F.), *1100*
- perturbation methods, variational methods, Roberts (S.M.), *4988*
- convergence, transforms, Jones (B.), *10040*
- computing techniques, matrix methods, Saha (R.K.), Boriotti (J.R.), *10047*

series expansion, design (optimum), optimization, structural analysis, Kirsch (U.), *502*

- conduction (heat), heat addition, numerical methods, Beck (J.V.), *3816*
- boundary value problems, finite amplitude, perturbation methods, plates, Kayuk (Ya.F.), Alekseeva (M.K.), *4991*
- absorption, reverberation, Joyce (W.B.), *6932*
- hamilton principle, periodic orbits, restricted three body problem, Hitzl (D.L.), Levinson (D.A.), *9812*

Serman (D.D.), ocean waves, random loading, salter duck, wave energy, wave engines, Mei (C.C.), *9631*

Serna (M.A.), see Garcia De Jalon (J.), *11342*

Sernas (V.), cavities, convection, heat transfer, interferometry, thermal measurements, visualization, Lee (E.I.), *8769*

servomechanisms, hydraulic machinery, mathematical models, stability theory, Bazhenov (A.I.), *127*

- frequency response, spool valves, Takahashi (K.), Takahashi (Y.), *1171*
- optimal control, time optimal systems, Zaytsev (G.G.), Steklov (V.K.), *4302*
- bearings (magnetic), control, Habermann (H.), Liard (G.), *4903*
- automatic control, electrical instruments, hydraulics, pumps, valves, Green (W.L.), Sanger (D.J.), (et al.), *6734*
- control, design, linear systems, multivariable systems, optimization, Davison (E.J.), Ferguson (I.J.), *8168*
- control, manipulators, position control, robotics, Hopfengartner (H.), *9189*
- control, design, position control, state space techniques, Wierschem (T.), *9190*
- aluminum alloys, plasticity, steel, strain measurement, stress relaxation, Meguid (S.A.), *10334*
- control, design, fluidics, hydraulic machinery, pneumatic components, Mccloy (D.), Martin (H.R.), *11100, book*

Seshadri (R.), elastic waves, nonlinear structures, rods, similarity methods, Singh (M.C.), *10227*

Seshagiri Rao (S.V.), see Govardhan Reddy (K.), *9783*

Sesonske (A.), see Eyler (L.L.), *1556*

Sestieri (A.), see Chiatti (G.), *7222*

Seth (G.S.), laplace transform, magneto fluid dynamics, porous surfaces, rotating fluids, unsteady flow, Jana (R.N.), (et al.), *11812*

Sethna (P.R.), see Bajaj (A.K.), *11671*

Sethuramiah (A.), cold working, friction (rolling), friction (sliding), lubrication (boundary), wear, Shukla (B.M.), (et al.), *7096*

Settari (A.), fluid injection, fracture, hydraulic fracturing, hydraulics, rocks, simulation, *8354*

Setterlund (R.H.), see Schmidt (G.T.), *5711*

settlements, dams, displacement, earth dams, Katzenbach (R.), Breth (H.), *521*

- experimental methods, piles, Dente (G.), *3412*
- prediction, soil mechanics, Asaoka (A.), Matsuo (M.), *6384*

Settles (G.S.), see Horstman (C.C.), *10432*

Setzer (W.), see Clark (R.N.), *2099*

Sevenhuijsen (P.J.), deformation, plastics, surfaces, visualization, *484*

Severn (R.T.), dams, earthquake engineering, experimental mechanics, vibration (forced), Jeary (A.P.), (et al.), *7608*

Severud (L.K.), fracture mechanics, inelasticity, pipes, stress analysis, thermal stresses, *7619*

Sevruk (V.D.), see Prokunin (A.N.), *545*

Sewailem (M.R.), cutting, tool wear, wear, *1010*

- cutting, steel, tool wear, tools, turning, Mobarak (I.M.), *9376*

Sewall (J.L.), see Edighoffer (H.H.), *7411*

Sewell (M.J.), bifurcation, duality, functional equations, nonlinear programming, variational methods, *2027*

- see Hopkins (H.G.) eds., *8179, book*

sewerage, froude number, hydraulics, models, particle size, Halliwell (A.R.), Saul (A.J.), *7544*

- drag reduction, pipes, polymers, Sellin (R.H.J.), Ollis (M.), *9504*

Seya (K.), fracture angle, rocks, triaxial tests, *427*

Seybert (A.F.), acoustic measurements, acoustics, error, wave energy, *3969*

- acoustic measurements, ducts, sound (random), sound fields, spectral analysis, Soenarko (B.), *4802*

Seyfarth (K.), control, design, position control, regulator problem, robotics, Hain (E.), *7252*

Sforzini (R.H.), design (optimum), rockets, solid propellants, *1768*

sh waves, approximation methods, soil structure interaction, Chu (L.L.), Askar (A.), (et al.), *967*

- cavities, dynamic response, stress concentration, Wall (D.J.N.), Varadan (V.V.), (et al.), *1306*
- elastic constants, layered media, reflection, Coen (S.), *5243*
- cylindrical bodies, half space, interface phenomena, Gamer (U.), *6331*
- bonding, half space, interface cracks, Srivastava (K.N.), Palaiya (R.M.), (et al.), *6343*
- half space, inclusions, seismic waves, stress analysis, Gamer (U.), *8004*
- half space, nonhomogeneous media, propagation, Kielczynski (P.), *10230*

Sha (W.C.), analytical methods, biot number, conduction (heat), cylindrical bodies, heisler charts, spherical bodies, unsteady flow, Ganic (E.N.), *9714*

Shabalina (V.N.), see Botvina (L.R.), *2425*

Shabat (A.B.), differential equations (ordinary), functional analyis, inverse method, scattering, *1998*

Shablovskii (O.N.), liquids, reynolds equation (turbulence), three dimensional flow, turbulent flow, *4650*

shadowgraphic methods, optical instruments, two phase flow, Hewitt (G.F.), Whalley (P.B.), *948*

- experimental methods, tension, tissues, Knauss (W.G.), Kenner (V.H.), *9057*

Shafey (H.M.), absorption, coatings, radiant interchange, radiation properties, reflection, scattering, Kunitomo (T.), *3827*

- coatings, mie scattering, radiant interchange, radiation properties, scattered light, spherical bodies, thin films, Kunitomo (T.), *6804*
- see Kunitomo (T.), *6805*

Shaffer (R.J.), see Hanson (M.E.), *5311*

- see Hanson (M.E.), *6434*

shafts, measurements (dynamic), torque gages, Artamonov (A.T.), Volkov (N.P.), (et al.), *225*

- flexible bodies, shells (cylindrical), strength, Mizoguchi (K.), Shirakawa (K.), (et al.), *3285*
- fatigue, stress concentration, turbines, Jackson (M.C.), Umans (S.D.), *4483*
- flywheels, high speed, machinery, vibration, Pandey (R.C.), Midha (A.), *5371*
- holes, residual stresses, stress relieving, welding, Bush (A.F.), Kromer (F.J.), *6467*
- constant velocity couplings, kinematics, splines, transmissions, Davoli (P.), *6556*
- beams (continuous), buckling, elastic foundations, finite element techniques, framed structures, Bagci (C.), *8261*

Shagal (D.I.), blood flow, experimental methods, microcirculation, Tavik (A.I.), (et al.), *6019*

Shagapov (V.Sh.), bubble dynamics, heat transfer, mass transfer, unsteady flow, *5818*

- see Azamatov (A.Sh.), *11923*

Shah (A.H.), elastic waves, harmonic waves, laminates, Datta (S.K.), *9345*

Shah (H.C.), see Nishioka (T.), *8962*

Shah (R.K.) eds., heat exchangers, heat exchangers (crossflow), heat exchangers (multipass), heat transfer, recuperators, regenerators, Mcdonald (C.F.), (et al.), *1711, book*

Shah (S.), see Sparrow (E.M.), *782*

Shah (S.L.), control, design, linear systems, multivariable systems, observers, pole placement, process control, Seborg (D.E.), (et al.), *3186*

- see Johnstone (R.M.), *11096*

Shah (S.P.), see Somayaji (S.), *7602*

Shah (V.L.), see Schultz (D.H.), *3621*

Shahaf (M.), expansion, impingement, jets, stability, Goldman (Y.), (et al.), *842*

Shahidullah (M.), see Oliver (D.R.), *7103*

Shahinpoor (M.), granular media, packed beds, statistical theory, *8918*

- granular media, gravitational stabilization, nonlinear theory, soils, *10249*

Shaikhutdinov (Z.G.), see Lazarev (G.P.), *847*

shakedown structures, fatigue, laminates, metallic composites, Dvorak (G.J.), Johnson (W.S.), *283*

- cyclic loading, elastoplasticity, work hardening, Megahed (M.M.), *2238*
- elastoplasticity, half space, indentation, residual stresses, Hills (D.A.), Ashelby (D.W.), *3263*
- elastoplasticity, mathematical programming, matrix methods, Hung (N.D.), Palgen (L.), *3544*

- dynamic testing, elastoplasticity, vibration, Ceradini (G.), *4513*
- beams, deflections, Tin Loi (F.), *5340*
- bridges (arch), reinforced concrete, Ronca (P.), Cohn (M.Z.), *5359*
- dynamic plasticity, plasticity, Auconi (F.), *8087*
- beams (flexural), deformation, elastoplasticity, variational methods, Mazzarella (C.), *8232*
- dynamic effects, elastoplasticity, thermal effects, work hardening, Konig (J.A.), Maier (G.), *8436*
- collapse, cylindrical bodies, pressure vessels, Tooth (A.S.), Jones (N.), *11336*

Shakhov (E.M.), see Aristov (V.V.), *9835*
Shakhov (V.G.), see Polyakova (L.A.), *11486*
Shakina (N.P.), atmospheric circulation, baroclinic instability, hydrodynamic stability, *3019*
Shakins (N.P.), atmospheric circulation, cyclones, weather forecasting, *4062*
Shakir-Khalil (H.), see Horne (M.R.), *2296*
- bolts, shear loading, tension, Ho (C.M.), *3583*

Shakirov (N.V.), see Kuznetsov (G.B.) eds., *5071, book*
Shalashilin (V.I.), see Grigolyuk (E.I.), *5082*
- dynamic analysis, plates (sandwich), vibration (free), Kolesnikov (I.Yu.), (et al.), *11149*

Shalda (L.M.), see Chernysh (V.P.), *10754*
Shaldyrvan (V.A.), see Bulanov (G.S.), *4381*
- plates (anisotropic), plates (holed), plates (thick), stress concentration, *7339*
- see Kosmodamianskii (A.S.), *8251, book*

shallow water, beaches, ocean waves, Guza (R.T.), Thorton (E.B.), *977*
- bends, numerical methods, rivers, secondary flow, Kalkwijk (J.P.T.), De Vriend (H.J.), *1494*
- acoustics, arrays, ocean, sound propagation, Buckingham (M.J.), *1802*
- breakwater, diffraction, ocean waves, refraction, Lui (P.L.-F.), Lozano (C.J.), (et al.), *1887*
- ocean bed, sound fields, sound generation, Ageeva (N.S.), Krupin (V.D.), *2933*
- surface waves, windwave interaction, Bitner (E.M.), *3014*
- breakers, spectra, surface waves, Iwata (K.), *3015*
- bottom irregularities, finite element techniques, ocean air interaction, surge, Kawahara (M.), Nakazawa (S.), (et al.), *3023*
- finite difference methods, one dimensional flow, tides, Stelling (G.S.), *3612*
- attenuation, ocean bed, underwater acoustics, Tindle (C.T.), Weston (D.E.), (et al.), *5747*
- acoustic measurements, noise, underwater acoustics, Walker (A.W.), *5750*
- finite element techniques, harbors, nonlinear waves, tsunami, Lepelletier (T.G.), *6609*
- eigenvalues, group velocity, pulsatile flow, ray theory, Tindle (C.T.), Bold (G.E.J.), *6612*
- diffusers, jets, Lee (J.H.), Jirka (G.H.), *6671*
- couplings, modes, scattering, underwater acoustics, Mcdaniel (S.T.), *6902*
- finite element techniques, tides, Platzman (G.W.), *8972*
- flow obstructions, interaction, ship dynamics, slender bodies, Yeung (R.W.), Tan (W.T.), *9007*
- channels, discharges, head, spillways, Sivakumaran (N.S.), Hosking (R.J.), (et al.), *9505*
- critical region, heaving, pitching, slender bodies, Plotkin (A.), *9942*
- cylindrical bodies, diffraction, nonlinear waves, offshore structures, Rahman (M.), Chakravartty (I.C.), *10393*
- estuaries, nonlinear waves, tidal waves, two dimensional flow, Debnath (L.), Chatterjee (A.K.), *11359*
- ocean, sound fields, sound propagation, Jensen (F.B.), *11899*
- bottom irregularities, ocean bed, scattering, underwater acoustics, Ivakin (A.N.), Lysanov (Yu.P.), *11912*

Shalygin (V.N.), see Tomashevskii (V.T.), *9246*
Shamina (O.G.), faults, radiation, seismic waves, Pavlov (A.A.), (et al.), *9909*
Shamma (S.E.), see Rosenbaum (M.), *8830*
Shamonin (S.A.), see Merzhievskii (L.A.), *8200*
Shamota (V.P.), see Kapusta (A.B.), *2894*
Shamsundar (N.), energy conservation, energy storage, latent heat, solar energy, Srinivasan (R.), *5604*
Shanahan (M.E.R.), crack opening displacement, environmental tests, failure, life expectancy, plastics, stress rupture, Schultz (J.), *4486*
Shanbhag (R.L.), see Narayanan (S.), *11935*
- see Narayanan (S.), *11971*

Shands (J.), annular flow, friction factor, moving surfaces, pipe flow, transition, Alfredsson (H.), (et al.), *6648*
Shang (H.M.), see Hsu (T.C.), *10147*
Shang (J.S.), bodies of revolution, oscillatory flow, spikes, viscous flow, Hankey (W.L.), (et al.), *7794*
Shanin (V.N.), see Vaisband (V.B.), *10671*
Shankar (N.), drops, interfaces, two phase flow, Cole (R.), (et al.), *9680*
Shankar (N.B.), earth pressure, soils, *6392*
Shankar (P.N.), flow obstructions, inviscid fluid, shear flow, two dimensional flow, vorticity, Sinha (U.N.), *2609*
- hydrodynamic stability, interface phenomena, perturbations, vortex sheets, *10466*

Shankar (R.), discontinuities, magneto plasma dynamics, propagation, radiating flow, shock waves, Jain (S.K.), *11826*

Shankland (I.R.), see Kestin (J.), *9675*
Shankland (J.R.), see Kestin (J.), *8666*
Shanmugam (N.E.), see Evans (H.R.), *3292*
- see Evans (H.R.), *7320*
- bending, cellular structures, grillages, nonlinear characteristics, structural analysis, ultimate strength, Evans (H.R.), *8263*

Shannon (G.F.), biocontrol, design, myoelectric control, prosthetic devices, *3227*
shape factors, boundary layer, conical flow, diffusers, entrainment, Odukwe (O.), *625*
- radiant interchange, Gross (U.), Spindler (K.), (et al.), *775*
- design (optimum), rotating disks, Bhavikatti (S.S.), Ramakrishnan (C.V.), *1428*
- design (minimum weight), steel, trusses, Spillers (W.R.), Kountouris (G.E.), *1429*
- boundary layer, reynolds number, transition, turbulence, Wazzan (A.R.), Gazley (C.) Jr., (et al.), *1540*
- radiation, spherical bodies, Chung (B.T.F.), Naraghi (M.H.N.), *1704*
- bridges (suspension), design (minimum weight), optimization, prestressed structures, Sofronie (R.), *2533*
- elastic bodies, optimization, stress analysis, Oda (J.), Yamazaki (K.), *3519*
- composite structures, design (optimum), multicomposite structures, optimization, Dems (K.), Mroz (Z.), *3522*
- echinodome, optimization, tanks, Ibidapo-Obe (O.), Royles (R.), (et al.), *5344*
- models, plumes, Henderson-Sellers (B.), *5456*
- alloys, bending, cyclic loading, iron, testing equipment, thermal fatigue, Pryakhin (V.A.), Ivanova (L.P.), *6474*
- obscuration, radiant interchange, visualization, Finkelstein (L.), Weinman (Y.), *6806*
- computer aided design, shells (shallow), structural design, thin walled structures, Alpa (G.), Bozzo (E.), (et al.), *7336*
- columns, composite materials, reinforced concrete, Smith (D.G.E.), *7355*
- thickness, ultrasonics, velocimeters, Melkanovich (A.A.), Firsukov (A.A.), (et al.), *7582*
- convex programming, design (minimum weight), trusses, Svanberg (K.), *7593*
- optimization, trusses, Saka (M.P.), *7598*
- bars, elastic bodies, optimization, torsion, Dems (K.), *7599*
- bars, cavities, conduction (heat), cylindrical bodies, Naghdi (A.K.), *7847*
- laminates, mechanical stabilization, plates, rayleigh ritz method, temperature, Hyer (M.W.), *9247*
- experimental methods, size factors, soil consolidation, Subba Rao (K.S.), *10247*
- blunt bodies, compressible flow, drag, hypersonic flow, optimization, rarefied gases, Bunimovich (A.I.), Dubinskii (A.V.), *11405*

shaping, drag coefficient, three dimensional flow, Dubinskii (A.V.), *1622*
- mechanical analysis, rolling, straighteners, Das Talukder (N.K.), Johnson (W.), *3425*

Shapiro (E.I.), discrete systems, filters, nonlinear systems, *144*
Shapiro (E.Y.), control, feedback, linear systems, pole placement, Fredricks (D.A.), (et al.), *6141*
Shapiro (G.I.), entrainment, heat transfer, mass transfer, mixing layers, oceanography, thermocline, turbulence (geophysical), *7059*
Shapiro (G.S.), see Skovoroda (A.R.), *6195*
Shapiro (L.H.), see Bates (H.F.), *1303*
- see Bates (H.F.), *8631*

Shapiro (L.J.), atmospheric circulation, rossby waves, *5929*
Shapiro (M.I.), see Kulik (A.Ya.), *5099*
Shapiro (R.), see Miller (N.R.), *1046*
Shapiro (V.E.), see Loginov (V.M.), *4955*
Shaposhnikova (E.I.), see Kulikovskii (A.G.), *2363*
Shapovalov (G.K.), boltzmann equation, hydrodynamics, initial value problems, rarefied gases, *7694*
Shapovalov (V.M.), convection, film cooling, film flow, heat transfer, plastics, polypropylene film, Tyabin (N.V.), (et al.), *5570*
Sharakshanae (A.A.), see Rusanov (V.V.), *2680*
Sharma (G.C.), see Kishan (H.), *1772*
Sharma (J.), see Shyam (R.), *8823*
- see Sharma (V.D.), *9636*

Sharma (J.N.), nonlinear analysis, ocean waves, spectra, wave loads, Dean (R.G.), *11663*
Sharma (K.G.), see Pande (G.N.), *6404*
Sharma (K.N.), see Sharma (R.C.), *8824*
- see Sharma (R.C.), *10839*

Sharma (N.L.), see Bhutani (O.P.), *8969*
Sharma (P.B.), axial compressors, measurements (dynamic), rotating stall, rotors, Railly (J.W.), *1635*
Sharma (P.C.), aerodynamic performance, conical flow, diffusers, entrance region, *626*
- see Srinivasulu (P.), *2524*

Sharma (R.C.), convection, porous media, thermal instability, *5883*
- kelvin-helmholtz instability, magneto fluid dynamics, porous media, streams, Singh (H.), (et al.), *7901*
- convection, magneto fluid dynamics, oscillatory flow, porous media, theory, Sharma (K.N.), *8824*
- porous media, taylor instability, two component flow, Sharma (K.N.), *10839*

Sharma (R.K.), ks formulation, oblateness, orbit mechanics, perturbation methods, regularization, two body problem, *6877*

Sharma (R.N.), conical flow, experimental results, wall jets, *1575*

Sharma (S.), buckling, composite structures, laminates, plates, Iyengar (N.G.R.), (et al.), *287*

- composite materials, laminates, plates (anisotropic), Iyengar (N.G.R.), (et al.), *7342*

Sharma (S.D.), see Gai (S.L.), *3725*

Sharma (V.D.), compressible flow, dissociation, nonequilibrium flow, *2619*

- mathematical models, nonequilibrium flow, shock waves, shock waves (attached), *5419*
- compressible flow, discontinuities, dissociation, gases, *6710*
- compressible flow, discontinuities, nonequilibrium effects, thermodynamics, Singh (R.S.), *7780*
- characteristic methods, discontinuities, dissociation, gases, Sharma (J.), (et al.), *9636*
- see Menon (V.V.), *10759*

Sharon (A.), explosions, film boiling, fuel-coolant interactions, shock tubes, Bankoff (S.G.), *10719*

Sharpe (W.N.) Jr., see Bagaria (W.J.), *2479*

Shashaty (A.J.), bending, cables, design, resistance, *4552*

- cables, ocean bed, torsion, underwater structures, *9256*

Shashkov (A.G.), mathematical models, thermocouples, thermophysical properties, *8680*

Shatalov (I.K.), axial compressors, blades, pressure distribution, strain gages, surge, velocity measurement, *8657*

Shatalov (S.D.), see Khodzhaev (K.Sh.), *4990*

Shatokhin (S.N.), bearings (gas lubricated), discharges, loads, lubricants (gas), lubrication (hydrostatic), Kodnyanko (V.A.), *9969*

Shaub (H.), internal combustion engines, lubricants (liquid), temperature, viscometry, Murphy (C.K.), *3757*

Shavaliev (M.Sh.), diffusion, mixtures, navier stokes equation, poiseuille flow, *10672*

Shaw (J.), blades, dynamic response, rotors, vibration, Albion (N.), *2337*

Shaw (L.M.), aerodynamic interference, axial fans, noise (aerodynamic), turbofan engines, wakes, Glaser (F.W.), *7894*

Shaw (M.C.), cutting, extrusion, forming, materials properties, plastic flow, *3420*

Shaw (M.T.), cold working, constitutive equations, forming, polymers, survey, yield condition, *2396*

Shaw (P.T.), see Csanady (G.T.), *8033*

Shaw (R.), see Abu-Ghannam (B.J.), *2633*

Shaw (R.H.), see Anand (S.C.), *80*

Shaw (S.J.), see Kinloch (A.J.), *542*

Shay (W.A.), finite difference methods, internal flow, navier stokes equation, two dimensional flow, vorticity, *4586*

Shchelkachev (M.V.), dispersion relation, electro fluid dynamics, perturbations, taylor instability, theory, *3890*

Shchennikov (V.V.), see Byrkin (A.P.), *8568*

Shchepetov (S.V.), see Kovrizhnykh (L.M.), *11838*

Shcherbak (S.B.), see Melikhov (O.I.), *5539*

- see Makhviladze (G.M.), *7888*

Shcherbakov (E.V.), algorithms, parallel computations, programming, *3180*

Shcherbakov (V.F.), see Pochuev (V.P.), *8808*

Shcherban (N.I.), see Fridman (V.M.), *3480*

Shcherbina (D.M.), heat transfer (combined modes), radiant interchange, radiometer, thermal measurements, *4713*

Shcherbina (Yu.V.), see Kazakevich (V.V.), *3205*

Shchukin (V.K.), cavities, compressible flow, convection, supersonic flow, Gortyshov (Yu.F.), (et al.), *11401*

- boundary layer (turbulent), channel flow, swirl flow, turbulence (structure), velocity profiles, Khalatov (A.A.), (et al.), *11547*

Shea (R.), materials properties, shock waves (normal), solid mechanics, Mescall (J.F.), *1311*

shear, higher order theories, plates (orthotropic), plates laminated, plates orthotropic, stress strain relationships, Ulyashina (A.N.), *319*

- bending, plates (nonlinear), plates (rectangular), postbuckling behavior, Walczak (W.), Jakubowski (S.), *332*
- plane strain, plastic flow, plasticity, shear bands, steel, Anand (L.), Spitzig (W.A.), *1196*
- beams (sandwich), design (optimum), large displacement, plates (nonlinear), Gierlinski (J.), Mroz (Z.), *1223*
- bending, plastic behavior, plates (circular), Nakamura (Y.), Tatenami (T.), (et al.), *1229*
- concrete, stiffness, Fardis (M.N.), Buyukozturk (O.), *1441*
- beams (flexural), bending (elastic), elasticity (linear), shear centre, Gyarmathy (K.), *2221*
- plates (nonhomogeneous), plates (thick), torsion, Mukhopadhyay (A.), Mukhopadhyay (J.), *2266*
- bending, girders, prestressed concrete, torsion, Taylor (G.), Warwaruk (J.), *2523*
- acoustic emission, crack propagation, fracture, pressure vessels, Finkel (V.M.), Muravin (G.B.), (et al.), *3506*
- bending, panels (flat), reinforced concrete, torsion, ultimate strength, Majid (K.I.), Celik (T.), *3534*
- galerkin method, plates (circular), rotary inertia, vibration (nonlinear), Chia (C.Y.), Sathyamoorthy (M.), *4423*
- acoustic waves, dynamic stresses, flexural waves, plates, reflection, wave equations, Dubbelday (P.S.), Rudgers (A.J.), *5209*
- dynamic analysis, plasticity, snow, tracked vehicles, vehicles, Brown (R.L.), *5366*
- boundary layer, calibration, friction (skin), preston tubes, Nitsche (W.), *5507*
- floating bodies, fluid-structure interaction, plates, vibration (forced), Suvorov (A.M.), Cherkesov (L.V.), *6297*
- copper, elastic constants, lattices, polycrystalline materials, strain, Gairola (B.K.D.), Kroner (E.), *6468*
- bolted joints, bolts, experimental results, torsion, Bahia (C.S.), Martin (L.H.), *6566*
- laminates, layered media, shells (sandwich), thermal stresses, thermoelasticity, Khoroshun (L.P.), Babich (D.V.), *6953*
- creep, finite element techniques, nonlinear analysis, stiffness matrix, Nguyen Dang Hung, *7218*
- galerkin method, plates (circular), plates (orthotropic), rotary inertia, vibration (nonlinear), Sathyamoorthy (M.), *7393*
- crack propagation, cracks, holes, Fuchssteiner (W.), Olsen (O.W.), *7520*
- adhesion, composite materials, strength, Rybin (A.A.), *7569*
- buoyancy, cavities, prediction, turbulent flow, Ideriah (F.J.K.), *7738*
- dynamic analysis, plates, rotary inertia, vibration (nonlinear), Sathyamoorthy (M.), *8308*
- concrete, plates, punch problems, reinforced bodies, Godycki-Cwirko (T.), Kosinska (A.), *8379*
- modal analysis, rotary inertia, shells (spherical), vibration (forced), Shenderov (E.L.), *9337*
- constitutive relations, soils, Nakai (T.), Matsuoka (H.), *9354*
- beams, bending, elastoplasticity, reinforced concrete, Nakazawa (T.), Ohta (T.), *9444*
- buildings, foundations, joints, piles, rock mechanics, Dight (P.M.), Chiu (H.K.), *9485*
- cylindrical bodies, roughness, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *9594*
- emulsions, fluid mechanics, permeability, porous media, surface profiles, surfactants, Kalpakci (B.), Klaus (E.E.), (et al.), *9887*
- beams, dynamic properties, rotary inertia, vibration (free), Doyle (J.F.), *10199*
- elastic foundations, plates (isotropic), vibration (free), Volos (N.P.), Dovganich (M.I.), *10203*
- beams (cantilever), bending, blades, rotary inertia, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- beams, reinforced concrete, shear stress, Batchelor (B. De V.), Kwun (M.), *10359*
- beams (curved), dynamic analysis, rotary inertia, vibration (free), Suzuki (K.), Takahashi (S.), *11148*
- impact, layered media, punch problems, viscoelasticity (dynamic), winkler foundation, Aleksandrov (V.M.), Zelentsov (V.B.), *11159*

shear flow, boundary layer, mesolayer, turbulence, turbulence model, Long (R.R.), Chen (T.-C.), *645*

- orr sommerfeld equation, turbulence (homogeneous), Kambe (R.), Doi (M.), (et al.), *648*
- flow measurement, turbulence, turbulent flow, velocity profiles, Harris (S.D.), Williamson (J.W.), (et al.), *660*
- polymers, viscometry, Kulicke (W.-M.), Porter (R.S.), *1488*
- convection (free), heat, rayleigh number, temperature profile, Yoshizaki (M.), *1515*
- experimental results, jets, suppression, turbulence, Zaman (K.B.M.Q.), Hussain (A.K.M.F.), *1582*
- channels, gravity waves (internal), stratified flow, wave interactions, Grimshaw (R.), *1601*
- cylindrical bodies, external flow, heat transfer, hot wire, reattachment, separated flow, Ota (T.), Kon (N.), (et al.), *1665*
- brownian motion, diffusion, particle dynamics, Foister (R.T.), Van De Ven (T.G.M.), *1731*
- currents, oceanography, Smart (J.H.), *1891*
- constitutive equations, materials possessing memory, non newtonian flow, viscoelastic fluids, Menezes (E.V.), *2575*
- biomechanics, rheology, viscometry, Whorlow (R.W.), *2578, book*
- flow obstructions, inviscid fluid, two dimensional flow, vorticity, Shankar (P.N.), Sinha (U.N.), *2609*
- airfoils, interaction, perturbations, Hashem (A.A.F.), Peacock (R.E.), *2610*
- mixing layers, stratified flow, Popov (V.A.), Chashechkin (Yu.D.), *2667*
- boundary layer, hydrodynamic stability, orr sommerfeld equation, roughness, stability theory, Lewkowicz (A.K.), *2681*
- decay, hydrodynamic stability, perturbations, Brown (S.N.), Stewartson (K.), *2682*
- curved surfaces, turbulence (structure), Townsend (A.A.), *2699*
- aerodynamic excitation, eddies, jets, noise (aerodynamic), turbulence, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- annuli, drops, Chan (P.C.-H.), Leal (L.G.), *2986*
- bearings (thrust), lubrication (hydrostatic), turbulent flow, Harada (M.), Aoki (H.), (et al.), *3043*
- non newtonian flow, plates (parallel), pressure gradient, second order fluids, Rajagopal (K.R.), Huilgol (R.R.), *3590*

- conical flow, diffusers, inlet flow, inlet flow (sheared), velocity profiles, Nakamura (I.), Ishikawa (K.), (et al.), *3679*
- hydrodynamic stability, membranes, vortex flow, Couder (Y.), *3702*
- dispersed flow, suspensions, walls, Brunn (P.), *4008*
- geophysics, granular media, rock mechanics, Passman (S.L.), Nunziato (J.W.), (et al.), *4132*
- rayleigh problem, unsteady flow, viscoelastic fluids, Johri (A.K.), Singhal (R.K.), *4568*
- computing techniques, coordinate systems, mathematical methods, navier stokes equation, Hirschel (E.H.), Kordulla (W.), *4596, book*
- hydrodynamic stability, orr sommerfeld equation, stability theory, Salwen (H.), Grosch (C.E.), *4639*
- rotational flow, solitary waves, stratified flow, Gibbon (J.D.), James (I.N.), (et al.), *4653*
- hydrodynamic stability, ocean air interaction, surface waves, wind-wave interaction, Kawai (S.), *4857*
- blood flow, capillary flow, microcirculation, platelet concentration, Beck (M.R.) Jr., Eckstein (E.C.), *4919*
- cylindrical bodies, pressure distribution, transition flow, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *5453*
- swirl flow, turbulence, turbulence model, Naot (D.), *5466*
- constitutive equations, polymers, viscoelastic fluids, Leonov (A.I.), Prokunin (A.N.), *6571*
- entrainment, rotating cylinders, viscoelastic fluids, viscoplasticity, Shulman (Z.P.), Baikov (V.I.), *6572*
- brownian motion, colloids, polar fluids, suspensions, Takamura (K.), Van De Ven (T.G.M.), (et al.), *6583*
- constitutive equations, couette flow, viscometry, Goddard (J.D.), *6593*
- flow irregularities, roughness, turbulent flow, Schofield (W.H.), *6641*
- closure, turbulence model, turbulent flow, Gallagher (B.), Magaard (L.), (et al.), *6685*
- ducts, sound propagation, Mani (R.), *6910*
- axisymmetric flow, bubble dynamics, Miksis (M.J.), *6987*
- deformation, drops, interface phenomena, Flumerfelt (R.W.), *6990*
- boundary layer (atmospheric), clouds, diffusion, turbulence (geophysical), wind, Skhirtladze (G.I.), Yurchak (B.S.), *7061*
- boundary layer, finite difference methods, navier stokes equation, parabolic equations, Spradley (L.W.), Stalnaker (J.F.), (et al.), *7684*
- boundary layer (atmospheric), turbulence (geophysical), wind-wave interaction, Chao (S.P.), *8034*
- drops, polymers, Chin (H.B.), Han (C.D.), *8492*
- free boundary, liquid vapor interface, viscometry, Krieg (R.D.), Son (J.E.), (et al.), *8500*
- inviscid fluid, velocity profiles, vortex flow, Kida (S.), *8528*
- gravity waves, magneto fluid dynamics, planetary atmospheres, wind, El Mekki (O.M.), *8822*
- turbulence, turbulence (anisotropic), turbulence model, Cambon (C.), Jeandel (D.), (et al.), *9604*
- atmosphere, spectra, stratified flow, turbulence (geophysical), Weinstock (J.), *9607*
- channel flow, dispersion, turbulence, turbulence (transport), Durbin (P.A.), *9609*
- insulation, magneto fluid dynamics, numerical methods, panels (flat), Sastry (S.R.N.), *9789*
- deformation, drops, interface phenomena, Rallison (J.M.), *9882*
- coherent structure, sound flow interaction, turbulence, turbulence (structure), Kleis (S.J.), Hussain (A.K.M.F.), (et al.), *10470*
- boundary layer (turbulent), convection (forced), heat transfer, turbulence, Thomas (L.C.), Ibrahim (M.B.), *10472*
- thermal diffusion, turbulent flow, Sreenivasan (K.R.), Tavoularis (S.), *10475*
- critical flow, films, viscous buckling, viscous flow, Suleiman (S.M.), Munson (B.R.), *11378*
- kelvin-helmholtz instability, numerical methods, vorticity, Shoucri (M.M.), *11391*
- buoyancy, hydrodynamic stability, richardson number, stratified flow, turbulent flow, Kranenburg (C.), *11535*
- channel flow, hydrodynamic stability, stability theory, turbulent flow, velocity profiles, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- eddies, experimental methods, jets, turbulence (structure), turbulent flow, Mumford (J.C.), *11545*
- reynolds number, turbulence (structure), turbulent flow, velocity profiles, Antonia (R.A.), Satyaprakash (B.R.), (et al.), *11546*
- reynolds stresses, stress strain relationships, turbulence model, turbulent flow, So (R.M.C.), Peskin (R.L.), *11559*
- gravity waves, nonlinear analysis, stratified flow, wave trains, Liu (A.K.), *11562*
- granular media, stresses, Savage (S.B.), Jeffrey (D.J.), *12062*

shear lag, beams (prestressed), bending, t-section, Adekola (A.O.), *294*
- cellular structures, elastic behavior, plates (anisotropic), web openings, Evans (H.R.), Shanmugam (N.E.), *3292*
- composite materials, fibers, fracture criteria, Gorse (J.G.), Gross (R.S.), *5130*
- bridges (box girder), design criteria, Evans (H.R.), Taherian (A.R.), *5151*
- composite materials, discontinuities, fibers, metallic composites, Fukuda (H.), Chou (T.-W.), *6194*
- beams (box), girders (plate), Kuzmanovic (B.O.), *11110*

shear layer, cylindrical bodies, vortex shedding, Stansby (P.K.), *2676*
- asymptotic methods, hydrodynamic stability, orr sommerfeld equation, stability theory, Monkewitz (P.A.), Monkewitz (M.A.), *2686*
- boundary layer, stability theory, turbulence (structure), wakes, Taneda (S.), *2692*
- measurements (dynamic), shear stress, walls, Tennant (M.H.), Pierce (F.J.), (et al.), *2761*
- blunt bodies, flow measurement, separation, wind tunnels (environmental), Castro (I.P.), *6642*
- gravity waves (internal), hydrodynamic stability, vortex sheets, Grimshaw (R.H.J.), *7745*
- compressible flow, navier stokes equation, reattachment, turbulent flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10431*
- richardson number, turbulence (clear air), turbulence (geophysical), Keller (J.L.), Haines (P.A.), *10478*
- compressible flow, finite element techniques, navier stokes equation, supersonic flow, unsteady flow, Cooke (C.H.), Blanchard (D.K.), *11429*

shear loading, beams (timoshenko), elasticity (three dimensional), shearing coefficient, Kelkel (K.), *295*
- crack propagation, dynamic fracture, elastodynamics, Bui (H.D.), Ehrlacher (A.), *470*
- beams (flexural), dynamic analysis, vibration (nonlinear), Nguyen Xuan Hung, *1263*
- crystals, dynamic plasticity, strain rate, Chiem (C.Y.), Duffy (J.), *2236*
- composite materials, finite element techniques, notch sensitivity, stress analysis, Herakovich (C.T.), Bergner (H.W.) Jr., *2455*
- cracks, stress intensity factor, twinning, Kuliev (V.D.), *2457*
- boundary value problems, half space, punch problems, Hara (T.), Shibuya (T.), (et al.), *3245*
- beams (cantilever), buckling, lateral stability, Reissner (E.), *3330*
- beam columns, beams (cantilever), buckling, Zalka (K.), *3333*
- buckling, numerical methods, shells (anisotropic), Cohen (G.A.), *3336*
- bolts, tension, Shakir-Khalil (H.), Ho (C.M.), *3583*
- adhesives, bonded joints, River (B.H.), Gillespie (R.H.), *3586*
- beams, bending, reinforced concrete, torsion, Rajagopalan (K.S.), *4362*
- beams (thin section), shells (cylindrical), thin walled structures, warping, Kholoptsev (V.V.), *4373*
- girders (plate), plastic behavior, postbuckling behavior, Niinobe (Y.), *6239*
- beams (box), bending, girders (plate), Evans (H.R.), Shanmugam (N.E.), *7320*
- blast effects, cyclic loading, fatigue, panels, plaster panels, vibration, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- edge cracks, infinite medium, stress intensity factor, Hara (T.), *9404*
- bending, finite element techniques, membrane theory, tanks, Royles (R.), Sofoluwe (A.B.), *11114*

shear strength, joints, rocks, scale effects, Barton (N.), Bandis (S.), *429*
- beams (prestressed), prestressed concrete, Rangan (B.V.), *511*
- cyclic testing, sand, strength, Tatsuoka (F.), Silver (M.L.), (et al.), *1316*
- cyclic testing, sand, strength, stress strain relationships, Tatsuoka (F.), Silver (M.L.), (et al.), *1317*
- beams, weibull statistics, wood structures, Liu (J.Y.), *1433*
- clay, cyclic testing, stress strain relationships, Matsui (T.), Ohara (H.), (et al.), *2378*
- slabs, stress analysis, ultimate strength, Garas (F.K.), Waine (B.R.), (et al.), *2517*
- anisotropic media, clay, Nova (R.), *3396*
- constitutive relations, experimental methods, sand, Vardoulakis (I.), *3398*
- clay, field tests, pressuremeter, Denby (G.M.), Clough (G.W.), *3404*
- correlation, friction, metals, Miyoshi (K.), Buckley (D.H.), *3492*
- bonded joints, welded joints, Bolshakov (A.P.), Novikov (S.A.), (et al.), *3585*
- beams, decay, reinforced concrete, Scribner (C.F.), Wight (J.K.), *4038*
- beams (composite), bending, design (optimum), ultimate strength, Farkas (J.), *4526*
- punch problems, reinforced concrete, slabs, Petcu (V.), Stanculescu (G.), (et al.), *4534*
- dynamic properties, soils, swell, Au (W.-C.), Chae (Y.S.), *5252*
- laminates, material testing, shear rigidity, Polyakov (V.A.), Tanevskii (V.V.), *6153*
- beams, reinforced concrete, ultimate strength, Megahid (A.), Maamoun (A.), (et al.), *10358*

shear stress, finite strain, imperfections, plane strain, shear bands, Abeyaratne (R.), Triantafyllidis (N.), *231*
- beams, Zaslavsky (A.), *296*
- beams (plastic), dynamic behavior, rotary inertia, Gomes De Oliveira (J.), Jones (N.), *407*
- anisotropic media, penny shaped crack, stress intensity factor, Dahan (M.), *459*
- pressure measurement, surface flow, turbulent flow, Pontikos (N.), Bradshaw (P.), *712*
- bottom irregularities, rivers, sediment transport, Todten (H.), Vetter (B.), *1497*
- aortic valve, blood, damage, prosthetic devices, Figliola (R.S.), Mueller (T.J.), *1960*
- bed load, erosion, jets, sediment transport, Chatterjee (S.S.), Ghosh (S.N.), *2591*
- measurements (dynamic), shear layer, walls, Tennant (M.H.), Pierce (F.J.), (et al.), *2761*

- arteries, cell behavior, dynamic response, muscles, Dewey (C.F.) Jr., Bussolari (S.R.), (et al.), *3065*
- aorta, blood flow, finite element methods, navier stokes equation, Gokhale (V.V.), Tanner (R.I.), (et al.), *3067*
- bed load, sediment transport, stability theory, Nakagawa (H.), Tsujimoto (T.), *3604*
- boundary layer (turbulent), channel flow, preston tubes, walls, Kiske (S.), Vasanta Ram (V.), (et al.), *4599*
- boundary layer, convection, friction (skin), laminar flow, plates (vertical), Hunt (R.), Wilks (G.), *4696*
- dynamic response, rods, vibration, wave equations, Kiyasbeili (T.N.), *5207*
- experimental methods, shock waves (normal), Batkov (Yu.V.), Novikov (S.A.), (et al.), *6366*
- cyclic testing, sand, saturation, Ishihara (K.), Yamazaki (F.), *6379*
- entrainment, mixing layers, stratification, wind, Kranenburg (C.), *7652*
- boundary layer, flow reversal, heat tracer, incompressible flow, two dimensional flow, velocity measurement, Westphal (R.V.), Eaton (J.K.), (et al.), *8664*
- earthquake resistant structures, foundations, soil structure interaction, underground, Meade (K.P.), Keer (L.M.), *9346*
- adhesives, bending, composite materials, joints, stress analysis, Yuceoglu (U.), Updike (D.P.), *9488*
- bed load, bottom irregularities, sediment transport, Ranga Raju (K.G.), Garde (R.J.), (et al.), *9519*
- channel flow, heat transfer, non newtonian flow, power law fluids, viscoelastic fluids, Shulman (Z.P.), Khusid (B.M.), (et al.), *9708*
- bending, plates (anisotropic), plates (sandwich), Berar (C.), *10158*
- concentrated loads, large displacement, plates, plates (nonlinear), Banerjee (B.), *10159*
- beams, reinforced concrete, shear, Batchelor (B. De V.), Kwun (M.), *10359*

shear transfer, modeling, reinforced concrete, Buyukozturk (O.), Connor (J.J.), (et al.), *534*

- cracks, reinforced concrete, Bazant (Z.P.), Tsubaki (T.), (et al.), *2519*
- torsion, trusses, Schmidt (L.C.), *2537*

shear walls, finite element methods, structural response, vibration, Li (G.C.), Desai (C.S.), *2344*

- frames, multistory frames, structural analysis, Basu (A.K.), Nagpal (A.K.), *2536*
- multistory frames, plates (folded), walls, Kristek (V.), *2542*
- earthquake effects, slabs, Paulay (T.), Taylor (R.G.), *3010*
- elastoplasticity, structural analysis, Pekau (O.A.), Gocevski (V.), *3513*
- buildings (tall), frames, variational methods, Arvidsson (K.), *3549*
- bending, floors, slabs, stiffness, Coull (A.), Wong (Y.C.), *3553*
- beams (thin section), thin walled structures, Coull (A.), Low (C.K.), *6211*
- structural analysis, walls, Smith (B.S.), Abate (A.), *6527*
- elastoplasticity, structural analysis, torsion, Coull (A.), Tawfik (S.Y.), *8457*

shear waves, clay, elastic constants, field tests, Abbiss (C.P.), *1318*

- solutions (material), surface waves, viscoelastic fluids, De Feijter (J.A.), Benjamins (J.), *1489*
- internal state variables, viscoelastic fluids, viscoelastic waves, Bampi (F.), Morro (A.), *1971*
- random media, seismic waves, Chu (L.), Askar (A.), (et al.), *3005*
- cracks, elastodynamics, electroelasticity, piezoelectrics, scattering, Sabbagh (H.A.), *3240*
- elastic waves, resonance, scattering, spherical bodies, Brill (D.), Gaunaurd (G.), (et al.), *3947*
- continuum mechanics, plastic waves, Druianov (B.A.), *5237*
- ocean bed, reflection, sedimentation, underwater acoustics, Vidmar (P.J.), *6907*
- attenuation, sand, Brunson (B.A.), Johnson (R.K.), *7430*
- diffraction, edge cracks, elastic bodies, Roy (A.), Visalakshi (N.), *8340*
- composite materials, elastic waves, propagation, random media, Kinra (V.K.), Anand (A.), *10235*
- compressional waves, ocean bed, sedimentation, wave interactions, Fryer (G.J.), *10237*
- elastoplasticity, impact, supersonic flow, Freund (L.B.), Douglas (A.S.), *11161*
- dilatancy, magneto fluid dynamics, non newtonian flow, theory, Pavlov (K.B.), *11829*

Sheela (B.V.), mesh generation, optimization, random search, stochastics, *6099*

- algorithms, mathematical programming, numerical methods, optimal control, Ramamoorthy (P.), *6140*

sheet metal, asymptotic behavior, residual stresses, series, Yagoda (H.P.), *54*

- deformation (finite), elasticity (nonlinear), protoelasticity, Kydoniefs (A.D.), *233*
- elasticity (linear), orthotropic materials, winding, Yagoda (H.P.), *236*
- anisotropic media, necking, rate sensitivity, strain rate, Neale (K.W.), Chater (E.), *274*
- folds, plastic behavior, Johnson (W.), Yu (T.X.), *434*
- brittle materials, mixed mode fracture, orthotropic materials, Lemant (F.), Pineau (A.), *454*
- forming, plastic behavior, roughness, surfaces, Yamaguchi (K.), Nishimura (S.), (et al.), *1345*
- plates (anisotropic), stress strain relationships, yield criteria, Ilahi (M.F.), *2275*
- forming, impact, Grieve (R.J.), Wambugu (N.W.), *2396*
- bending (elastic), bending (plastic), finite element methods, plane strain, Oh (S.I.), Kobayashi (S.), *2399*
- drawing, flaws, forming, Ghosh (S.K.), *2400*
- cold working, deformation (plastic), stress strain relationships, Reif (T.), *3422*
- crack propagation, stochastic processes, Borodachev (N.M.), *3440*
- explosive forming, materials processing, tubes, Berman (I.), Schroeder (J.W.), *4473*
- anisotropic media, cold working, deformation (plastic), rolling, Honda (K.), Hosokawa (N.), (et al.), *5271*
- materials properties, rolling, Scrutton (R.F.), Lenard (J.G.), *5276*
- contact problems, elasticity (nonlinear), shells (thin), Wang (C.Y.), *6167*
- elasticity (nonlinear), springs, Wang (C.-Y.), *8234*
- aluminum alloys, brittle fracture, crack growth, fracture toughness, stress intensity factor, Yablonskii (I.S.), *9432*
- inspection, magnetic field, mechanical properties, rolling, Timoshenko (N.N.), Pyatunin (G.A.), (et al.), *10322*

Shefer (L.A.), damage (cumulative), fatigue, random loading, Ezhov (V.G.), (et al.), *3542*

Sheih (C.M.), air pollution, dispersion, plumes, *4057*

Sheikh (A.K.), life expectancy, machine design, optimization, probability, tools, Kendall (L.A.), (et al.), *1346*

Sheiman (V.A.), gases, heat transfer, mass transfer, suspensions, Nikolaichik (L.V.), *10664*

Sheinman (I.), dynamic analysis, numerical analysis, shells (of revolution), Zamir (I.), *4374*

- see Simitses (G.J.), *11124*

Shekriladze (I.G.), boiling, bubble dynamics, film boiling, heat transfer, nucleate boiling, *8691*

Shekriladze (I.G.), capillary surfaces, condensation, evaporation, heat transfer, Rusishvili (D.G.), *10649*

Shelagin (Yu.N.), see Kokorev (L.S.), *3818*

Sheldon (G.P.), cracks, fatigue, fracture mechanics, gas turbines, powder metallurgy, Cook (T.S.), (et al.), *2416*

shells, computing techniques, existence theorems, mathematical methods, Visarion (V.), Migdalovici (M.), *69*

- finite element techniques, plates, structural analysis, survey, variational methods, Pian (T.H.H.), Tong (P.), *83*
- asymptotic behavior, layered media, tubes, Widera (G.E.O.), Johnson (M.W.), (et al.), *289*
- membranes, stress functions, stresses, Simmonds (J.G.), *308*
- displacement, edge effects, Nair (S.), *313*
- buckling, catastrophe theory, elastic stability, elasticity, Hui (D.), Hansen (J.S.), *329*
- casting, cooling, freezing, rupture, stefan problem, Oki (S.), *440*
- cooling towers, wind loads, Harnach (R.), Niemann (H.-J.), *1450*
- bending, finite element techniques, interpolation, locking, matrix methods, mindlin plates, plates, Tsach (U.), *2070*
- panels (curved), Oishanskii (V.P.), *2269*
- plates (orthotropic), theory, Galimov (Sh.K.), *2277*
- submerged bodies, underwater acoustics, Vasudevan (R.), Dimaggio (F.L.), *2961*
- stability theory, variational methods, Valid (R.), *3242*
- plates, theory, Galimov (K.Z.), *3298*
- bending, shells (parabolic velaroidal), Hadid (H.A.), Lynn (P.P.), *3300*
- cooling towers, imperfections, reinforced concrete, stress analysis, Kato (S.), Yokoo (Y.), *3552*
- finite element methods, pressure vessels, stress analysis, Aggarwal (S.K.), Nayak (G.C.), (et al.), *3566*
- acoustic waves, scattering, Kachalov (A.P.), *3937*
- creep, elastoplasticity, finite element techniques, Levy (A.), *4353*
- design (optimum), holes, reinforced openings, Pelekh (B.L.), Gleba (A.Yu.), *4380*
- buckets, experimental mechanics, Angehrn (R.), Schweizer (F.), (et al.), *4383*
- cooling towers, experimental mechanics, wind loads, Niemann (H.-J.), Ruhwedel (J.), *4542*
- design, offshore structures, Fumes (O.), Loset (O.), *4544*
- edge effects, thermoelasticity (steady), Rogacheva (N.N.), *4813*
- membranes, mesh generation, nonlinear characteristics, plates, Jones (R.E.), Vos (R.G.), *5027*
- beams, continuum mechanics, elasticity, solid mechanics, Reismann (H.), Pawlik (P.S.), *5069, book*
- composite materials, elasticity (linear), photoplasticity, viscoelasticity, Kuznetsov (G.B.) eds., Shakirov (N.V.), *5071, book*
- finite difference methods, membrane theory, theory, Csonka (P.), *5156, book*
- developable surfaces, membrane theory, Pina (E.), Campoy (G.), *5158*
- plates, stability theory, stress analysis, vibration, Galimov (K.Z.) eds., Sachenkov (A.V.), *6215, book*
- plates (folded), structural analysis, Srinivasa Rao (P.), Sitapati Rao (P.), *6533*
- continuum mechanics, solid mechanics, variational methods, Mason (J.), *7129, book*
- curved elements, finite element techniques, shells (shallow), slabs, Mohr (G.), *7207*
- dynamic analysis, elastoplasticity, finite amplitude, imperfections, Ishizaki (T.), Bathe (K.-J.), *7216*

- constitutive equations, elasticity (linear), Markov (P.), *7338*
- finite element techniques, penalty function, Mohr (G.A.), *7348*
- plates, stability theory, Khoroshun (L.P.), *7357*
- plates, vibration, Soedel (W.), *7388*
- boundary conditions, composite structures, connected bodies, vibration, Averbukh (A.Z.), Veitsman (R.I.), (et al.), *8222*
- anisotropic structures, plates (sandwich), rayleigh ritz method, vibration (free), Kuznetsov (N.D.), Kartashov (G.G.), (et al.), *8305*
- cracking, fracture, limit analysis, reinforced concrete, Coenen (J.H.), *8439*
- numerical analysis, plates, He (G.-Q.), Zhang (W.-Y.), *9264*
- flexure, shells (long), torsion (plastic), Tikhomirov (V.V.), *9265*
- membrane theory, theory, Pfluger (A.), *9266*
- imperfections, numerical analysis, Aronson (A.Ya.), Gaidaichuk (V.V.), (et al.), *9270*
- buckling, design criteria, Bushnell (D.), *9290*
- elbows, penalty function, pipes, stiffness matrix, Bathe (K.J.), Almeida (C.A.), *10063*
- buckling, elastoplasticity, large displacement, pressurized components, Galletly (G.D.), *10185*
- cosserat solids, micromechanics, plates, Kayuk (Ya.F.), Zhukovskii (A.P.), *11116*
- dynamic analysis, structural response, transient effects, Malyshev (A.P.), *11139*
- compressible flow, eigenvalue problems, fluid-structure interaction, Simonov (I.V.), *11669*

shells (anisotropic), pressure vessels, shells (of revolution), shells (sandwich), underwater structures, Palaninathan (R.), Montague (P.), *320*

- composite materials, polymers, structural stability, Tomashevskii (V.T.), Yakovlev (V.S.), *1257*
- composite materials, fibers, shells (stiffened), structural stability, Ershov (N.P.), *2304*
- finite element methods (hybrid), finite strain, large displacement, shells (sandwich), Chang (T.Y.), Sawamiphakai (K.), *3311*
- buckling, numerical methods, shear loading, Cohen (G.A.), *3336*
- finite element techniques, laminates, shells (of revolution), Venkatesh (A.), Rao (K.P.), *4194*
- elasticity (linear), shells (cylindrical), Podlichuk (Yu.N.), *6224*
- pressure vessels, shells (of revolution), stress analysis, tanks, wirewound vessels, Timonin (A.M.), *9464*
- shells (cylindrical), stress intensity factor, Kostenko (I.S.), *10157*

shells (axisymmetric), holes, pressure vessels, stress analysis, Reuss (P.), *241*

- axisymmetric loading, elasticity, finite element techniques, Surana (K.S.), *1135*
- shells (shallow), structural stability, Srubshchik (L.S.), *1253*
- elastoplasticity, snap-through, Toi (Y.), Ishinabe (M.), (et al.), *7365*
- membrane theory, shells (of revolution), shells (thin), Hsu (T.C.), Shang (H.M.), *10147*
- design (ultimate strength), numerical methods, plates, strength, Dzygadlo (Z.), Olejnik (A.), *10350*
- acoustic loading, buckling, Kornev (V.M.), Stepanenko (M.V.), *11643*
- hydroelasticity, scale models, submerged bodies, Takeuchi (K.), Desanto (D.F.), *11672*

shells (conical), postbuckling behavior, shells (sandwich), Magnucki (K.), *2289*

- cyclic loading, dynamic loads, dynamic stability, Massalas (C.), Dalamangas (A.), (et al.), *8273*
- thermal stresses, thermoelasticity (steady), Harinath (K.S.), *8873*
- dynamic properties, vibration (torsional), Tomar (J.S.), Gupta (D.C.), (et al.), *9318*
- plasticity, shells (of revolution), Vyshedkevich (I.U.), *10155*
- averaging, eigenvalues, shells (stiffened), vibration (free), Lesnichaya (V.A.), Pisanko (A.N.), *10214*
- elastic waves, impact, Barez (F.), Goldsmith (W.), *11157*

shells (cylindrical), inclusions, pressurized components, Bonde (D.H.), Rao (K.P.), *253*

- deformation, displacement, foundations, tanks, Brandes (K.), *307*
- deformation, elastoplasticity, pressure vessels, shells (plastic), Ohashi (Y.), Okouchi (T.), *312*
- shells (long), Sanders (J.L.) Jr., *314*
- axial loading, bearing capacity, buckling (nonlinear), shells (orthotropic), Steinhardt (O.), Pfeiffer (M.), *318*
- compression, elastoplasticity, Kovalenko (V.A.), Piskun (V.V.), (et al.), *322*
- buckling, Nazarov (V.A.), *348*
- buckling, holes, shells (thin), Toda (S.), *349*
- buckling, Ponomarev (K.K.), *353*
- dynamic stability, shells (stiffened), springs, Palamarchuk (V.G.), *356*
- dynamic response, flexural waves, vibration, wave engines, Fuller (C.R.), *374*
- frequency response, vibration (free), Palchevskii (A.S.), Pryadko (A.A.), (et al.), *375*
- dynamic response, eigenvalues, vibration (free), El Raheb (M.), Babcock (C.D.) Jr., *376*
- nonlinear analysis, vibration (parametric), Bogdanovich (A.E.), Feldmane (E.G.), *377*
- offshore structures, residual stresses, welded joints, White (J.D.), *529*
- equations of motion, shells (thin), Akeju (T.A.I.), *1233*
- contact problems, stress concentration, structural support, Kanaun (S.K.), Elkovskaya (T.M.), *1237*
- bending, bends, pipes, tubes, Kitching (R.), Zarrabi (K.), (et al.), *1241*
- impulsive loading, transient effects, vibration (forced), Ujihashi (S.), Okazaki (T.), (et al.), *1279*
- crack arrest, dynamic fracture, impact, surface flaws, Popelar (C.H.), Gehlen (P.C.), (et al.), *1383*
- containers (partially filled), hydroelasticity, shells (fluid-filled), vibration, Perekhrest (V.I.), Ulitin (G.M.), *1610*
- defects, stress strain relationships, Pobedrya (B.E.), Levin (V.D.), *2272*
- collapse, compression, postbuckling behavior, Foster (C.G.), *2305*
- buckling, prebuckling behavior, structural stability, Brush (D.O.), *2308*
- asymptotic methods, waves, Protsenko (A.M.), *2360*
- impulsive loading, plastic behavior, Ramu (S.A.), Iyengar (K.J.), *2373*
- constraints, design (optimum), shells (stiffened), Rao (S.S.), Reddy (E.S.), *2511*
- fluid-structure interaction, impact, numerical methods, Belytschko (T.), Mullen (R.), *2711*
- nuclear reactors, ratchetting, thermal effects, thermoplasticity, Goodman (A.M.), *2970*
- anisotropic media, cooling, polymers, shells (thick), thermal stresses, Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- combined loading, creep, pressurized components, Lau (J.H.), Listvinsky (G.K.), *3252*
- flexible bodies, shafts, strength, Mizoguchi (K.), Shirakawa (K.), (et al.), *3285*
- experimental methods, imperfections, shells (stiffened), Yaffe (R.), Singer (J.), (et al.), *3313*
- buckling, compression, imperfections, mode interaction, postbuckling behavior, shells (stiffened), Byskov (E.), Hansen (J.C.), *3323*
- buckling (experimental), buckling (plastic), elastoplasticity, shells (plastic), Croll (J.G.A.), *3337*
- experimental mechanics, vibration (free), Voloshanovskii (Yu.P.), *3371*
- dynamic analysis, vibration (free), wirewound vessels, Greenberg (J.B.), Stavsky (Y.), *3374*
- multiple cracks, stress intensity factor, three dimensional formulation, torsion, Shibuya (T.), Koizumi (T.), (et al.), *3457*
- elastoplasticity, flexure, plastic behavior, shells (shallow), Kolesnik (I.A.), Troshin (V.G.), *4372*
- beams (thin section), shear loading, thin walled structures, warping, Kholoptsev (V.V.), *4373*
- axial loading, elastoplasticity, shells (plastic), torque, Ermakov (S.V.), *4375*
- boundary conditions, variable section, Tawfik (O.M.), *4385*
- buckling, postbuckling behavior, Babenko (V.I.), *4392*
- elliptical bodies, structural stability, torsion, Konoplev (Yu.G.), Kopp (A.V.), *4398*
- buckling (nonlinear), moving loads, shells (orthotropic), Bryukalo (L.A.), Gulyaev (V.I.), *4399*
- experimental results, plastic behavior, steel, Ohashi (Y.), Tanaka (E.), *5113*
- concrete, nonlinear analysis, plastic behavior, Chen (W.F.), Suzuki (H.), (et al.), *5116*
- shells (thin), structural stability, wind loads, Brendel (B.), Ramm (E.), (et al.), *5183*
- dynamic response, shells (shallow), vibration (free), Emmerling (F.A.), Kloss (R.A.), *5218*
- dynamic properties, shells (of revolution), shells (stiffened), vibration, Moshenskii (N.L.), *5219*
- dynamic stresses, vibration (forced), Ujihashi (S.), Itoh (A.), (et al.), *5221*
- dynamic response, shells (stiffened), vibration (free), Amiro (I.Ya.), Palamarchuk (V.G.), *5223*
- anisotropic media, thermoelasticity (steady), Biswas (P.), *5799*
- contact problems, interference fits, Murakami (T.), Yanuki (T.), (et al.), *6169*
- cyclic loading, ductility, plastic behavior, Mozharovskii (N.S.), Bobyr (N.I.), *6186*
- bending (elastic), bends, pressurized pipes, shells (thin), Whatham (J.F.), *6220*
- cracks, failure, pressurized pipes, Kitching (R.), Zarrabi (K.), *6221*
- elasticity (linear), shells (anisotropic), Podlichuk (Yu.N.), *6224*
- pressurized components, shells (stiffened), Hwang (K.C.), Zheng (Z.-C.), *6253*
- bending (elastic), structural stability, thin walled structures, Makeev (E.M.), *6256*
- bifurcation, buckling, shells (sandwich), Hegedus (I.), *6257*
- lyapunov's functions, stability theory, Leipholz (H.H.E.), *6258*
- axial loading, failure, joints, Bushnell (D.), Holmes (A.M.C.), (et al.), *6259*
- buckling, cold working, shells (stiffened), stiffened structures, welding, Bushnell (D.), *6262*
- buckling, shells (stiffened), torsion, Yen (S.-W.), *6263*
- axial loading, collapse, shells (stiffened), Walker (A.C.), Sridharan (S.), *6264*
- bearing capacity, composite materials, plastics, thermal effects, Tretyachenko (G.N.), Dzyuba (V.S.), (et al.), *6265*
- vibration (nonlinear), Nguyen Xuan Hung, *6301*
- buckling, shells (stiffened), vibration (forced), Singer (J.), *6302*
- moving loads, response, underground, Pozhuev (V.I.), *6327*
- dynamic response, moving loads, shells (sandwich), Pozhuev (V.I.), *6344*
- fluid boundaries, impact, Dvorkin (Ya.P.), *6370*
- fluid boundaries, impact, Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6372*
- modes, noise, Dowell (E.H.), *6925*
- beams (thin section), bending (elastic), thin walled structures, Antonenko (E.V.), *7325*

- composite materials, plastics, shells (plastic), Khoroshun (L.P.), Strelchenko (I.G.), *7341*
- buckling, dynamic stability, nonlinear analysis, Brendel (B.), Ramm (E.), *7360*
- dynamic stability, imperfections, impulsive loading, transient loading, Zimcik (D.G.), Tennyson (R.C.), *7361*
- elastoviscoplasticity, fracture mechanics, j-integral, work hardening, yield condition, Carmignani (C.), Vitale (E.), *8157*
- belts, conveyors, plates (circular), De Boer (R.), Kuntzsch (V.), (et al.), *8242*
- buckling (torsional), postbuckling behavior, pressurized pipes, Kodama (S.), Otomo (K.), (et al.), *8258*
- bifurcation, critical load, shells (nonlinear), shells (shallow), Andreev (L.V.), Zavarykin (L.G.), (et al.), *8267*
- dynamic stability, shells (thin), Sachenkov (A.V.), Bakhtieva (L.U.), *8270*
- buckling, imperfections, shells (stiffened), Hui (D.), Tennyson (R.C.), (et al.), *8271*
- buckling, critical load, imperfections, shells (stiffened), Ellinas (C.P.), Croll (J.G.A.), *8272*
- cyclic loading, dynamic stability, Shirakawa (K.), *8274*
- bonding, dynamic response, elastic foundations, Chonan (S.), *8313*
- shells (long), stress analysis, Jezso (K.), *9268*
- experimental results, joints, plates (circular), Szeki (J.), *9272*
- shells (thick), theory, Tawfik (O.M.), *9277*
- bending, buckling, shells (stiffened), Kan (S.N.), Kaplan (Yu. I.), (et al.), *9292*
- axial loading, pressure, shells (stiffened), Harding (J.E.), *9294*
- dynamic analysis, plates (circular), vibration (free), Rott (W.), *9319*
- dynamic analysis, prestressed structures, vibration (free), Kukudzhanov (S.N.), *9322*
- plates, shells (fluid-filled), wave generation, Bagdoev (A.G.), Movsisyan (L.A.), *9334*
- acoustic loading, fluid-structure interaction, wave equations, Gordienko (V.I.), Kubenko (V.D.), (et al.), *9336*
- mathematical models, nonlinear programming, optimization, stress analysis, stresses, Michael (W.), Siddall (J.N.), *10090*
- shells (anisotropic), stress intensity factor, Kostenko (I.S.), *10157*
- axisymmetric loading, buckling, imperfections, Croll (J.G.A.), Batista (R.C.), *10177*
- buckling, shells (stiffened), Gavrilenko (G.D.), Sitnik (A.S.), *10178*
- dynamic stability, shells (viscoelastic), thin walled structures, Koltunov (M.A.), Karimov (A.I.), (et al.), *10181*
- blades, rayleigh ritz method, vibration (free), Leissa (A.W.), Lee (J.K.), (et al.), *10210*
- impedance methods, vibration (free), Eichelberger (E.C.), *10211*
- dynamic properties, vibration (free), Barron (R.), Villanueva (C.), *10212*
- damping, dynamic response, vibration (forced), Leissa (A.W.), Iyer (K.M.), *10213*
- moving loads, vibration (free), Mulyukov (R.M.), *10215*
- dynamic analysis, shells (sandwich), vibration (free), Bespalova (E.I.), *10221*
- composite structures, design (minimum weight), flutter, supersonic flow, Kosichenko (A.A.), Pochtman (Yu.M.), (et al.), *10763*
- pressurized components, shells (nonlinear), stability theory, Kabanov (V.V.), Zheleznov (L.P.), *11112*
- finite element techniques, shells (stiffened), Thomas (I.T.), Webber (J.P.H.), *11117*
- axial loading, buckling, holes, Toda (S.), *11123*
- arches, dynamic stability, frames, Simitses (G.J.), Sheinman (I.), *11124*
- dynamic analysis, vibration (free), Takahashi (S.), Suzuki (K.), (et al.), *11133*
- dynamic stresses, shells (sandwich), vibration (nonlinear), Ertapinar (A.), Mengi (Y.), *11134*
- dynamic analysis, fins, shells (stiffened), vibration (free), Palamarchuk (V.G.), *11136*
- elastic waves, propagation, vibration, Guz (A.N.), *11138*
- composite materials, design (optimum), stiffened structures, Pochtman (Yu.M.), Tugai (O.V.), *11324*
- bodies (liquid filled), fluid-structure interaction, vibration, Chung (H.), Turula (P.), (et al.), *11627*
- axial flow, compressible flow, fluid-structure interaction, Paidoussis (M.P.), Ostoja-Starzewski (M.), *11636*
- acoustic waves, fluid-structure interaction, shock waves, submerged bodies, Huang (H.), *11666*
- acoustic waves, fluid-structure interaction, submerged bodies, transient loading, Geers (T.L.), Yen (C.-L.), *11680*
- crossflow, flutter, thin walled structures, Paidoussis (M.P.), Wong (D.T.-M.), *11841*

shells (ellipsoidal), buckling (experimental), collapse, shells (torispherical), structural stability, Galletly (G.D.), *2309*

- buckling (plastic), pressure vessels, Bushnell (D.), *2310*
- design (optimum), pressure vessels, shells (toroidal), stress analysis, Smith (P.), *2547*
- dyn[illegible]nalysis, shells (of revolution), vibration (free), Filippov (S.B.), *9321*

shells (fluid-filled), containers (partially filled), hydroelasticity, sloshing, surveys, Dimaggio (F.L.), *676*

- convection (free), heat transfer, rayleigh number, Powe (R.E.), Warrington (R.O.), (et al.), *755*
- inertial waves, rotating cylinders, tanks, Wood (W.W.), *1587*
- inertial waves, ray method, rotating bodies, spherical bodies, London (S.), Shen (M.C.), *1599*
- containers (partially filled), hydroelasticity, shells (cylindrical), vibration, Perekhrest (V.I.), Ulitin (G.M.), *1610*
- fluid-structure interaction, shells (coaxial), vibration, Stussi (U.W.), Jemelka (P.), *2710*
- dissipation, submerged bodies, vibration (free), viscous effects, Su (T.C.), *5217*
- fluid-structure interaction, vibration, Kalumuck (K.M.), Huber (P.W.), *7771*
- annuli, fluid-structure interaction, vibration, Pavlovskii (V.S.), Ometsinskaya (E.B.), *9633*
- plates, shells (cylindrical), wave generation, Bagdoev (A.G.), Movsisyan (L.A.), *9334*
- fluid-structure interaction, modes, vibration, Parkus (H.), *9627*
- inertial waves, rotating cylinders, spectra, Scott (W.E.), *11597*
- fluid-structure interaction, shock waves, submerged bodies, Wright (J.P.), Misovec (A.), (et al.), *11664*
- hydroelasticity, vibration, vibration (nonaxisymmetric), Radovinskii (A.L.), *11689*

shells (hyperbolic), buckling, cooling towers, design, vibration, Form (J.), Krings (W.), (et al.), *321*

- cooling towers, design, Almasi (J.), *8458*

shells (hyperbolic paraboloid), large displacement, nailed joints, shells (sandwich), wood structures, Moss (P.J.), Carr (A.J.), (et al.), *2281*

- membrane theory, panels (curved), shells (thin), Layrangues (P.), *3306*
- concrete, experimental mechanics, modeling, Sambanthan (T.G.), Aravindan (P.K.), (et al.), *3309*

shells (long), shells (cylindrical), Sanders (J.L.) Jr., *314*

- shells (outer), shells (sandwich), structural stability, Karimbaev (T.D.), Zhumabaev (M.Zh.), (et al.), *1254*
- boreholes, contact problems, liners, Warren (W.E.), *2270*
- dynamic analysis, vibration (free), Berdichevskii (V.L.), Le Khan Chau, *8314*
- flexure, shells, torsion (plastic), Tikhomirov (V.V.), *9265*
- shells (cylindrical), stress analysis, Jezso (K.), *9268*

shells (nonhomogeneous), bending, curved tubes, finite pure bending, large displacement, tubes, Reissner (E.), *293*

- creep, variational methods, Boldyrev (E.I.), Kurshin (L.M.), (et al.), *7278*

shells (nonlinear), filament winding, reinforced openings, stress analysis, Lykyanenko (P.D.), Makarenkov (A.G.), *251*

- shells (thick), Gulyaev (V.I.), Bazhenov (V.A.), (et al.), *311, book*
- finite element methods (hybrid), large displacement, Boegershausen (H.), *324*
- large displacement, shells (plastic), shells (spherical), Kondo (K.), Pian (T.H.H.), *1234*
- nonlinear theory, Pietraszkiewicz (W.), *1235*
- finite element techniques, large displacement, Kanok-Nukulchai (W.), Taylor (R.L.), (et al.), *1240*
- buckling, shells (spherical), structural stability, Lange (C.G.), Kriegsmann (G.A.), *1252*
- large displacement, strain energy, Libai (A.), Simmonds (J.G.), *2271*
- buckling, shells (spherical), Shilkrut (D.), *3338*
- large displacement, nonlinear theory, Galimov (K.Z.), *4376*
- dynamic analysis, equations of motion, shells (orthotropic), Sokolovskaya (I.I.), *4377*
- bending, finite strain, theory, Pietraszkiewicz (W.), *5161*
- nonlinear analysis, plates (nonlinear), structural stability, Wada (H.), Taki (Y.), (et al.), *5162*
- finite element methods, shells (thin), structural stability, Carnoy (E.G.), *5169*
- buckling (nonlinear), vibration (nonlinear), Novikov (V.V.), *5186*
- finite element techniques, geometric nonlinearities, Hughes (T.J.R.), Liu (W.K.), *7337*
- finite element techniques, pipes, Lazzeri (L.), *7346*
- contact problems, tires, Tielking (J.T.), Schapery (R.A.), *8201*
- dynamic behavior, elastodynamics, Libai (A.), *8246*
- finite element techniques, shells (shallow), Mansfield (L.), *8256*
- bifurcation, critical load, shells (cylindrical), shells (shallow), Andreev (L.V.), Zavarykin (L.G.), (et al.), *8267*
- finite element techniques, nonlinear structures, Hughes (T.J.R.), Liu (W.K.), *9141*
- dynamic behavior, plates (circular), shells (of revolution), shells (viscoelastic), Sullivan (B.J.), Batterman (S.C.), *10154*
- pressurized components, shells (cylindrical), stability theory, Kabanov (V.V.), Zheleznov (L.P.), *11112*

shells (of revolution), composite structures, finite element techniques, residual stresses, Blagonadezhin (V.L.), Dmitriev (A.V.), *92*

- asymptotic methods, Steele (C.R.), *309*
- deformation, elasticity (nonlinear), Myachenkov (V.I.), Yusov (V.N.), *316*
- pressure vessels, shells (anisotropic), shells (sandwich), underwater structures, Palaninathan (R.), Montague (P.), *320*
- elasticity, shells (thin), Deipak (R.), *328*
- design (optimum), pressure vessels, Mansfield (E.G.), *1231*
- membrane theory, shells (membrane), Kisben (S.), *1232*
- frequencies, vibration (free), Goldenveizer (A.L.), *2339*

- shells (stiffened), stress strain relationships, Isakhanov (G.V.), Gulyar (A.I.), (et al.), *3312*
- finite element techniques, laminates, shells (anisotropic), Venkatesh (A.), Rao (K.P.), *4194*
- dynamic analysis, numerical analysis, Sheinman (I.), Zamir (I.), *4374*
- composite materials, residual stresses, Blagonadezhin (V.L.), Vorontsov (A.N.), (et al.), *5100*
- dynamic properties, shells (cylindrical), shells (stiffened), vibration, Moshenskii (N.L.), *5219*
- modal analysis, vibration, Wang (D.-J.), Ren (J.-G.), (et al.), *5220*
- dynamic loads, finite element techniques, Feijoo (R.A.), Jospin (R.J.), (et al.), *5235*
- ceramics, piezoelectric devices, vibration (forced), Gololobov (V.I.), *7400*
- anisotropic media, composite materials, mathematical programming, optimization, polymers, Tomashevskii (V.T.), Nikolaev (B.A.), (et al.), *7594*
- membranes, variational methods, Kreichman (M.M.), Cherevatskii (V.B.), *8248*
- boundary elements, fluid-structure interaction, Walker (S.), *8512*
- mindlin plates, plates, postbuckling behavior, shells (shallow), Pica (A.), Wood (R.D.), *9283*
- dynamic analysis, shells (ellipsoidal), vibration (free), Filippov (S.B.), *9321*
- pressure vessels, shells (anisotropic), stress analysis, tanks, wirewound vessels, Timonin (A.M.), *9464*
- membrane theory, shells (axisymmetric), shells (thin), Hsu (T.C.), Shang (H.M.), *10147*
- cooling towers, membrane theory, thin walled structures, Szalai (J.), *10151*
- bearing capacity, limit analysis, plastic behavior, shells (stiffened), Dekhtyar (A.S.), *10152*
- dynamic behavior, plates (circular), shells (nonlinear), shells (viscoelastic), Sullivan (B.J.), Batterman (S.C.), *10154*
- plasticity, shells (conical), Vyshedkevich (I.U.), *10155*
- shells (stiffened), structural stability, Subbiah (J.), Natarajan (R.), *10179*
- design (optimum), structural optimization, torsion, Gura (N.M.), *11115*

shells (orthotropic), axial loading, bearing capacity, buckling (nonlinear), shells (cylindrical), Steinhardt (O.), Pfeiffer (M.), *318*

- buckling, shells (sandwich), structural stability, Khoroshun (L.P.), Koshevoi (I.K.), *2306*
- dynamic analysis, equations of motion, shells (nonlinear), Sokolovskaya (I.I.), *4377*
- buckling (nonlinear), moving loads, shells (cylindrical), Bryukalo (L.A.), Gulyaev (V.I.), *4399*
- geometric nonlinearities, optimization, shells (thin), Narusberg (V.L.), Rikards (R.B.), (et al.), *5348*
- rayleigh method, shells (spherical), vibration (free), De Souza (V.C.M.), Croll (J.G.A.), *8316*

shells (outer), shells (long), shells (sandwich), structural stability, Karimbaev (T.D.), Zhumabaev (M.Zh.), (et al.), *1254*

- dynamic behavior, steel, strain rate, thermal effects, torsion, Eleiche (A.-S.M.), *2487*

shells (plastic), deformation, elastoplasticity, pressure vessels, shells (cylindrical), Ohashi (Y.), Okouchi (T.), *312*

- large displacement, shells (nonlinear), shells (spherical), Kondo (K.), Pian (T.H.H.), *1234*
- deformation (finite), deformation (plastic), membranes, Selyutin (A.E.), Lebedev (A.A.), *2280*
- deformation (plastic), elastoplasticity, inverse problems, Burlakov (A.V.), Lvov (G.I.), *3307*
- collapse, elastoplasticity, imperfections, shells (spherical), Kao (R.), *3322*
- buckling (experimental), buckling (plastic), elastoplasticity, shells (cylindrical), Croll (J.G.A.), *3337*
- axial loading, elastoplasticity, shells (cylindrical), torque, Ermakov (S.V.), *4375*
- composite materials, plastics, shells (cylindrical), Khoroshun (L.P.), Strelchenko (I.G.), *7341*

shells (sandwich), pressure vessels, shells (anisotropic), shells (of revolution), underwater structures, Palaninathan (R.), Montague (P.), *320*

- dynamic behavior, shells (spherical), vibration (free), Lizarev (A.D.), Rostanina (N.B.), *378*
- shells (long), shells (outer), structural stability, Karimbaev (T.D.), Zhumabaev (M.Zh.), (et al.), *1254*
- large displacement, nailed joints, shells (hyperbolic paraboloid), wood structures, Moss (P.J.), Carr (A.J.), (et al.), *2281*
- postbuckling behavior, shells (conical), Magnucki (K.), *2289*
- buckling, shells (orthotropic), structural stability, Khoroshun (L.P.), Koshevoi (I.K.), *2306*
- finite element methods (hybrid), finite strain, large displacement, shells (anisotropic), Chang (T.Y.), Sawamiphakai (K.), *3311*
- electromagnetic waves, reflection, shells (spherical), Bushnell (D.), *4370*
- hamilton principle, vibration (forced), Dubenets (V.G.), *4436*
- bifurcation, buckling, shells (cylindrical), Hegedus (I.), *6257*
- dynamic response, moving loads, shells (cylindrical), Pozhuev (V.I.), *6344*
- laminates, layered media, shear, thermal stresses, thermoelasticity, Khoroshun (L.P.), Babich (D.V.), *6953*
- composite structures, holes, laminates, Shnerenko (K.I.), *8221*
- dynamic analysis, harmonic waves, plates (sandwich), Khoroshun (L.P.), Ivanov (Yu.A.), *9327*
- dynamic analysis, shells (cylindrical), vibration (free), Bespalova (E.I.), *10221*
- dynamic stresses, shells (cylindrical), vibration (nonlinear), Ertepinar (A.), Mengi (Y.), *11134*
- dynamic analysis, vibration, Kuznetsov (N.D.), Kartashov (G.G.), *11137*

shells (shallow), boundary conditions, displacement, Galimov (K.Z.), *315*

- shells (axisymmetric), structural stability, Srubshchik (L.S.), *1253*
- elastoplasticity, flexure, plastic behavior, shells (cylindrical), Kolesnik (I.A.), Troshin (V.G.), *4372*
- buckling (experimental), shells (spherical), Yamada (S.), Uchiyama (K.), (et al.), *5171*
- dynamic response, shells (cylindrical), vibration (free), Emmerling (F.A.), Kloss (R.A.), *5218*
- curved elements, finite element techniques, shells, slabs, Mohr (G.), *7207*
- beams (thin section), computer programming, elastoplasticity, Larkin (L.A.), *7217*
- computer aided design, shape factors, structural design, thin walled structures, Alpa (G.), Bozzo (E.), (et al.), *7336*
- beams (curved), curved elements, digital simulation, forming, Stolarski (H.), Belytschko (T.), *8142*
- finite element techniques, shells (nonlinear), Mansfield (L.), *8256*
- bifurcation, critical load, shells (cylindrical), shells (nonlinear), Andreev (L.V.), Zavarykin (L.G.), (et al.), *8267*
- asymptotic behavior, shells (spherical), stability theory, Larchenko (V.V.), *8268*
- buckling, dimpling, shells (spherical), Wan (F.Y.M.), *8269*
- inserts, junctions, shells (spherical), stress analysis, Varga (K.), *9269*
- curved surfaces, fundament, structural analysis, Tepavitcharov (A.), Ljutzkanov (D.), (et al.), *9271*
- mindlin plates, plates, postbuckling behavior, shells (of revolution), Pica (A.), Wood (R.D.), *9283*
- buckling, imperfection sensitivity, postbuckling behavior, Srubshchik (L.S.), *9284*
- existence theorems, postbuckling theory, Kubrusly (R.S.), *10165*

shells (spherical), elasticity (linear), stamping, stress intensity factor, torsion, Aleksandrov (V.M.), Karpenko (V.A.), *244*

- buckling (experimental), reinforced openings, Gudramovich (V.S), Diskovskii (I.A.), *351*
- dynamic behavior, shells (sandwich), vibration (free), Lizarev (A.D.), Rostanina (N.B.), *378*
- explosive loading, plasticity, Anantha Ramu (S.), Iyengar (K.J.), *408*
- shells (thick), thermal effects, thermoplasticity, Durban (D.), *928*
- large displacement, shells (nonlinear), shells (plastic), Kondo (K.), Pian (T.H.H.), *1234*
- buckling, shells (nonlinear), structural stability, Lange (C.G.), Kriegsmann (G.A.), *1252*
- modal analysis, shells (thin), vibration (free), Skudrzyk (E.J.), *1278*
- convection (free), differential equations (ordinary), grashof number, Singh (S.N.), Chen (J.), *1689*
- implosion, laser plasma interaction, nuclear fusion, turbulence (transport), Lykov (V.A.), Murashkina (V.A.), (et al.), *1782*
- reinforced openings, stress concentration, Pelekh (B.L.), Galasi (A.A.), (et al.), *2268*
- axisymmetric loading, bending, shells (perforated), Nagorski (R.), *2273*
- collapse, elastoplasticity, imperfections, shells (plastic), Kao (R.), *3322*
- buckling, shells (nonlinear), Shilkrut (D.), *3338*
- electromagnetic waves, reflection, shells (sandwich), Bushnell (D.), *4370*
- brittle materials, composite materials, cyclic loading, experimental mechanics, Amelyanovich (K.K.), Podgornyi (L.N.), *4547*
- buckling (experimental), shells (shallow), Yamada (S.), Uchiyama (K.), (et al.), *5171*
- fourier transform, vibration (free), Bhattacharyya (R.), *5224*
- buckling (large amplitude), imperfections, plastic behavior, Kao (R.), *6260*
- buckling (nonlinear), dynamic behavior, imperfections, Kao (R.), *6266*
- fluid boundaries, impact, Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6371*
- boundary integral methods, condensation, dynamic response, pressure vessels, reactor structures, steam, Krieg (R.), Goller (B.), (et al.), *6549*
- convection, hydrodynamic stability, rayleigh number, rotating fluids, Geiger (G.), Busse (F.), *6787*
- holes, stress concentration, Reissner (J.E.), *7333*
- cavities, elastic bodies, transient effects, transient loading, Duffey (T.A.), Johnson (J.N.), *7420*
- asymptotic behavior, shells (shallow), stability theory, Larchenko (V.V.), *8268*
- buckling, dimpling, shells (shallow), Wan (F.Y.M.), *8269*
- rayleigh method, shells (orthotropic), vibration (free), De Souza (V.C.M.), Croll (J.G.A.), *8316*
- impulsive loading, radial loading, viscoelasticity (dynamic), Guelin (P.), Nowacki (W.K.), (et al.), *8345*
- annular flow, convection (forced), rotating bodies, secondary flow, Dallman (R.J.), Douglass (R.W.), *8720*
- heat transfer, rotating bodies, Belvedere (G.), Paterno (L.), (et al.), *8990*
- aneurysms, biomechanics, heart, stress analysis, Radhakrishnan (S.), Ghista (D.N.), (et al.), *9084*
- inserts, junctions, shells (shallow), stress analysis, Varga (K.), *9269*
- modal analysis, rotary inertia, shear, vibration (forced), Shenderov (E.L.), *9337*

- containers (partially filled), nonlinear analysis, pendulum analogy, sloshing, Sayar (B.A.), Baumgarten (J.R.), *9632*
- boundary layer, fluid injection, heat transfer, supersonic flow, Zinchenko (V.I.), Trofimchuk (E.G.), *10682*
- shells (thick), transient loading, vibration (free), Gurkok (A.), Ertepinar (A.), *11132*
- fluid-structure interaction, pressure distribution, submerged bodies, transient effects, transient loading, Neilson (H.C.), Everstine (G.C.), (et al.), *11635*
- acoustic loading, fluid-structure interaction, transient loading, Podstrigach (Ya.S.), Galazyuk (V.A.), (et al.), *11678*

shells (stiffened), buckling (thermal), failure, thermoelasticity, Reznikov (B.S.), *352*

- dynamic stability, shells (cylindrical), springs, Palamarchuk (V.G.), *356*
- dynamic response, elastic waves, Mikhailov (A.M.), *397*
- discontinuities, plates, theory, Mikhailov (B.K.), *2278, book*
- composite materials, fibers, shells (anisotropic), structural stability, Ershov (N.P.), *2304*
- constraints, design (optimum), shells (cylindrical), Rao (S.S.), Reddy (E.S.), *2511*
- shells (of revolution), stress strain relationships, Isakhanov (G.V.), Gulyar (A.I.), (et al.), *3312*
- experimental methods, imperfections, shells (cylindrical), Yaffe (R.), Singer (J.), (et al.), *3313*
- buckling, compression, imperfections, mode interaction, postbuckling behavior, shells (cylindrical), Byskov (E.), Hansen (J.C.), *3323*
- dynamic properties, shells (cylindrical), shells (of revolution), vibration, Moshenskii (N.L.), *5219*
- dynamic response, shells (cylindrical), vibration (free), Amiro (I.Ya.), Palamarchuk (V.G.), *5223*
- pressurized components, shells (cylindrical), Hwang (K.-C.), Zheng (Z.C.), *6253*
- buckling, cold working, shells (cylindrical), stiffened structures, welding, Bushnell (D.), *6262*
- buckling, shells (cylindrical), torsion, Yen (S.-W.), *6263*
- axial loading, collapse, shells (cylindrical), Walker (A.C.), Sridharan (S.), *6264*
- buckling, shells (cylindrical), vibration (forced), Singer (J.), *6302*
- design, ship structures, structural stability, submarine, Niessen (E.), *6542*
- buckling, imperfections, shells (cylindrical), Hui (D.), Tennyson (R.C.), (et al.), *8271*
- buckling, critical load, imperfections, shells (cylindrical), Ellinas (C.P.), Croll (J.G.A.), *8272*
- dynamic analysis, plates (stiffened), Zhigalko (Yu.P.), Dmitrieva (L.M.), *8311*
- bending, buckling, shells (cylindrical), Kan (S.N.), Kaplan (Yu. I.), (et al.), *9292*
- axial loading, pressure, shells (cylindrical), Harding (J.E.), *9294*
- reinforced concrete, thin walled structures, Gupta (A.K.), *10150*
- bearing capacity, limit analysis, plastic behavior, shells (of revolution), Dekhtyar (A.S.), *10152*
- buckling, shells (cylindrical), Gavrilenko (G.D.), Sitnik (A.S.), *10178*
- shells (of revolution), structural stability, Subbiah (J.), Natarajan (R.), *10179*
- beams (thin section), biaxial loading, buckling, Ashour (H.A.), Sobel (L.H.), *10180*
- averaging, eigenvalues, shells (conical), vibration (free), Lesnichaya (V.A.), Pisanko (A.N.), *10214*
- finite element techniques, shells (cylindrical), Thomas (I.T.), Webber (J.P.H.), *11117*
- cylindrical bodies, vibration (forced), Malyutin (I.S.), Nedbai (A.Ya.), *11135*
- dynamic analysis, fins, shells (cylindrical), vibration (free), Palamarchuk (V.G.), *11136*

shells (thick), shells (nonlinear), Gulyaev (V.I.), Bazhenov (V.A.), (et al.), *311, book*

- shells (spherical), thermal effects, thermoplasticity, Durban (D.), *928*
- elastoplasticity, high temperature, shells (thin), Levy (A.), *1205*
- anisotropic media, cooling, polymers, shells (cylindrical), thermal stresses, Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- beams (curved), finite element techniques, isoparametric elements, plates (stiffened), stiffened structures, Jirousek (J.), *7212*
- finite element techniques, mesh generation, structural design, thermal diffusion, Baldur (R.), *8156*
- shells (cylindrical), theory, Tawfik (O.M.), *9277*
- dynamic properties, reinforced concrete, spherical bodies, transient loading, Bak (G.), *9320*
- shells (spherical), transient loading, vibration (free), Gurkok (A.), Ertepinar (A.), *11132*

shells (thin), elasticity, shells (of revolution), Deipak (R.), *328*

- buckling, holes, shells (cylindrical), Toda (S.), *349*
- elastoplasticity, high temperature, shells (thick), Levy (A.), *1205*
- equations of motion, shells (cylindrical), Akeju (T.A.I.), *1233*
- modal analysis, shells (spherical), vibration (free), Skudrzyk (E.J.), *1278*
- thermoelasticity, variational methods, Podstrigach (Ya.S.), Shvets (R.N.), *2963, book*
- membrane theory, panels (curved), shells (hyperbolic paraboloid), Layrangues (P.), *3306*
- gas turbines, structural analysis, Elkelish (M.S.), Elsawaf (A.), (et al.), *3983*
- anisotropic media, cosserat solids, membrane theory, moving surfaces, Murdoch (A.I.), Cohen (H.), *4926*
- finite element methods, shells (nonlinear), structural stability, Carnoy (E.G.), *5169*
- shells (cylindrical), structural stability, wind loads, Brendel (B.), Ramm (E.), (et al.), *5183*
- geometric nonlinearities, optimization, shells (orthotropic), Narusberg (V.L.), Rikards (R.B.), (et al.), *5348*
- contact problems, elasticity (nonlinear), sheet metal, Wang (C.Y.), *6167*
- constitutive equations, plasticity, torsion, Mozharovskaya (T.N.), *6178*
- deformation (finite), nonlinear theory, solid mechanics, Mollmann (H.), *6216, book*
- large displacement, nonlinear materials, Parisch (H.), *6219*
- bending (elastic), bends, pressurized pipes, shells (cylindrical), Whatham (J.F.), *6220*
- finite element techniques, thin walled structures, Idelsohn (S.), *6232*
- finite element techniques, stiffness matrix, Mohr (G.A.), *7349*
- geometric nonlinearities, material nonlinearities, plane stress, reinforced concrete, Arnesen (A.), Sorensen (S.I.), (et al.), *7603*
- dynamic stability, shells (cylindrical), Sachenkov (A.V.), Bakhtieva (L.U.), *8270*
- membrane theory, shells (axisymmetric), shells (of revolution), Hsu (T.C.), Shang (H.M.), *10147*
- magnetoelasticity, plates, surveys, Ambartsumian (S.A.), *79999*

shells (torispherical), buckling (experimental), collapse, shells (ellipsoidal), structural stability, Galletly (G.D.), *2309*

- deformation, plastics, pressure vessels, reinforced bodies, strength, Barton (D.C.), Soden (P.D.), (et al.), *10367*

shells (toroidal), design (optimum), pressure vessels, shells (ellipsoidal), stress analysis, Smith (C.O.), *2547*

- theory, Selskii (Yu.S.), *3305*
- buckling (experimental), experimental mechanics, pressure vessels, thin walled structures, Stanley (P.), Campbell (T.D.), *7622*
- critical load, vibration, Bulygin (A.V.), *11122*

shells (viscoelastic), panels (curved), structural stability, Potapov (V.D.), *2313*

- dynamic behavior, plates (circular), shells (nonlinear), shells (of revolution), Sullivan (B.J.), Batterman (S.C.), *10154*
- dynamic stability, shells (cylindrical), thin walled structures, Koltunov (M.A.), Karimov (A.I.), (et al.), *10181*

Shelomovskii (V.V.), see Kraiko (A.N.), *4591*

Shen (C.Y.), basins, channel flow, critical flow, rotating bodies, weirs, *11614*

Shen (H.T.), free boundary, ice, rivers, velocity profiles, Ackermann (N.L.), *1493*

- dispersion, mixing, rivers, water pollution, *5911*

Shen (M.C.), blood flow, particle fluid flow, peristaltic flow, viscoelastic fluids, Lin (K.C.), (et al.), *1042*

- see London (S.), *1599*

Shen (S.F.), see Hieber (C.A.), *549*

Shenderov (E.L.), modal analysis, rotary inertia, shear, shells (spherical), vibration (forced), *9337*

Shenderov (I.B.), bearings (ball), contact problems, elastoplasticity, spherical bodies, *1198*

Shenderov (L.Z.), inclusions, liquid gas mixture, measurements, two phase flow, void fraction, Kvashnin (A.G.), (et al.), *6977*

Shenderovskii (V.A.), see Gorlei (V.V.), *8707*

Sheng (Y.), detonation, explosions, shock waves (oblique), Sislian (J.P.), *11894*

Shenoy (A.V.), convection (forced), external flow, internal flow, laminar flow, non newtonian flow, turbulent flow, viscoelastic fluids, Mashelkar (R.A.), *9707*

Shensa (M.J.), doppler effect, underwater acoustics, *11898*

Shephard (M.S.), computer graphics, computing techniques, finite element techniques, mesh generation, optimization, Gallagher (R.H.), (et al.), *5031*

- finite element techniques, mesh generation, plane stress, semi infinite media, singularities, Gallagher (R.H.), (et al.), *6104*
- see Haber (R.), *6106*

Shepherd (I.C.), see Cabelli (A.), *7935*

- ducts (curved), modes, reflection, sound propagation, Cabelli (A.), *11934*

Shepherd (J.J.), see Manony (J.J.), *7153*

- see Mahony (J.J.), *7157*

Sheppard (C.G.W.), see Noyce (J.R.), *5640*

Sher (E.), design, diodes, fluidics, laminar flow, scroll diode, *1170*

- compressible flow, exhaust gases, inlet flow, internal combustion engines, two-stroke cycle, *5647*
- diodes, fluidics, internal combustion engines, mass transfer, valves, *11796*

Sherbourne (A.N.), anisotropic media, bending, dynamic relaxation, plates (circular), Murphy (D.N.S.), *305*

Shercliff (J.A.), duct flow, liquid metals, magneto fluid dynamics, nonuniform flow, thermoelectric phenomena, *8812*

- end effects, interface phenomena, magneto fluid dynamics, pipe flow, thermoelectric phenomena, *10735*

Sherman (B.), infiltration, runoff, *5914*

Sherman (C.H.), see Ko (S.-H.), *915*

Sherman (D.C.), convection (free), film boiling, hydrodynamic stability, liquid vapor interface, pipe flow, thermal instability, two phase flow, Sabersky (R.H.), *8693*

Shermer (C.L.), stiffness, strength, structural analysis, torsion, *5365*

Shermergor (T.D.), see Grigorev (O.A.), *2930*

Sherstiannikov (V.A.), see Kalnin (V.M.), *2872*
Sherwood (J.D.), drops, surface tension, viscous effects, *3622*
• electro fluid dynamics, particle fluid flow, rods, suspensions, *11384*
Sheryazdanov (G.B.), see Kiryushchenko (E.V.), *11813*
Shestakov (N.S.), see Asoskov (V.A.), *1755*
Shesterikov (S.A.), constitutive equations, creep, crystals, Melnikov (G.P.), (et al.), *8198*
Shestopal (O.Ya.), see Shestopal (V.O.), *8360*
Shestopal (V.O.), extrusion, galerkin method, high temperature, plastic flow, Shestopal (O.Ya.), *8360*
Sheth (B.V.), blood flow, diffusion, microcirculation, Hellums (J.D.), *3063*
Shettigar (U.R.), see Arunachalam (V.M.), *7126*
Shetty (D.K.), see Rosenfield (A.R.), *4518*
Shevchenko (A.V.), bearings (gas lubricated), bearings (thrust), design (optimum), lubrication (hydrostatic), optimization, Fedotov (V.A.), (et al.), *9968*
Shevchenko (Yu.N.), anisotropy, bauschinger effect, experimental results, yield criteria, Kulakov (S.V.), (et al.), *5115*
• thermal loading, thermoelasticity, viscoelastic materials, Terekhov (R.G.), (et al.), *8880*
Shevchuk (V.G.), flame propagation, powdered fuels, suspensions, Goroshin (S.V.), (et al.), *836*
• see Polishchuk (D.I.), *5628*
• flame propagation, particles, suspensions, Kondratev (E.N.), (et al.), *9768*
Shevtsov (V.I.), see Fursov (V.P.), *9767*
Shiau (L.-C.), chimneys, earthquake effects, elastoplasticity, Yang (T.Y.), *1884*
Shibahara (M.), diffraction, discontinuities, elastic waves, Tateno (S.), (et al.), *403*
Shibata (H.), see Tsuchiya (M.), *1865*
• algorithms, multivariable systems, nonlinear systems, stability theory, stochastic systems, Mayeda (H.), (et al.), *3171*
Shibata (K.), experimental mechanics, fatigue, flaws, fracture, pipes, Oba (T.), (et al.), *7620*
Shibata (T.), see Ozoe (H.), *8703*
• see Inoue (Y.), *11142*
Shibayama (S.), capillary flow, heat pipes, viscous effects, wick, Morooka (S.), *10628*
Shibuya (T.), half space, indentation, punch problems, *3244*
• see Hara (T.), *3245*
• multiple cracks, shells (cylindrical), stress intensity factor, three dimensional formulation, torsion, Koizumi (T.), (et al.), *3457*
• experimental methods, force, impact, plates (circular), Koizumi (T.), (et al.), *4480*
• cylindrical bodies, interface cracks, multiple cracks, stress intensity factor, torsion, Koizumi (T.), (et al.), *10293*
Shidfar (A.), see Jaswon (M.A.), *7272*
Shieh (C.-L.), see Bazant (Z.P.), *430*
Shieh (C.F.), see Frost (W.), *10516*
Shieh (L.-S.), control, decoupling, model reduction, multivariable systems, Wei (Y.-J.P.), (et al.), *9158*
Shieh (L.S.), frequency domain techniques, mathematical models, model reduction, transfer functions, Datta-Barua (M.), (et al.), *4222*
Shield (R.T.), see Choi (I.), *5081*
shielded arc welding, free jets, melting, phase changes, Kolesnichenko (A.F.), *6570*
Shiflett (G.R.), see Laub (A.J.), *8093*
Shih (C.F.), see Kumar (V.), *1381*
Shih (M.T.), see Sih (G.C.), *931*
Shih (S.-C.), distributed parameters, optimal control, singular perturbations, *10085*
Shih (T.-Y.), see Lin (Y.K.), *5889*
Shih (T.M.), boundary layer, computing techniques, differential equations (ordinary), differential equations (partial), nonlinear analysis, Huang (H.J.), *7712*
Shih (T.T.), alloys, crack growth, fatigue, low cycle fatigue, rotors, Donald (J.K.), *3439*
• brittle materials, failure, fracture toughness, notch tests, stress intensity factor, *7519*
Shih (Y.-P.), differential equations (ordinary), least squares, time delay systems, Hwang (C.), (et al.), *2054*
Shiino (J.), cloud physics, precipitation, rainfall, *4079*
Shikida (M.), disks, gas turbines, high speed, steel, strength, Kanayama (Y.), (et al.), *2501*
Shilkrut (D.), buckling, shells (nonlinear), shells (spherical), *3338*
• deformable bodies, numerical methods, *9275*
Shima (A.), see Tsujino (T.), *7119*
• bubble dynamics, collapse, walls, Sato (Y.), *12043*
• see Sato (Y.), *12048*
Shimada (H.), crack propagation, fatigue, fracture mechanics, material testing, Furuya (Y.), *3433*
• see Furuya (Y.), *10271*
Shimada (K.), balancing, flexibility, impedance, rotors, Miwa (S.), *6568*
Shimahashi (Y.), drawing, materials processing, measurements, residual stresses, Saito (K.), *1399*
Shimamura (S.), see Furue (H.), *7958*
Shimatomi (Y.), see Oda (S.), *2565*
Shimazaki (Y.), see Thompson (E.), *2056*
Shimbo (M.), fracture, granular media, stochastics, *10307*
Shimelevich (L.I.), see Dmitriev (S.P.), *184*
Shimemura (E.), see Mori (Y.), *7228*
Shimizu (H.), see Nishiyama (K.), *7107*
Shimizu (M.), see Kunio (T.), *442*
Shimizu (R.), see Ohgaki (M.), *5756*
Shimkovich (D.G.), bodies of revolution, green function, impact jets, separated flow, *1518*
Shimogo (T.), see Shinohara (Y.), *11653*
Shimokawa (T.), composite materials, fatigue, graphite, life expectancy, resins, weibull statistics, Hamaguchi (Y.), *6203*
Shimomura (H.), annular flow, conductivity, heat transfer, insulating materials (thermal), isothermal processes, Okamoto (Y.), (et al.), *765*
Shinar (J.), see Blank (D.), *1160*
Shinbrot (M.), see Reeder (J.), *9623*
Shindo (Y.), automatic transmission, shift mechanism, transmissions, transmissions (planetary), Ito (H.), (et al.), *538*
• cracks, elastic waves, scattering, *7431*
• cracks, dynamic fracture, singular integral equations, stress intensity factor, twisting, *10305*
Shinohara (Y.), seismic loading, submerged bodies, tube bundles, vibration, Shimogo (T.), *11653*
Shinomiya (Y.), see Masubuchi (M.), *11638*
Shinozuka (M.), see Yun (C.-B.), *513*
• earthquake effects, lifeline systems, risk, Takada (S.), (et al.), *7035*
Shinozuka (M.) eds., probabilistic design, reliability, risk, stochastic processes, vibration (random), Yao (J.T.P.), *8447, book*
Shintani (K.), see Kiuchi (M.), *9374*
Shiohata (K.), balancing, dynamic behavior, rotating shafts, vibration (forced), Fujisawa (F.), (et al.), *10216*
• balancing, dynamic analysis, flexible bodies, rotating shafts, Fujisawa (F.), *11146*
Shioji (M.), see Ikegami (M.), *10710*
Shiomi (H.), bending, girders (plate), ultimate strength, *1256*
Shioya (S.), inclusions, plates (nonhomogeneous), thermal stresses, thermoelasticity (steady), Matsuda (M.), *2965*
• see Araki (H.), *2966*
• inclusions, plates (nonhomogeneous), thermal stresses, Matsuda (M.), (et al.), *5794*
• see Murakami (H.), *11173*
Shiozawa (B.), see Wakao (N.), *5541*
ship design, bending (elastic), moment distribution, wave interactions, Loukakis (T.A.), Grivas (S.B.), *994*
• computer aided design, graphical methods, Kupras (L.K.), De Zwaan (A.P.), *995*
• hulls, lateral stability, rolling motion, waves, Burcher (R.K.), *1922*
• diesel engines, propellers (marine), propulsion, Ono (R.), Yoshida (O.), *1923*
• girders, vibration (flow induced), Wereldsma (R.), *4097*
• capsizing, failure, ocean waves, rolling motion, ship motion, stability, Dahle (E.A.), Kjaerland (O.), *5964*
• dynamic stability, ship structures, Langenberg (H.), *7617*
• mission analysis, surface effect, towing tanks, Balquet (R.J.), *8046*
• bearings (thrust), damping, design, stiffness, vibration, Vassilopoulos (L.), *10375*
ship dynamics, elastic bodies, ocean waves, ship motion, vibration, Bishop (R.E.D.), Price (W.G.), *4105*
• drift waves, moored vessels, mooring, waves, Flower (J.O.), *7077*
• naval mechanics, ship towing, towing cables, Latorre (R.), Bernitsas (M.M.), *8036*
• flow obstructions, interaction, shallow water, slender bodies, Yeung (R.W.), Tan (W.T.), *9007*
ship maneuvers, collision models, energy dissipators, offshore structures, Furnes (O.), Amdahl (J.), *993*
• controllability, maneuverability, rudders, steering, Van Amerongen (J.), De Goeij (W.F.), (et al.), *4102*
• anchors, kalman filters, optimal control, ships, Baichen (J.G.), Jenssen (N.A.), (et al.), *6147*
• berthing, docks, harbors, jetties, mathematical models, ships, Fontijn (H.L.), *7074*
ship motion, currents, mooring, stability theory, wind, Sorheim (H.-R.), *3032*
• damping, friction (skin), rolling motion, roughness, Myrhaug (D.), *4098*
• currents, irrotational flow, slender bodies, Triantafyllou (M.S.), *4101*
• elastic bodies, ocean waves, ship dynamics, vibration, Bishop (R.E.D.), Price (W.G.), *4105*
• capsizing, failure, ocean waves, rolling motion, ship design, stability, Dahle (E.A.), Kjaerland (O.), *5964*
• ellipsoids, free boundary, oscillating bodies, singularities, source distribution, Inglis (R.B.), Price (W.G.), *8037*
• nonlinear analysis, ocean waves, rolling motion, Haddara (M.R.), *8038*
• drag, floating structures, ocean waves, Chakraberti (S.K.), *8040*
• capsizing, ocean waves, resonance, rolling motion, stochastics, Blocki (W.), *8041*

- control stability, control surfaces, ocean waves, surge, unsteady flow, Haddara (M.R.), *8042*
- capsizing, models, resonance, rolling motion, safety, Kuo (C.), Welaya (Y.), *8043*
- asymptotic methods, free boundary, slender bodies, Troesch (A.W.), *9006*
- damping, heaving, surface effect, virtual mass, Kim (C.H.), Tsakonas (S.), *9014*
- damping, nonlinear theory, rolling motion, Cardo (A.), Francescutto (A.), (et al.), *10877*
- heaving, pitching, rolling motion, virtual mass, yawing, Troesch (A.W.), *10878*
- canals, finite element methods, linear theory, three dimensional flow, Bai (K.J.), *12087*

ship performance, electric power, motors, propulsion, Rains (D.A.), Vanlandingham (D.J.), (et al.), *5965*
- monitoring, Bradley (M.S.), *5971*
- disabled ships, dynamic analysis, safety, ship towing, Butt (J.A.), Lawrie (S.T.), (et al.), *12085*

ship resistance, green theorem, linear theory, wavemaking resistance, Odabasi (A.Y.), *5961*
- boundary value problems, froude number, hulls, nonlinear theory, wavemaking resistance, Maruo (H.), *5969*
- drag, models, viscous effects, wakes, Townsin (R.L.), Wynne (J.B.), *7073*
- boundary value problems, green function, integral methods, wavemaking resistance, Noblesse (F.), *9008*
- asymptotic methods, irrotational flow, slender bodies, wavemaking resistance, Adachi (H.), *10879*

ship slamming, impact, ocean waves, pitching, vibration, Hansen (H.-J.), *5962*
- hulls, hydroelasticity, penetration, wedges, Gorshkov (A.G.), Vakalov (G.N.), *8628*

ship structures, bridges (suspension), buildings (tall), heat exchangers, hydraulic machinery, hydraulic structures, nuclear reactors, vibration (flow induced), Naudascher (E.) eds., Rockwell (D.), *2906, book*
- dynamic response, finite element methods, vibration (forced), Camisetti (C.), Macco (A.), (et al.), *5229*
- ice, loads, offshore structures, Hysing (T.), *5364*
- hulls, structural analysis, Mcvee (J.D.), *6541*
- design, shells (stiffened), structural stability, submarine, Niessen (E.), *6542*
- dynamic stability, ship design, Langenberg (H.), *7617*
- deformation (finite), elastoplasticity, plates (stiffened), postbuckling behavior, Matthies (H.), Payer (H.G.), *8276*
- collapse, finite element techniques, icebreakers, nonlinear analysis, Hakala (M.K.), *9005*
- finite element techniques, plane stress, plates (stiffened), Mukhopadhyay (M.), *9140*
- dynamic response, floating bodies, Kaui (M.K.), *9460*

ship towing, naval mechanics, ship dynamics, towing cables, Latorre (R.), Bernitsas (M.M.), *8036*
- disabled ships, dynamic analysis, safety, ship performance, Butt (J.A.), Lawrie (S.T.), (et al.), *12085*

Shipka (I.G.), see Martynenko (M.D.), *5077*
Shippy (D.J.), see Reddy (C.T.), *6113*
ships, models, propellers (marine), wakes, Zborowski (A.), Nginh (N.M.), *1921*
- draft, hydrostatics, matrix methods, trim, Chalmers (D.W.), *3033*
- machinery, marine engineering, Theremin (H.) eds., Robke (H.), *4104, book*
- finite element techniques, propellers (marine), vibration (flow induced), Skaar (K.T.), Carlsen (C.A.), *5970*
- anchors, kalman filters, optimal control, ship maneuvers, Balchen (J.G.), Jenssen (N.A.), (et al.), *6147*
- berthing, docks, harbors, jetties, mathematical models, ship maneuvers, Fontijn (H.L.), *7074*
- canals, couette flow, wakes, Kulczyk (J.), *8048*
- gravity waves (surface), potential flow, separation, stern waves, Vanden-Broeck (J.-M.), *8622*
- asymptotic methods, diffraction, ocean waves, slender bodies, wave interactions, Beck (R.F.), Troesch (A.W.), *9012*
- fredholm equations, irrotational flow, source distribution, Miloh (T.), *9015*
- asymptotic methods, boundary layer (three dimensional), parabolic equations, wakes, Mori (K.), *9016*
- girders, hulls, torsion, Westin (H.), *10876*
- channels, finite difference methods, three dimensional formulation, wave generation, Ohring (S.), *11580*
- floating bodies, gravity waves (surface), oscillating bodies, Kyozuka (Y.), Yoshida (K.), *11644*
- impact, pressure distribution, sloshing, tanks, Gran (S.), *11667*
- boundary value problems, diffraction, slender bodies, wave interactions, Liapis (N.), Faltinsen (O.M.), *12086*

Shirahata (H.), see Daiguji (H.), *5448*
- cascades, compressible flow, finite element techniques, rotating disks, Daiguji (H.), *10451*

Shirai (T.), see Ishida (M.), *8935*
Shiraishi (I.), see Kimoto (K.), *3961*
Shiraishi (N.), see Mizumura (K.), *5916*
Shirakashi (M.), diffusion, turbulence, turbulence model, Tomita (Y.), *2697*
Shirakawa (K.), see Mizoguchi (K.), *3285*
- cyclic loading, dynamic stability, shells (cylindrical), *8274*

Shirakura (M.), conformal mapping, cylindrical bodies, plates, *4989*
Shiralkar (G.S.), cavities, convection, laminar flow, Tien (C.L.), *3783*
Shiratori (E.), see Tsuda (S.), *5129*
Shirkot (K.S.), heat transfer, micropolar media, non newtonian flow, pipe flow, Thakur (D.S.), *8580*
Shirley (W.A.), see Winther (B.A.), *4326*
Shirmanov (V.S.), beams (elastic), beams (thin section), stability, stress analysis, *7356*
Shironosov (V.A.), see Kraiko (A.N.), *9553*
Shishigin (M.I.), design, manipulators, robotics, Khomeriki (T.L.), *223*
Shishkanova (L.A.), see Tikhomolova (K.P.), *5830*
Shishkin (L.A.), ferrous metals, liquids, magnetoelasticity, oscillations, suspensions, *862*
- ferrous metals, gravity waves, liquid metals, magneto fluid dynamics, theory, Slatinskii (N.D.), *10748*

Shiu (K.C.), oil wells, temperature, thermal measurements, Beggs (H.D.), *1720*
Shivakumar (V.), green function, infinite medium, plates (holed), stress intensity factor, Forman (R.G.), *8397*
Shivamoggi (B.K.), airfoils, oscillating bodies, transonic flow, unsteady flow, *5491*
- inviscid fluid, stratified flow, vortex breakdown, vortex flow, Uberoi (M.S.), *7672*
- hall effect, magneto plasma dynamics, models, plates (perforated), rotating fluids, *8817*
- compressibility, modes, plasma, rayleigh taylor instability, theory, *9901*
- hydrodynamic stability, liquid vapor interface, supersonic flow, surface tension, *11534*
- infinite medium, laplace transform, magneto plasma dynamics, panels (flat), unsteady flow, *11814*
- annular flow, convection, plasma, theory, waves, *11837*
- drift waves, magnetic field, nonhomogeneous media, plasma, stability theory, *11839*

Shivaprasad (B.G.), see Ramaprian (B.R.), *9561*
Shivashankara (B.N.), flow irregularities, jets, noise abatement, sound generation, Bhat (W.V.), *10795*
Shkadov (V.Ya.), see Demekhin (E.A.), *7758*
Shkapov (P.M.), see Kinelev (V.G.), *11801*
Shkarlet (Yu.M.), see Remezov (V.B.), *499*
Shladover (S.E.), automatic control, control, guideways, mass transportation, vehicles, *5062*
Shlien (D.J.), buoyant flow, plumes, temperature, Boxman (R.L.), *3693*
Shlychkov (V.A.), see Pushistov (P.Yu.), *984*
Shmanenkov (V.N.), see Kornienko (E.S.), *8562*
Shmanenkova (G.A.), see Zemlyanskii (B.A.), *6767*
Shmerlin (B.Ya.), see Kabanov (A.S.), *1901*
Shmuely (M.), see Perl (M.), *10304*
Shnaidman (M.A.), see Nachinkina (G.N.), *3203*
Shnaidman (V.A.), see Berkovich (L.V.), *1915*
- see Tarnopolskii (A.G.), *2959*
- atmospheric circulation, boundary layer (atmospheric), currents, *5939*

Shnerenko (K.I.), composite structures, holes, laminates, shells (sandwich), *8221*
Shneyerova (R.I.), see Miropolskiy (Z.L.), *747*
shock, cables, dynamic response, power generation, transmission lines, vibration, Dubey (R.N.), Sahay (C.), *1272*
- dynamic properties, seismic loading, vibration (forced), Polyakov (V.S.), *1286*
- calibration, dynamic response, transducers, vibration, Bouche (R.R.), *1289, book*
- fluid injection, shock waves, Ovsyannikov (M.P.), *1553*
- cauchy problem, hyperbolic equations, isentropic processes, wave equations, Hoff (D.), *2011*
- crystals, dynamic properties, piezoelectrics, single crystals, Novitskii (E.Z.), Korotchenko (M.V.), (et al.), *2499*
- beams (timoshenko), impedance methods, vibration (forced), Rangaiah (V.P.), Neubert (V.H.), *3360*
- experimental mechanics, fiber optics, measurements (dynamic), Cook (R.O.), Hamm (C.W.), (et al.), *6320*
- safety, ski bindings, snow, Brossard (J.P.), Pascal (R.), (et al.), *6360*
- conical bodies, dynamic stresses, vibration (torsional), Brepta (R.), Trnka (J.), *7386*
- dynamic response, transient effects, Krupenin (V.L.), *9305*
- dynamic response, structural analysis, vibration, Wiss (J.F.), *10225*

shock absorbers, beams, dynamic response, Bratt (J.F.), *1273*
- gait, human body, locomotion, shock waves, Voloshin (A.), Wosk (J.), (et al.), *4117*

shock layer, boundary value problems, differential equations (ordinary), singular perturbations, Howes (F.A.), *25*
- boundary layer (three dimensional), boundary layer (turbulent), mathematical models, Kussoy (M.I.), Viegas (J.R.), (et al.), *601*
- ablation, conservation laws, interplanetary probes, planetary atmospheres, Moss (J.N.), Simmonds (A.L.), (et al.), *7777*
- asymptotic behavior, blunt bodies, hypersonic flow, separation, two dimensional flow, Barantsev (R.G.), Engelgart (V.N.), *8636*
- fins, missiles, numerical methods, supersonic flow, Wardlaw (A.B.) Jr., Solomon (J.M.), *9551*

- fluid injection, hypersonic flow, similarity methods, stagnation point, Plostins (P.), Rubin (S.G.), *10495*
- blunt bodies, compressible flow, finite difference methods, inviscid fluid, Srivastava (B.N.), Werle (M.J.), (et al.), *11428*

shock tubes, critical region, shock waves, Borisov (A.A.), Borisov (A.A.), (et al.), *682*

- boundary layer, nonuniform flow, Cunningham (A.J.), Ogram (G.L.), (et al.), *715*
- particles, pyrolysis, Fussey (D.E.), Gosling (A.J.), (et al.), *839*
- bubble dynamics, shock waves, Kalva (S.P.), Zvirin (Y.), *2991*
- characteristic methods, hyperbolic equations, pipelines, rupture, Cronje (J.S.), Bishnoi (P.R.), (et al.), *3721*
- conical bodies, heat transfer, Ardasheva (M.M.), Bezmenov (V.Ya.), (et al.), *5537*
- catalytic surfaces, dissociation, heat transfer, hydrogen, real gas effects, Nasser (A.E.M.), East (R.A.), *5562*
- damping, diffusion, oscillations, Srinivas (K.), Gururaja (J.), *7682*
- interaction, shock waves, wedges, Beryozkina (M.K.), Syshchikova (M.P.), (et al.), *7778*
- boundary layer, reflection, shock waves, Walenta (Z.A.), *9642*
- dust, particles, shock waves, Miura (H.), Glass (I.I.), *9674*
- density, schlieren methods, shock waves, thermal effects, thermal gradient, Akimov (A.I.), Piskareva (M.V.), (et al.), *10492*
- explosions, film boiling, fuel-coolant interactions, Sharon (A.), Bankoff (S.G.), *10719*
- drops, nozzles, two phase flow, Borisov (A.A.), Gelfand (B.E.), (et al.), *12024*

shock tubes (electromagnetic), accelerators, discharges, magneto plasma dynamics, similarity methods, Beloshitskii (V.V.), Komelkov (V.S.), (et al.), *2900*

shock waves, nonlinear waves, one dimensional waves, wave equations, Lardner (R.W.), *36*

- discontinuities, polytropic processes, waves, Ruggeri (T.), *679*
- three dimensional flow, two dimensional flow, Hunt (B.L.), *680*
- ellipsoids, reflection, spherical bodies, Nosenko (N.I.), Sysoev (N.N.), (et al.), *681*
- critical region, shock tubes, Borisov (A.A.), Borisov (A.A.), (et al.), *682*
- acoustic waves, acoustics, travelling waves, turbulence, Chou (K.H.), Lee (P.S.), (et al.), *903*
- aorta, blood flow, flexible walls, pulsatile flow, Forbes (L.K.), *1041*
- finite element techniques, nonlinear mechanics, time dependence, wave equations, Cella (A.), Lucchesi (M.), (et al.), *1130*
- fluid injection, shock, Ovsyannikov (M.P.), *1553*
- caustics, compressible flow, conduction (unsteady), supersonic flow, Fung (K.-Y.), *1612*
- computing techniques, conductivity, ionized gases, Makhmudov (A.A.), Popov (A.P.), *1613*
- nonlinear theory, propagation, Rogers (P.H.), Weiner (A.M.), *1614*
- carbon dioxide, reflection, shock waves (oblique), Ando (S.), *1615*
- nonequilibrium effects, two component flow, Zaslonko (I.S.), Mozzhukhin (E.V.), (et al.), *1734*
- explosive loading, microcracks, porous media, rocks, Siegfried (R.W.), Mcqueen (R.G.), (et al.), *2388*
- compressible flow, nozzles, numerical methods, transonic flow, Wadia (A.R.), Payne (F.R.), *2615*
- compressible flow, one dimensional flow, one dimensional waves, Hsiao (L.), Chang (T.), *2618*
- conical bodies, stability theory, supersonic flow, wedges, Rusanov (V.V.), Sharakshanae (A.A.), *2680*
- acoustic waves, nonlinear waves, Webster (D.A.), Blackstock (D.T.), *2704*
- analysis, diffraction, submerged bodies, Gorshkov (A.G.), *2715*
- mach stem, spherical waves, trajectories, triple-point trajectory, Takayama (K.), Sekiguchi (H.), *2721*
- boundary layer (thermal), computing techniques, reflection, unsteady state, Brun (R.), Chauvin (C.), (et al.), *2723*
- reflection, shock polar, unsteady state, Ben-Dor (G.), *2724*
- airfoils, computing techniques, holography, interferometry, supercritical flow, Spaid (F.W.), Bachalo (W.D.), *2726*
- airfoil characteristics, airfoils, oscillating bodies, pressure distribution, schlieren methods, Benetka (J.), Pernica (Z.), *2733*
- channel flow, combustion, hydrogen, supersonic flow, Zimont (V.L.), Levin (V.M.), (et al.), *2865*
- magneto plasma dynamics, numerical methods, polar fluids, similarity methods, Pushkar (E.A.), *2890*
- acoustic waves, alfven number, magneto fluid dynamics, nonlinear characteristics, Lustman (L.), Geffen (N.), *2892*
- ballistics, launching, propellants, Taylor (T.D.), Lin (T.C.), *2929*
- attenuation, ear muffs, noise, noise abatement, nonlinear waves, Osmundsen (E.), Gjaevenes (K.), *2958*
- bubble dynamics, shock tubes, Kalva (S.P.), Zvirin (Y.), *2991*
- dynamic response, plates, transient effects, vibration (forced), Coleby (J.R.), Mazumdar (J.), *3365*
- boundary layer (turbulent), flow measurement, injection, interaction, Squire (L.C.), Smith (M.J.), *3649*
- expansion, piston driven flow, Emanuel (G.), *3720*
- clausius-duhem inequality, conduction (heat), thermodynamics, viscoelastic fluids, Morro (A.), *3722*
- explosions, isentropic processes, semi infinite media, Singh (P.), *3723*
- gait, human body, locomotion, shock absorbers, Voloshin (A.), Wosk (J.), (et al.), *4117*
- acceleration waves, cosserat solids, thermoelasticity (transient), Nistor (I.), *4129*
- exhaust gases, jets, numerical methods, plumes, supersonic flow, Dash (S.M.), Thorpe (R.D.), *4590*
- characteristic methods, sonic booms, supersonic flow, three dimensional flow, Hendriks (T.P.M.), *4592, book*
- blunt bodies, finite difference methods, supersonic flow, Gustafsson (B.), Wahlund (P.), *4593*
- blunt bodies, finite difference methods, supersonic flow, Weilmuenster (K.J.), Graves (R.A.) Jr., *4594*
- collapse, discharges, plasma, schlieren methods, Baronets (P.N.), Saprykin (A.I.), (et al.), *4667*
- constitutive equations, deformation (finite), elasticity (nonlinear), thermodynamics (nonequilibrium), Malek-Madani (R.), *4925*
- elasticity (nonlinear), fluids, jump conditions, Ting (T.C.T.), *4930*
- crystals, solid mechanics, Klimenko (V.Yu.), Dremin (A.N.), *4931*
- impact, plates, spherical waves, Yakupov (R.G.), *5249*
- compressible flow, finite difference methods, Anderson (J.D.) Jr., *5411, book*
- cylindrical bodies, missiles, numerical methods, supersonic flow, three dimensional flow, turbulent flow, Hung (C.M.), Chaussee (D.S.), *5413*
- mathematical models, nonequilibrium flow, shock waves (attached), Sharma (V.D.), *5419*
- boundary layer, interaction, mach number, navier stokes equation, reynolds number, Mateer (G.G.), Viegas (J.R.), *5432*
- finite amplitude, particulate flow, unsteady state, Yamamoto (Y.), Kobayashi (S.), (et al.), *5486*
- delta wings, pressure measurement, supersonic flow, Squire (L.C.), *5489*
- combustion, detonation, reaction kinetics, tubes, Gendugov (V.M.), *5630*
- earth, magneto plasma dynamics, nonlinear waves, plasma, Chang (T.T.S.), *5682*
- attenuation, bones, human body, Wosk (J.), Voloshin (A.), *6025*
- boundary layer, flow measurement, interaction, Paynter (G.C.), *6643*
- internal flow, three dimensional flow, transonic flow, Brochet (J.), *6662*
- mach reflection, reflection, roughness, unsteady state, Takayama (K.), Ben-Dor (G.), (et al.), *6711*
- gases, ideal gas, refraction, Legowski (Z.), Wlodarczyk (E.), *6712*
- blunt bodies, supersonic flow, De Neef (T.), Moretti (G.), *6713*
- flow measurement, mach reflection, photography, reflection, transition, Ben-Dor (G.), Takayama (K.), *6714*
- algorithms, computing techniques, Vorozhtsov (E.V.), Yanenko (N.N.), *6715*
- axial compressors, rotors, transonic flow, visualization, Strazisar (A.J.), Powell (J.A.), *6742*
- liquefaction, phase changes, retrograde gases, Dettleff (G.), *6753*
- cylindrical bodies, heat transfer, hypersonic flow, leading edge, swept wings, Zemlyanskii (B.A.), Shmanenkova (G.A.), *6767*
- nonlinear characteristics, ocean, sound propagation, underwater acoustics, Fridman (V.E.), *6916*
- fracture, particles, thermal stresses, Levin (A.L.), Murzinov (I.N.), (et al.), *6946*
- compressible flow, numerical methods, stability (numerical), supersonic flow, Ivanov (M.J.), Kraiko (A.N.), *7692*
- boundary layer, moving surfaces, Zhuk (V.I.), Ryzhov (O.S.), *7707*
- reflection, refraction, surveys, Griffith (W.C.), *7776*
- interaction, shock tubes, wedges, Beryozkina (M.K.), Syshchikova (M.P.), (et al.), *7778*
- hypervelocity, interaction, magneto plasma dynamics, pulsatile flow, Oliver (D.A.), Swean (T.F.) Jr., (et al.), *7898*
- detonation (two phase), explosions, thermal explosions, Ulyanitskii (V.Yu.), *7931*
- bearings (gas lubricated), bearings (thrust), lubricants (gas), lubrication (hydrostatic), Boffey (D.A.), Wilson (P.M.), *8056*
- compressible flow, separated flow, separation, transonic flow, Carter (J.E.), *8547*
- compressible flow, numerical methods, transonic flow, Niyogi (P.), Das (T.K.), *8548*
- axisymmetric flow, compressible flow, flow obstructions, impingement, jets, supersonic flow, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- channel flow, duct flow, laminar flow, wakes, Byrkin (A.P.), Shchennikov (V.V.), *8568*
- dissipation, similarity methods, Imshennik (V.S.), *8634*
- ellipsoids, perturbation methods, reflection, Gorbachev (L.P.), Sokolov (V.B.), *8635*
- characteristic methods, explosions, implosion, Yousaf (M.), *8637*
- metals, phase changes, vaporization, waves, Goloveiko (A.G.), Martynikhina (V.I.), *8874*
- dynamic properties, high temperature, hopkinson bar, metals, Tsoi (P.A.), Novikov (S.A.), (et al.), *8890*
- conservation laws, hydrodynamics, hyperbolic equations, nonlinear mechanics, Cheng (K.-S.), *9102*
- compressible flow, perturbation methods, piston driven flow, Schneider (G.H.), *9549*

- compressible flow, inviscid fluid, numerical methods, transonic flow, Rizzi (A.) eds., Viviand (H.), *9556, book*
- finite difference methods, supersonic flow, three dimensional flow, Yamamoto (Y.), Karashima (K.), *9635*
- astrophysics, planetary atmospheres, propagation, similarity methods, Pai (S.I.), Menon (S.), (et al.), *9637*
- difference equations, hyperbolic equations, Laval (P.), *9638*
- conservation laws, existence theorems, hyperbolic equations, Chang (P.H.), *9639*
- compressible flow, group theory, similarity methods, Logan (J.D.), Perez (J. De J.), *9640*
- boundary layer, cylindrical bodies, interaction, Gvozdeva (L.G.), Bazhenova (T.V.), (et al.), *9641*
- boundary layer, reflection, shock tubes, Walenta (Z.A.), *9642*
- acoustic waves, asymptotic methods, burgers equation, Parker (D.F.), *9644*
- airfoils, pressure distribution, separated flow, transonic flow, unsteady flow, Roos (F.W.), *9805*
- explosions, explosive loading, explosive solid interactions, hydrodynamics, Ritter (Z.W.), *9843*
- dust, particles, shock tubes, Miura (H.), Glass (I.I.), *9874*
- blunt bodies, compressible flow, supersonic flow, three dimensional flow, Schwarze (H.-F.), *10416*
- density, schlieren methods, shock tubes, thermal effects, thermal gradient, Akimov (A.I.), Piskareva (M.V.), (et al.), *10492*
- cavities, similarity methods, Lazarus (R.B.), *10493*
- diffraction, wedges, Pekurovskii (L.E.), *10494*
- detonation, explosions, unsteady flow, Ulyanitskii (V.Yu.), *10781*
- compressible flow, planetary atmospheres, plasma, rarefied gases, supersonic flow, Gurevich (A.V.), Paschenko (N.T.), *11406*
- compressible flow, cylindrical bodies, fluid-structure interaction, internal flow, Dubrovskaya (L.I.), Kim (A.V.), (et al.), *11410*
- chemically reactive flow, compressible flow, supersonic flow, Ni (A.L.), Ryzhov (O.S.), *11424*
- compressible flow, numerical methods, Zhmakin (A.I.), Fursenko (A.A.), *11425*
- acoustic waves, compressible flow, multiphase flow, nonequilibrium flow, numerical methods, rarefied flow, Cook (T.L.), Demuth (R.B.), (et al.), *11426*
- compressible flow, dissociation, finite difference methods, numerical methods, Charakhchyan (A.A.), *11431*
- bgk model, gases, kinetic theory, Narusawa (U.), *11441*
- gases, two dimensional flow, variational methods, Bratos (M.), Herczynski (R.), *11444*
- compressional waves, flow irregularities, two phase flow, Lyakhov (A.G.), *11639*
- acoustic waves, fluid-structure interaction, shells (cylindrical), submerged bodies, Huang (H.), *11656*
- fluid-structure interaction, shells (fluid-filled), submerged bodies, Wright (J.P.), Misovec (A.), (et al.), *11664*
- film boiling, melting, thermal explosions, thermal shock, Inoue (A.), Bankoff (S.G.), *11760*
- film boiling, melting, thermal explosions, thermal shock, Inoue (A.), Ganguli (A.), (et al.), *11761*
- acoustic waves, channel flow, ionized gases, propagation, Levin (V.A.), *11811*
- discontinuities, magneto plasma dynamics, propagation, radiating flow, Shankar (R.), Jain (S.K.), *11826*
- nonlinear waves, sonic booms, sound propagation, supersonic flow, Weber (M.E.), Donn (W.L.), *11916*
- acoustics, gas solid interface, nonlinear waves, Babaev (A.E.), *11919*
- jet engines, sound generation, supersonic flow, Norum (T.D.), Seiner (J.M.), *11958*
- sound generation, supersonic flow, transonic flow, Gusev (V.E.), Karabutov (A.A.), *11964*

shock waves (normal), compression, dynamic properties, elastoplasticity, experimental results, metals, Astanin (V.V.), *399*
- boundary layer, curved surfaces, separation, Bohning (R.), *600*
- elastic waves, thermoelasticity, Ukeje (E.), *1291*
- dynamic properties, metals, strain rate, Meyers (M.A.) eds., Murr (L.E.), *1299, book*
- elastic waves, fracture, rock mechanics, Kosinski (W.), *1300*
- spectra, structural response, Matsuzaki (Y.), *1309*
- materials properties, solid mechanics, Shea (R.), Mescall (J.F.), *1311*
- elasticity (nonlinear), material nonlinearities, Kulikovskii (A.G.), Shaposhnikova (E.I.), *2363*
- materials properties, rocks, Vasl (A.A.), Zhukov (A.V.), (et al.), *5242*
- lasers (gasdynamic), radiation pressure, Chlodzinski (J.), Denus (S.), (et al.), *6338*
- experimental methods, shear stress, Batkov (Yu.V.), Novikov (S.A.), (et al.), *6366*
- elastoplasticity, experimental methods, Astanin (V.V.), *7427*
- one dimensional flow, particle fluid flow, two phase flow, unsteady flow, Marconi (F.), Rudman (S.), (et al.), *9873*
- combustion, explosions, reactors, Sukhov (G.S.), Yarin (L.P.), *9899*
- attenuation, metals, modeling, Duan (Z.-P.), *10231*
- dislocations, plasticity, Dynin (E.A.), *11158*
- rarefied gases, simulation, Belotserkovskiy (G.M.), Yanitskiy (V.Ye.), *11456*

shock waves (oblique), carbon dioxide, reflection, shock waves, Ando (S.), *1615*
- critical region, reflection, Wright (T.W.), *4455*
- detonation, explosions, Sheng (Y.), Sislian (J.P.), *11894*

Shoham (O.), see Barnea (D.), *938*
- see Barnea (D.), *2989*

Shoji (M.), see Imai (K.), *6510*

Shoji (T.), see Saka (M.), *1380*
- acoustic emission, ductile fracture, triaxial loading, Khan (M.A.), (et al.), *5307*
- see Khan (M.A.), *5370*
- see Khan (M.A.), *7558*

Sholokhova (N.I.), clouds, forecasting, meteorology (physical), moisture, *4077*

Shook (C.A.), coal, experimental results, pipe flow, slurries, Haas (D.B.), (et al.), *11498*

Shorokov (N.N.), see Myshanov (A.I.), *5447*

Shou (W.), see Zhu (P.), *6717*

Shou (Z.Q.), combustors, design, turbojet engines, wind loads, *3748*

Shoucri (M.M.), kelvin-helmholtz instability, numerical methods, shear flow, vorticity, *11391*

Shoucri (R.M.), contraction, heart, modeling, muscles, *4909*

Shovkoplyas (V.N.), see Perestyuk (N.A.), *4952*

Shpeizman (V.V.), see Stepanov (W.A.), *6442*

Shpenzer (G.G.), see Bazarov (S.M.), *2845*

shrinkage, beams (composite), cracking, reinforced concrete, slabs, Johnson (R.P.), Allison (R.W.), *2265*
- crimping, material testing, textiles, thermal effects, Quynn (R.G.), Poisson (W.H.), *7310*

Shrira (V.I.), gravity waves, nonlinear waves, stability theory, thermal waves, three dimensional formulation, *1083*

Shrivastava (S.K.), see Bhat (M.S.), *12*
- see Hablani (H.B.), *6886*

Shteinbok (D.B.), forecasting, heat transfer (atmospheric), weather forecasting, *3022*

Shtern (V.N.), see Lifshits (A.M.), *1771*

Shtessel (E.A.), see Sotnichenko (L.V.), *2851*

Shtykov (V.I.), freezing, permeability, snow, soils, thawing, *3402*

Shubik (B.M.), see Kats (A.), *5888*

Shubin (G.R.), dynamic interaction, explosions, explosive loading, hydrodynamics, impulsive transfers, *7932*

Shubladze (A.M.), automatic control, stability theory, state space techniques, *166*
- see Braslavskii (A.D.), *2094*
- algorithms, estimation, identification, *2112*

Shugan (I.V.), buoyant flow, cryogenics, geysering, pipe flow, Bosykh (L.A.), *4703*

Shugrin (S.M.), differential equations (ordinary), evolution equations, time dependence, *1091*

Shukla (A.), see Rossmanith (H.P.), *3481*

Shukla (B.M.), see Sethuramiah (A.), *7096*

Shukla (J.B.), bearings (journal), lubricants (liquid), lubrication (hydrodynamic), power law fluids, squeeze films, viscosity, Prasad (K.R.), (et al.), *9952*

Shukla (K.N.), condensers, heat pipes, transient effects, *3841*

Shuler (P.J.), see Ramirez (W.F.), *10690*

Shuleykin (V.V.), gravity waves (surface), gravity waves (trochoidal), phase velocity, wave trains, *1588*

Shulman (E.I.), existence theorems, plasma, wave interactions, wave packets, *5*

Shulman (I.I.), see Danilov (V.L.), *2995*

Shulman (Z.P.), convection (forced), ferrous metals, magneto fluid dynamics, suspensions, thermophysical properties, Kordonskiy (V.I.), (et al.), *5548*
- entrainment, rotating cylinders, shear flow, viscoelastic fluids, viscoplasticity, Baikov (V.I.), *6572*
- channel flow, heat transfer, non newtonian flow, power law fluids, shear stress, viscoelastic fluids, Khusid (B.M.), (et al.), *9708*

Shum (Y.M.), see Satter (A.), *5834*

Shur (D.), see Horowitz (I.), *116*

Shurchkov (A.V.), heat transfer, microcracks, rocks, Prikhodko (N.K.), (et al.), *5858*

Shurshalov (L.V.), chemical kinetics, detonation, explosions, *9832*

Shurygin (V.M.), aerodynamic interference, inlets, mathematical models, vortex sheets, wings, *6723*

Shushunov (V.V.), see Aleksandrov (A.Ya.), *4332*

Shuzi (Y.), bearings, machine design, spindles, stiffness, *4561*

Shvets (I.T.), see Repukhov (V.M.), *4676*

Shvets (R.N.), see Podstrigach (Ya.S.), *2963, book*

Shvets (Yu.I.), boundary layer, cylindrical bodies, incompressible flow, non newtonian flow, separated flow, Vishnevskii (V.K.), *603*

Shvidler (M.I.), see Korolev (A.V.), *2998*

Shyam (R.), approximations, expansion, magneto plasma dynamics, radiation, waves, Sharma (J.), (et al.), *8823*

Shyam Sunder (S.), hydrodynamic pressure, offshore structures, sensitivity, wave loads, Connor (J.J.), *1451*

Siauw (T.H.), casting, computer aided design, dies, thermal effects, *7461*
Sibul (L.H.), see Adomian (G.), *10074*
Sibuya (E.), see Kobayashi (H.), *7481*
Sichel (M.), see Eidelman (S.), *9822*
• see Eidelman (S.), *9823*
Sickles (W.L.), see Parker (R.L.) Jr., *1647*
Siclari (M.J.), see Grossman (B.), *8638*
Siddall (J.N.), see Michael (W.), *10090*
Siddon (T.E.), see Hoglund (L.E.), *1649*
Sideridis (E.P.), see Spathis (G.D.), *5124*
Sides (J.), see Lerat (A.), *697*
Sidlichovsky (M.), perturbation methods, transformation, two body problem, *9808*
Sidorchuk (V.N.), bottom irregularities, gravity waves (stratified), nonlinear waves, steepness, *1592*
Sidorenko (M.K.), dynamic analysis, turbomachinery, vibration (forced), *2355*
• see Kanunnikov (I.P.), *5216*
Sidoroff (F.), constitutive equations, elastoplasticity, finite strain, plasticity, *7281*
Sidorov (I.M.), see Radashevich (Yu.B.), *4282*
Sidorov (V.A.), electrical properties, induced polarization, rocks, Yakhin (A.M.), *6403*
Siebert (H.), estimation, leak detection, leaks, pipelines, piping systems, Klaiber (T.), *9192*
Siegfried (R.W.), explosive loading, microcracks, porous media, rocks, shock waves, Mcqueen (R.G.), (et al.), *2388*
Siegmann (W.L.), see Watson (J.G.), *895*
• see Friedlander (S.), *11619*
Siekman (J.G.), adhesives, bonded joints, capillary flow, *1481*
Siekmann (J.), films, interface phenomena, liquid vapor interface, rotating fluids, two phase flow, Johann (W.), *9877*
Siemer (H.), boundary value problems, elastic foundations, elasticity (linear), rings, Weiskopf (H.), *7328*
Siemers (P.M.) III, see Larson (T.J.), *3753*
Sieniutycz (S.), conduction (unsteady), heat transfer, heat transfer (combined modes), wave equations, *1082*
• thermal instability, thermal waves, thermodynamics (nonequilibrium), transport mechanisms, unsteady flow, *8708*
• combustion, convection, mass transfer, relaxation, *11775*
Sierakowski (R.L.), see Takeda (N.), *284*
• see Takeda (N.), *2376*
Sievert (G.), calibration, data reduction, flow measurement, *9674*
Siew (P.F.), see Leppington (F.G.), *3717*
Siewert (C.E.), bgk model, kinetic theory, mathematical methods, matrix methods, riemann-hilbert problem, Kelley (C.T.), *1103*
• computing techniques, eigenvalues, electromagnetic waves, radiation, wiener-hopf technique, *2031*
• bgk model, evaporation, half space, Thomas (J.R.) Jr., *3644*
• channel flow, plane flow, poiseuille flow, rarefied gases, *11437*
Sifner (O.), see Juza (J.), *5521*
Sigalov (A.V.), see Dulnev (G.N.), *1697*
Sigalov (G.F.), bodies of revolution, compressible flow, drag, optimization, transonic flow, wave drag, *11396*
Sigbjornesson (R.), see Langen (I.), *5356*
Sigbjornsson (R.), aerodynamics, bridges (suspension), gust loads, stochastics, wind loads, Hjorth-Hansen (E.), *3911*
• dynamic response, frequency domain techniques, gravity platforms, offshore structures, stochastic processes, vibration (random), wave loads, Smith (E.K.), *7614*
• see Spidsoe (N.), *8460*
• fatigue, offshore structures, stochastic processes, vibration (forced), wave loads, *11334*
Siggia (E.D.), numerical methods, turbulence (isotropic), turbulence model, two dimensional flow, Aref (H.), *2698*
• see Aref (H.), *5399*
• reynolds stresses, strain rate, turbulence (isotropic), turbulence model, vorticity, *11541*
Sigillito (V.G.), see Kuttler (J.R.), *363*
• see Kuttler (J.R.), *6292*
• see Fox (D.W.), *9311*
Sigli (D.), flow measurement, oscillatory flow, unsteady flow, viscoelastic fluids, Maalouf (A.), *8505*
Sigmond (R.S.), crack growth, diffraction, fatigue, nondestructive tests, ultrasonics, Lien (E.), *10282*
Signer (H.R.), see Schuller (F.T.), *3577*
Signoret (C.), hopkinson bar, impact, microprocessors, strain gages, strain measurement, testing equipment, Pouyet (J.M.), (et al.), *4507*
Sigorskii (V.P.), see Kolyada (Yu.V.), *2040*
Sigrist (L.), cellular flow, convection (free), mass transportation, Dossenbach (O.), (et al.), *1736*
Sih (G.C.), composite materials, diffusion, hygrothermal effects, Shih (M.T.), (et al.), *931*
• crack growth, fatigue, mixed mode fracture, Barthelemy (B.M.), *1371*
• see Hartranft (R.J.), *1832*
• crack propagation, fracture criteria, inhomogeneities, Chen (E.P.), *8414*
• failure, fracture mechanics, structural analysis, toughness, Hartranft (R.J.), *9381*
Sih (G.C.) eds., crack growth, ductile fracture, fatigue, fracture mechanics, fracture toughness, Valluri (S.R.), *8405, book*
Sijbrand (J.), bifurcation, elliptic equations, free boundary, plasma, tokamak, *4975*
Sikora (J.P.), deflections, moire methods, propellers, propellers (marine), *8423*
Silberman (E.), pipe flow, rotational flow, turbulent flow, wavy walls, *7717*
silencers, acoustics, attenuation, automobiles, ducts, exhaust gases, Prasad (M.G.), Crocker (M.J.), *1813*
• absorption, cavities, ducts, porous media, sound propagation, Yoshida (H.), *2934*
Silin (A.A.), elastomers, friction (sliding), polymers, space, vacuum, *1005*
Siljak (D.D.), see Ikeda (M.), *8102*
• see Ikeda (M.), *9175*
Silk (M.G.), cracks, flaw detection, time domain techniques, ultrasonics, welded joints, Lidington (B.H.), (et al.), *7583*
Sills (G.C.), see Lee (K.), *9357*
Sills (L.B.), interface cracks, propagation, semi infinite media, viscoelasticity, wiener-hopf technique, Benveniste (Y.), *1376*
Silovanyuk (V.P.), see Stadnik (M.M.), *6163*
silting, rivers, scour, sediment transport, Lapshenkov (V.S.), Boguslavskaya (T.A.), *1899*
Siluyanova (I.D.), estimation, linear systems, nonlinear systems, stochastic systems, *4306*
Silva (M.A.G.), piping systems, valves, vibration (flow induced), water hammer, *11603*
Silver (M.L.), see Tatsuoka (F.), *1316*
• see Tatsuoka (F.), *1317*
• see Tatsuoka (F.), *11177*
Silverman (L.M.), see Emre (E.), *4233*
Sima (V.), algorithms, linear systems, multivariable systems, optimal control, schur form, *5055*
Simandiri (S.), damping, design, rotors, squeeze films, Hahn (E.J.), *3576*
Simcak (F.), dynamic analysis, plates, vibration (free), vibration (self excited), *9315*
similarity methods, algorithms, pattern recognition, Sahai (D.), *155*
• blunt bodies, oscillations, wakes, Griffin (O.M.), *629*
• half space, impact, Burenin (A.A.), Lapygin (V.V.), *1310*
• boundary layer, free jets, transformation, transition flow, Hunt (R.), Wilks (G.), *1532*
• boundary layer, compressible flow, stagnation point, three dimensional flow, unsteady flow, Kumari (M.), Nath (G.), *1545*
• boundary layer, convection (free), polar fluids, Jena (S.K.), Mathur (M.N.), *1976*
• boundary layer, cylindrical bodies, laminar flow, Stock (H.W.), *2626*
• convection (free), plates (vertical), Zolotov (N.L.), *2796*
• convection (free), friction (skin), magneto fluid dynamics, plates, Brar (G.S.), *2685*
• magneto plasma dynamics, numerical methods, polar fluids, shock waves, Pushkar (E.A.), *2890*
• accelerators, discharges, magneto plasma dynamics, shock tubes (electromagnetic), Beloshitskii (V.V.), Komelkov (V.S.), (et al.), *2900*
• boundary layer, laminar flow, turbulence (transport), Sokolov (M.), Antonia (R.A.), (et al.), *3648*
• decay, jets, Middleton (D.), *3682*
• axisymmetric flow, plumes, Appalaswamy (A.V.), Jaluria (Y.), *3685*
• counterflow, jets, supersonic flow, Kalinin (V.M.), Melbard (A.M.), *3691*
• air conditioning, closed conduit flow, Moog (W.), *3789*
• blades, heat transfer, rotating fluids, simulation, turbomachinery, Eckert (E.R.G.), *3802*
• conservation laws, continuum mechanics, fracture, integral methods, mathematical methods, Cherepanov (G.P.), *4489*
• dynamic analysis, two phase flow, Entov (V.M.), Yarin (A.L.), *4630*
• asymptotic behavior, dimensional analysis, Barenblatt (G.I.), *4998*
• boiling, condensation, liquid gas mixture, modeling, Kutateladze (S.S.), *6758*
• groundwater, numerical methods, Ramm (D.), Chazan (D.), *7005*
• inviscid fluid, stratified flow, vorticity, Yih (C.-S.), *7655*
• nonisothermal flow, reynolds number (small), squeeze flow, unsteady flow, Phan-Thien (N.), *7724*
• coding, plasma, Demchenko (V.V.), *7775*
• group theory, helmholtz equation, klein-gordon equation, mathematical methods, Steinberg (S.), Wolf (K.B.), *8113*
• dissipation, shock waves, Imshennik (V.S.), *8634*
• boussinesq equation, differential equations (ordinary), differential equations (partial), hydrology, porous media, Bhutani (O.P.), Sharma (N.L.), *8969*
• astrophysics, planetary atmospheres, propagation, shock waves, Pai (S.I.), Menon (S.), (et al.), *9637*
• compressible flow, group theory, shock waves, Logan (J.D.), Perez (J. De J.), *9640*
• film cooling, heat transfer, injection, El-Hadik (A.A.B.), Barrow (H.), *9694*

- boundary layer (thermal), magneto fluid dynamics, rotating disks, Glazov (O.A.), *9710*
- heat addition, magneto fluid dynamics, numerical methods, plates, Soundalgekar (V.M.), Takhar (H.S.), (et al.), *9784*
- elastic waves, nonlinear structures, rods, Seshadri (R.), Singh (M.C.), *10227*
- entrainment, stratified flow, stresses, turbulent mixing, Kundu (P.K.), *10408*
- ventilation, wall jets, El-Taher (R.M.), *10453*
- cavities, shock waves, Lazarus (R.B.), *10493*
- fluid injection, hypersonic flow, shock layer, stagnation point, Plostins (P.), Rubin (S.G.), *10495*
- compressible flow, energy transport, high temperature, unsteady flow, Korobeynikov (V.P.), *11419*
- chemically reactive flow, compressible flow, nonequilibrium flow, Kolesnichenko (E.G.), *11422*
- spectra, turbulence, turbulence model, velocity profiles, Driscoll (R.J.), Kennedy (L.A.), *11542*
- gravity waves (finite depth), korteweg de vries equation, radial waves, rotational flow, Djordjevic (V.D.), Pavlovic (M.), *11569*
- condensation (filmwise), laminar flow, porous walls, velocity profiles, Liu (C.Y.), Ismail (K.A.R.), (et al.), *11762*
- blast waves, cylindrical waves, explosions, isothermal processes, Lerche (I.), *11827*

Siminkovich (V.N.), see Romaniv (O.N.), *6420*

Simirad (C.), almost periodic functions, differential equations (ordinary), existence theorems, oscillations, *4950*

Simitses (G.J.), nonlinear analysis, portal frames, postbuckling behavior, Giri (J.), (et al.), *2534*
- arches, dynamic stability, frames, shells (cylindrical), Sheinman (I.), *11124*

Simiu (E.), probability, stochastic processes, weibull statistics, wind loads, Filliben (J.J.), *4171*
- buildings, design, structural analysis, wind loads, Filliben (J.J.), *7795*

Simkhovich (S.L.), magneto fluid dynamics, relaxation, stability theory, stress analysis, tensor methods, *9795*
- channel flow, elastoplasticity, magneto fluid dynamics, stability theory, tensor methods, viscous flow, Ionochkina (L.I.), (et al.), *11809*

Simkin (M.M.), algorithms, discrete systems, kalman filters, *181*
- correlation, estimation, filters, iterative methods, *4313*

Simkova (O.), beams (sandwich), hamilton principle, vibration (forced), Markus (S.), *10222*

Simmers (D.A.), axial flow, heat transfer, laminar flow, velocity profiles, vortex flow, Coney (J.E.R.), *1566*
- annular flow, hot wire, velocity profiles, Coney (J.E.R.), *3752*

Simmonds (A.L.), see Moss (J.N.), *7777*

Simmonds (J.G.), membranes, shells, stress functions, stresses, *308*
- see Libai (A.), *2271*
- conservation laws, elasticity (nonlinear), energy methods, path integrals, Nicholson (J.W.), *3229*
- cracks, elliptical cracks, energy density, plates (holed), Duva (J.), *4490*
- bending (elastic), large displacement, plates, torsion, *6222*

Simmons (G.W.), see Wei (R.P.), *7477*

Simmons (H.C.), combustors, fluid injection, gas turbines, sprays, Harding (C.F.), *5655*

Simmons (J.A.), see Eatwell (G.P.), *10239*

Simmons (J.M.), see Lai (J.C.S.), *628*
- excitation, jets, oscillating bodies, Lai (J.C.S.), (et al.), *4633*

Simo (C.), see Llibre (J.), *1787*
- see Llibre (J.), *4953*
- collision models, mathematical methods, n body problems, stability theory, Llibre (J.), *10770*

Simon (L.), see Osmont (D.), *5225*

Simone (S.), bubbly flow, particulate flow, powders, Harriott (P.), *7012*

Simonian (A.M.), axial loading, creep, metals, *10335*

Simonov (I.V.), compressible flow, eigenvalue problems, fluid-structure interaction, shells, *11669*

Simons (G.A.), carbon, char particles, combustion, mass transfer, particles, porous media, *11793*

Simpkins (P.G.), cavities, cellular flow, closed conduit flow, convection (free), critical flow, Dudderar (T.D.), *4709*
- convection, heat transfer, porous media, Blythe (P.A.), *5855*
- see Blythe (P.A.), *9898*

simply supported structures, bridges (box girder), structural analysis, Agrawal (S.B.), Tamhankar (M.G.), *2531*
- beams (cantilever), influence matrix, modal control, structural analysis, time domain techniques, Vilnay (O.), *7592*
- beam columns, design (minimum weight), Karihaloo (B.L.), *7597*
- buckling, follower forces, nonconservative systems, plates (rectangular), Leipholz (H.H.E.), Wadkington (D.), *9289*
- design (minimum weight), design (optimum), eigenvalues, Karihaloo (B.L.), Parbery (R.D.), *10347*

Simpson (A.), see Hopper (C.T.), *3093*

Simpson (H.C.), choked flow, free boundary, gravity, water, waterfall, Rooney (D.H.), (et al.), *1517*

Simpson (J.J.), heat transfer, ocean air interaction, oceanography, radiation, Dickey (T.D.), *9924*

Sims (D.L.), see Cowles (B.A.), *2494*

simulation, earthquakes, stochastic processes, time domain techniques, Hoshiya (M.), Chiba (T.), *147*
- large scale systems, optimal control, Krasovskii (A.A.), *210*
- magnetic levitation, magnetic stabilization, transportation devices, vehicles, Cherchas (D.B.), *211*
- estimation, mathematical models, population estimation, Nakamura (A.), Nakamura (M.), *215*
- analog simulation, cardiovascular system, respiratory system, Balasubramanian (R.), *230*
- conical bodies, impact, layered media, Rimskii (V.K.), Sabodash (P.F.), *405*
- computer programming, computing techniques, surveys, Stephenson (J.), *1125, book*
- computing techniques, wind tunnels (environmental), Lee (K.D.), *1126*
- design, guidance systems, missiles, Zarchan (P.), *1162*
- airplanes, control, flight control, vtol, Tinling (B.E.), Cole (G.L.), *1166*
- friction (rolling), tires, Guntur (R.), Sankar (S.), *1456*
- compressible flow, detection, separated flow, wires, Degani (D.), Brosh (A.), (et al.), *1546*
- airplanes, ground effect, vortices, wakes, Wickens (R.H.), *1619*
- estimation, identification, Cheng (R.C.H.), *2202*
- air traffic control, airplanes, mathematical models, Atack (M.J.), *2203*
- dynamic response, motorcycles, vehicles, Black (S.H.), Taylor (D.L.), *2353*
- machinery, noise, spectra, Sasaki (K.), Sato (T.), (et al.), *2957*
- airplanes, noise (traffic), noise abatement, supersonic flow, Grantham (W.D.), Smith (P.M.), (et al.), *2960*
- oil removal, reservoir engineering, Kazemi (H.), Merrill (L.S.), *2994*
- free boundary, groundwater, Korolev (A.V.), Shvidler (M.I.), *2998*
- earthquakes, Polhemus (N.W.), Cakmak (A.S.), *3012*
- ocean waves, probability, stochastic processes, Flower (J.O.), *3108*
- frequency domain techniques, frequency response, identification, Frisch (H.P.), *3165*
- extrusion, material testing, steel, Soos (E.), Teodosiu (C.), (et al.), *3423*
- compressible flow, lasers (gasdynamic), Achasov (O.V.), Blaga (Ya.), (et al.), *3641*
- modeling, plumes, wind tunnels, Korst (H.H.), White (R.A.), (et al.), *3681*
- blades, heat transfer, rotating fluids, similarity methods, turbomachinery, Eckert (E.R.G.), *3902*
- material testing, rupture, thermal fatigue, Cailletaud (G.), Culie (J.-P.), (et al.), *3998*
- finite element techniques, singularities, Nayfeh (A.H.), Nassar (E.A.-A.M.), *4193*
- algorithms, digital simulation, linear systems, matrix methods, numerical methods, state space techniques, transition matrices, Litz (L.), *4206*
- separated flow, strouhal number, vortex flow, Kiya (M.), Arie (M.), *4609*
- automatic control, cryogenics, wind tunnels, Thibodeaux (J.J.), Balakrishna (S.), *5063*
- cruise missile, missiles, modeling, navigation, Schmidt (G.T.), Setterlund (R.H.), *5711*
- human body, kinematics, motion, Dapena (J.), *6009*
- bond graphs, control, nonlinear theory, Karnopp (D.), *6122*
- feedback, gait, prosthetic devices, Hirokawa (S.), Sugiyama (H.), (et al.), *6150*
- airplanes, flight path, fuel economy, optimization, Wauer (J.C.), Bruckner (J.M.H.), (et al.), *6729*
- finite element techniques, hydrodynamics, matrix methods, Walters (R.A.), *7221*
- frequency domain techniques, frequency response, sampled data systems, Frisch (H.P.), *7232*
- analog simulation, manipulators, robotics, Backhouse (C.), Jones (J.R.), *7253*
- multivariable systems, numerical methods, Arays (Ye.A.), Dmitriyev (V.M.), *7258*
- collision models, offshore structures, probability theory, Thoft-Christensen (P.), *7615*
- chemical reactions, combustion (submerged), Coats (K.H.), *7992*
- reservoir engineering, three dimensional flow, Kuniansky (J.), Hillestad (J.G.), *7995*
- coding, computer programming, Tarlos (B.), *8140*
- man machine systems, mathematical models, process control, stochastic systems, Hajnal (M.), Revesz (G.), *8172*
- fluid injection, fracture, hydraulic fracturing, hydraulics, rocks, Settari (A.), *8354*
- finite difference methods, vortex sheets, vortices, Bromilow (I.G.), Clements (R.R.), *8542*
- channel flow, galerkin method, turbulent flow, Rozhdestvensky (B.L.), Priymak (V.G.), *8569*
- decay, dispersion, turbulence (homogeneous), Kowalski (A.D.), Peskin (R.L.), *8609*
- monte carlo analysis, pipe flow, turbulent flow, two phase flow, Yoshida (H.), Masuda (H.), (et al.), *8893*
- dispersion, finite element methods, natural gas, Chan (S.T.), Gresho (P.M.), (et al.), *8902*
- combustion chambers, reservoirs, Youngren (G.K.), *8943*
- pressure gradient, reservoirs, Watts (J.W.) III, *8946*
- diffusers, inlets, supersonic flow, unsteady flow, Colbourne (D.E.), *9590*

- atmospheric circulation, heat transfer (atmospheric), waves, Lordi (N.J.), Kasahara (A.), (et al.), *9929*
- atmospheric circulation, heat transfer (atmospheric), waves, Hsu (C.-P.F.), *9930*
- algorithms, mathematical models, probability theory, Malyshev (I.A.), Palagin (Yu.I.), *10060*
- deformation, earthquakes, faults, Miyashita (K.), *10847*
- rarefied gases, shock waves (normal), Belotserkovskiy (G.M.), Yanitskiy (V.Ye.), *11458*
- pipe flow, unsteady flow, viscoelastic fluids, De Saint Victor, Ly (D.P.), (et al.), *11506*
- earthquakes, seismic waves, spectra, Doblare (M.), Alarcon (E.), (et al.), *12071*

Simuni (L.M.), see Makarenko (I.P.), *10569*
Sin (H.-C.), see Suh (N.P.), *998*
Sin (K.S.), discrete systems, feedback, identification, linear systems, Goodwin (G.C.), *4259*
Sinay (L.R.), flutter, modeling, panels, perturbation methods, Reiss (E.L.), *4753*
Sinclair (G.B.), cables, networks, Hodder (S.B.), *292*
- holes, plates (perforated), stress concentration, *1179*
- see Dempsey (J.P.), *4335*
- see Spencer (S.E.), *7264*

Sinclair (J.W.), see Fletcher (R.), *10053*
Sinclair (M.), control, flight tests, helicopters, Morgan (M.), *1629*
Sinclair (T.J.E.), see Abbs (A.F.), *3413*
Sincovec (R.F.), algorithms, large scale systems, matrix methods, Erisman (A.M.), (et al.), *2039*
Sines (G.), aluminum alloys, combined loading, fatigue, life expectancy, multiaxial fatigue, Ohgi (G.), *2407*
Singare (S.M.), approximations, finite difference methods, inequalities, Pachpatte (B.G.), *1117*
Singer (J.), see Yaffe (R.), *3313*
- elastic foundations, plates (stiffened), vibration (free), Rand (O.), (et al.), *4424*
- buckling, shells (cylindrical), shells (stiffened), vibration (forced), *6302*
- see Ari-Gur (J.), *11125*

Singh (A.), field tests, penetration, soils, Verma (M.S.), *2380*
Singh (B.M.), contact problems, elasticity (nonhomogeneous), half space, Rokne (J.G.), (et al.), *3243*
- see Dhaliwal (R.S.), *5090*
- see Dhaliwal (R.S.), *8390*

Singh (C.), see Sinha (P.), *9033*
- additives, bearings (journal), lubrication (hydrodynamic), micropolar media, reynolds equation, Sinha (P.), *9963*
- bearings (journal), lubrication (hydrodynamic), non newtonian flow, squeeze films, Sinha (P.), *10890*

Singh (H.), see Sharma (R.C.), *7901*
Singh (H.B.), air pollution, Saias (L.J.), (et al.), *1918*
Singh (I.R.), see Reddy (J.N.), *4413*
Singh (J.P.), see Satyamurthy (K.), *6943*
Singh (K.C.), bearings (gas lubricated), bearings (porous metal), bearings (thrust), lubrication (hydrostatic), stiffness, Rao (N.S.), *10887*
Singh (K.K.), optimization, tanks, variational methods, Swamee (P.K.), *3520*
Singh (K.P.), geometrical properties, heat exchangers, heat exchangers (stream-symmetric), heat transfer, internal flow, *10615*
Singh (M.), see Malik (S.K.), *7740*
- see Malik (S.K.), *9621*
- see Verma (P.D.S.), *10732*

Singh (M.C.), see Seshadri (R.), *10227*
Singh (M.P.), entrainment, laminar flow, pipe flow, swirl flow, Sinha (P.C.), (et al.), *610*
- damping, modeling, seismic loading, structures, *8966*

Singh (N.), see Bandyopadhyay (S.N.), *5304*
Singh (P.), explosions, isentropic processes, semi infinite media, shock waves, *3723*
- boundary layer (thermal), convection (free), heat transfer, integral methods, variational methods, Bhattacharya (D.K.), *5567*
- fluid mechanics, rotating disks, thermodynamics (irreversible), variational methods, Ram (P.), *10435*

Singh (P.N.), beams, elasticity (linear), solid mechanics, torsion, Jha (P.K.), *5070, book*
Singh (R.), fluid mechanics, modeling, transient effects, turbomachinery, *698*
- fluid mechanics, modeling, transient effects, turbomachinery, *699*
- see Mahalanabis (A.K.), *4250*

Singh (R.S.), see Sharma (V.D.), *7780*
Singh (S.N.), airplanes, design, feedback, observers, Schy (A.A.), *121*
- convection (free), differential equations (ordinary), grashof number, shells (spherical), Chen (J.), *1689*
- dynamic stability, gyrodynamics, spinning bodies, *1988*
- annular flow, convection (free), grashof number, spherical bodies, stratified flow, Elliott (J.M.), *3801*
- control, decoupling, design, digital control, feedback, nonlinear systems, *11050*

Singh (S.P.), aquifers, mixing layers, storage, *2996*
- see Spilker (R.L.), *10062*

Singh (S.R.), compressible flow, consolidation, porous media, Sagar (B.), *8927*
Singh (Y.P.), see Phalswal (D.R.), *2901*
- cams, linkages, mechanisms, synthesis, Kohli (D.), *6561*
- limit cycles, nonlinear analysis, oscillators, quenching, vibration (nonlinear), *7369*

Singhal (A.K.), moving media, oil removal, particle fluid flow, two phase flow, Dranchuk (P.M.), *9893*
Singhal (M.M.), see Goel (M.C.), *9457*
Singhal (R.K.), see Johri (A.K.), *4568*
Singhal (R.P.), see Green (A.E.S.), *10875*
Singkofer (K.), see Nagle (R.K.), *3096*
singular control, compression, linear systems, optimal control, Vasenin (V.A.), Samsonov (V.A.), *115*
- algorithms, optimal control, quasilinearization, Yeo (B.P.), *189*
- algorithms, avoidance, missiles, trajectories, variable metric algorithm, Blank (D.), Shinar (J.), *1160*
- linear systems, optimal control, Casti (J.), *2116*
- optimal control, variational methods, Skorodinskii (I.T.), *3183*
- algorithms, boundary value problems, multiple shooting algorithm, numerical methods, solar energy, Oberle (H.J.), *4304*
- optimal control, optimization, switching, Powers (W.F.), *4992*

singular integral equations, collocation, convergence, numerical methods, Tsamasphyros (G.), Theocaris (P.S.), *45*
- contact problems, elastic foundations, plates (circular), Karasev (S.N.), *252*
- contact problems, elasticity (linear), uniqueness, variational methods, Panagiotopoulos (P.D.), Zastrow (U.), *254*
- rotating disks, Filshtinskii (L.A.), Lyubchak (V.A.), *325*
- corners, elastic behavior, numerical methods, stress intensity factor, Theocaris (P.S.), Ioakimidis (N.I.), *478*
- cracks, elasticity, plates, Kruger (K.H.), *1373*
- convergence, integration, Tsamasphyros (G.), Theocaris (P.S.), *2052*
- cracks, elasticity (three dimensional), plates (thick), singularities, Folias (E.S.), *2434*
- cauchy integral, collocation, splines, Napolitano (M.), Rubini (F.), (et al.), *3119*
- cylindrical bodies, floating bodies, free boundary, heaving, singularities, Ursell (F.), *4099*
- experimental methods, mathematical methods, rethermalization, Haidar (N.H.S.), *4164*
- collocation, computing techniques, elasticity, Ioakimidis (N.I.), Theocaris (P.S.), *4182*
- cracks, elasticity (linear), plates (weakened), Borshchuk (E.M.), *4336*
- complex variables, cracks, edge dislocations, kinked crack, mixed mode loading, Kariholoo (B.L.), *4500*
- boundary value problems, laplace equation, mellin transform, transforms, wedges, Chakrabarti (A.), *4979*
- bonded joints, composite materials, edge cracks, fracture, stress intensity factor, Bakioglu (M.), *5127*
- cauchy principal value, collocation, computing techniques, Theocaris (P.S.), *6083*
- computing techniques, cracks, elasticity, Boiko (A.V.), Karpenko (L.N.), *6458*
- approximations, computing techniques, linear equations, Fabrikant (V.), Hoa (S.V.), (et al.), *7184*
- biharmonic equation, boundary value problems, elasticity (linear), Heise (U.), *7271*
- computing techniques, crack branching, interface cracks, penny shaped crack, Theocaris (P.S.), *7516*
- computing techniques, corners, fracture mechanics, stress intensity factor, Ioakimidis (N.I.), Theocaris (P.S.), *8419*
- brittle fracture, cracks, holes, plates (weakened), stress intensity factor, Mirsalimov (V.M.), *10291*
- cracks, dynamic fracture, stress intensity factor, twisting, Shindo (Y.), *10305*
- annuli, incompressible flow, jet flaps, vortices, wings, Belotserkovskii (S.M.), Lifanov (I.K.), *10496*

singular perturbations, boundary value problems, differential equations (ordinary), shock layer, Howes (F.A.), *25*
- approximation methods, diffusion, transient effects, Mann-Nachbar (P.), *1105*
- asymptotic methods, boundary layer, incompressible flow, interaction, separation, Veldman (A.E.P.), *1549*
- optimal control, regulator problem, riccati equation, Dmitriev (M.G.), *2119*
- aerodynamics, algorithms, boundary layer, boundary value problems, Calise (A.J.), *2120*
- boundary layer (thermal), conical bodies, incompressible flow, laminar flow, Kortikov (N.N.), Novikova (I.B.), *2606*
- computing techniques, finite difference methods, Berger (A.E.), Solomon (J.M.), (et al.), *3117*
- asymptotic behavior, initial value problems, parabolic equations, Alexiades (V.), *4175*
- estimation, perturbation theory, Sebald (A.V.), Haddad (A.H.), *4294*
- computing techniques, differential equations (ordinary), mesh generation, Kreiss (B.), Kreiss (H.-O.), *6067*
- boundary value problems, differential equations (ordinary), eigenvalues, stiff systems, Mahony (J.J.), Shepherd (J.J.), *7157*
- asymptotic behavior, differential equations (ordinary), large scale systems, stability theory, Grujic (L.T.), *8105*

- boundary layer, boundary value problems, elliptic equations, perturbation theory, Jiang (F.-R.), *9108*
- laplace transform, nonlinear waves, pade approximation, Venkatarangan (S.N.), Narendran (G.), *9109*
- boundary value problems, computing techniques, Roberts (S.M.), *10038*
- distributed parameters, optimal control, Shih (S.-C.), *10085*
- boundary value problems, elliptic equations, Zheng (Y.-S.), *10934*
- algorithms, control, discrete systems, Rajagopalan (P.K.), Naidu (D.S.), *11043*
- algorithms, optimal control, suboptimal control, Rajagopalan (P.K.), Naidu (D.S.), *11076*

singular waves, continuum mechanics, jump conditions, moving surfaces, waves, Beda (G.), *4127*
- continuum mechanics, jump conditions, moving surfaces, Kraiko (A.N.), *4929*
- elastic behavior, laplace transform, tauberian theorems, time delay systems, Lokshin (A.A.), *8124*
- dislocations, plastic waves, Markenscoff (X.), *8336*

singularities, elasticity (linear), stress concentration, stresses, wedges, Dempsey (J.P.), *238*
- concentrated load, crack opening displacement, fracture angle, strain energy, stress intensity factor, Gdoutos (E.E.), *468*
- inviscid fluid, irrotational flow, uniform current, Dragos (L.), Homentcovschi (D.), *1502*
- cavitation flow, free boundary, wedges, Sotina (N.B.), Fominykh (V.V.), *1503*
- finite element techniques, mesh generation, Hughes (T.J.R.), Akin (J.E.), *2065*
- crack tip geometry, finite element methods (hybrid), fracture, notch sensitivity, Lin (K.Y.), Tong (P.), *2071*
- cylindrical bodies, finite element techniques, stress analysis, Solecki (J.S.), Swedlow (J.L.), *2073*
- corners, crack opening displacement, cracks, finite element techniques, Wait (R.), *2074*
- cracks, elasticity (three dimensional), plates (thick), singular integral equations, Folias (E.S.), *2434*
- half space, reservoirs, streamlines, viscous flow, Hasegawa (E.), Fukuda (H.), *3616*
- boundary layer (three dimensional), boundary layer (turbulent), separation, Cousteix (J.), Houdeville (R.), *3652*
- cylindrical bodies, floating bodies, free boundary, heaving, singular integral equations, Ursell (F.), *4099*
- differential equations (ordinary), limit cycles, Wang (M.), Wang (L.), *4155*
- boundary elements, computing techniques, integration, Pina (H.L.G.), Fernandes (J.L.M.), Brebbia (C.A.), *4179*
- finite element techniques, simulation, Nayfeh (A.H.), Nassar (E.A.-A.M.), *4193*
- elasticity (linear), solid mechanics, variational methods, Rozin (L.A.), *4338, book*
- edge effects, plates (circular), plates (thick), Bulanov (G.S.), Shaldyrvan (V.A.), *4381*
- airfoils, fredholm equations, irrotational flow, least squares, sources, Campbell (G.S.), *4587*
- approximations, duct flow, elliptic equations, magneto fluid dynamics, Nye (V.A.), *4747*
- benard problem, bifurcation, convection (benard), Golubitsky (M.), Schaeffer (D.), *4983*
- computing techniques, elliptic equations, stability (numerical), Steinberg (J.), *5003*
- computer programming, edge cracks, three dimensional formulation, Hussain (M.A.), Coffin (L.F.), (et al.), *5021*
- differentiation, interpolation, matrix inversion, Okabe (M.), Kikuchi (N.), *5022*
- crack opening displacement, finite element techniques, fracture mechanics, Okabe (M.), *5024*
- finite element techniques, fracture mechanics, multiple cracks, stress intensity factor, Staab (G.H.), Sun (C.T.), *5313*
- boundary integral methods, elliptic equations, stress intensity factor, Xanthis (L.S.), Bernal (M.J.M.), (et al.), *6065*
- algorithms, computer programming, integration, Roose (D.), De Doncker (E.), *6094*
- finite element techniques, mesh generation, plane stress, semi infinite media, Shephard (M.S.), Gallagher (R.H.), (et al.), *6104*
- finite element techniques, fracture mechanics, Okabe (M.), *6107*
- ocean waves, spectra, Harper (E.Y.), *6696*
- bifurcation, catastrophe theory, fluid mechanics, topological techniques, Stewart (I.), *7172*
- approximation methods, elastic bodies, mathematical methods, vibration (forced), George (O.D.), *7398*
- cracks, elasticity (nonlocal), Atkinson (C.), *7523*
- bonded joints, composite materials, fracture criteria, interface cracks, Viola (E.), Piva (A.), *7535*
- axisymmetric flow, bodies of revolution, fredholm equations, least squares, source distribution, Jones (D.J.), *7681*
- ellipsoids, free boundary, oscillating bodies, ship motion, source distribution, Inglis (R.B.), Price (W.G.), *8037*
- computing techniques, elliptic equations, fredholm equations, matrix methods, Christiansen (S.), *8119*
- cauchy integrals, computing techniques, integration, Ioakimidis (N.I.), *8128*
- crack propagation, stress intensity factor, Peano (A.), Pasini (A.), *8143*
- mechanical analysis, mesh generation, Syczewski (M.), Tribillo (R.), *9125*
- plates, stokes flow, two dimensional flow, velocity profiles, viscous flow, Hasegawa (E.), *9532*
- annular flow, asymptotic methods, cylindrical bodies, rotating cylinders, Conlisk (A.T.), Walker (J.D.A.), *9535*
- boundary layer, flow obstructions, laminar flow, separated flow, Smith (F.T.), Daniels (P.G.), *9569*
- darcy flow, porous media, Lafe (O.E.), Montes (J.S.), (et al.), *9905*
- energy conversion, ocean, rotating fluids, sinks, stratified flow, Whitehead (J.A.) Jr., Gershenfeld (N.), *10411*
- computing techniques, parabolic equations, Ryvkin (V.B.), Kopeliovich (B.L.), *10937*
- anisotropic media, elastic waves, Peslyak (M.Yu.), *11165*
- creeping flow, heat transfer, nuclear waste, spherical bodies, viscous flow, Krenk (S.), *11363*
- gravity waves (internal), nonhomogeneous media, radial waves, wavemaking resistance, Gorodtsov (V.A.), *11380*
- flow fields, force, nonlinear theory, plates, walls, Sozou (C.), Pickering (W.M.), *11388*

Sinha (M.S.P.), distributed parameters, identification, nonlinear systems, walsh functions, Rajamani (V.S.), (et al.), *11058*

Sinha (N.K.), compressible flow, ice mechanics, material testing, rate sensitivity, strength, *493*
- see El-Sherief (H.), *4238*
- adaptive systems, digital control, microprocessors, nonlinear systems, observers, Law (S.S.Y.), (et al.), *10081*

Sinha (P.), bearings (roller), couple stresses, lubrication (elastohydrodynamic), non newtonian flow, rolling contact, Singh (C.), *9033*
- see Singh (C.), *9963*
- see Singh (C.), *10890*

Sinha (P.C.), see Singh (M.P.), *610*

Sinha (P.K.), decoupling, feedback, linear systems, multivariable systems, time invariant systems, *113*

Sinha (S.K.), see Sodha (M.S.), *2904*

Sinha (S.N.), compressible flow, navier stokes equation, reattachment, shear layer, turbulent flow, Gupta (A.K.), (et al.), *10431*
- cavities, reattachment, separated flow, Gupta (A.K.), (et al.), *10434*

Sinha (U.N.), see Shankar (P.N.), *2609*

Sinha Roy (J.), see Rout (B.), *7102*
- bearings (thrust), inertia, lubricants (liquid), lubrication (hydrostatic), viscoelastic fluids, Biswal (B.), *8058*

Sinhasan (R.), see Wadhwa (S.S.), *1935*
- see Dhagat (S.K.), *2569*
- see Aggarwal (K.R.), *2714*
- see Tayal (S.P.), *7093*
- see Malik (M.), *8059*
- see Tayal (S.P.), *8062*
- see Malik (M.), *9953*
- see Malik (M.), *10376*
- see Dhagat (S.K.), *12091*

Sinkevich (O.A.), see Artemov (V.I.), *7900*

Sinyavskii (V.F.), cylindrical bodies, damping, hydrodynamics, inertia, vibration, Fedotovskii (V.S.), (et al.), *5232*
- cylindrical bodies, dissipation, oscillating bodies, vibration, viscous effects, Fedotovskii (V.S.), (et al.), *5233*

siphons, air, irrotational flow, streamlines, Ali (K.H.M.), Pateman (D.), *6613*
- models, scale effects, surface tension, weirs, Goldring (B.T.), *7542*

Sirazetdinov (T.K.), see Ivanov (V.V.), *691*
- constraints, design, optimal control, regulator problem, Smirnov (S.V.), *4292*

Siriwardane (H.J.), see Desai (C.S.), *415*
- nonlinear theory, numerical methods, soil consolidation, Desai (C.S.), *9356*

Sirotenko (O.D.), mathematical models, meteorology, *4087*

Sirotenko (V.Ya.), see Pyatkin (V.P.), *202*

Sirotin (A.G.), see Dvoiris (A.D.), *11770*

Sirotkin (V.K.), see Dunin (S.Z.), *6400*

Sirotkin (Ya.A.), aerodynamics, axial turbines, cooling, heat transfer, one dimensional flow, *701*

Sirovich (L.), see Lewis (T.S.), *9647*
- eigenvalue problems, mathematical methods, operators, transforms, Knight (B.W.), *10030*
- see Knight (B.W.), *10035*

Sirtori (S.), boundary elements, elasticity (linear), plates, stress analysis, *6172*

Siryi (V.S.), analysis, bubble dynamics, liquid gas mixture, nozzles, Prikhodko (N.A.), *4627*

Sislian (J.P.), combustion (turbulent), compressible flow, swirl flow, turbulent mixing, *9564*
- see Sheng (Y.), *11894*

Sitapati Rao (P.), see Srinivasa Rao (P.), *6533*

Sitnik (A.S.), see Gavrilenko (G.D.), *10178*

Sitzer (M.R.), penetration, plane strain, plastic behavior, tools, Durban (D.), *6408*

Siu (T.K.), see Leondes (C.T.), *4218*

Sivakumaran (N.S.), channels, discharges, head, shallow water, spillways, Hosking (R.J.), (et al.), *9505*

Sivaramakrishnan (M.M.), airplane performance, ground roll, landing gears, *10509*

Sivashinsky (G.), aerothermochemistry, bifurcation, combustion, propagation, thermal waves, *8789*

Sivashinsky (G.I.), combustion instability, flames (turbulent), Matkowsky (B.J.), *838*

Sivirkin (V.F.), compressible flow, jets, turbulent flow, *11543*

Siwoff (F.), design, fluidics, proximity detectors, switching, Stojanow (B.), (et al.), *4327*

Sjoblom (B.G.A.), combustors, emissions, gas turbines, vaporization, *7884*

Skaar (K.T.), finite element techniques, propellers (marine), ships, vibration (flow induced), Carlsen (C.A.), *5970*

Skalak (R.), see Tozeren (H.), *5985*

- blood flow, capillary flow, microcirculation, Chien (S.), *8075*

Skar (S.J.), dynamics, existence theorems, large scale systems, limit cycles, Miller (R.K.), (et al.), *8103*

Skarshaug (R.E.), see Glasgow (E.R.), *11742*

Skawinski (R.), pipe flow, slots, sudden expansion, velocity profiles, Lasowska (A.), (et al.), *5443*

Skelton (R.E.), adaptive systems, estimation, filters, maximum principle, *2080*

- failure, linear systems, model reduction, *11053*

Skhirtladze (G.I.), boundary layer (atmospheric), clouds, diffusion, shear flow, turbulence (geophysical), wind, Yurchak (B.S.), *7061*

Skidmore (R.), blood flow, circulation, elastic constants, frequency response, laplace transform, Woodcock (J.P.), *7120*

Sklepko (J.), see Hocking (L.M.), *4640*

skin, adhesives, biomechanics, sensor devices, Margules (G.S.), Harris (D.L.), *1963*

- aging, tissues, ultrasonics, Bhagat (P.K.), Kerrick (W.), (et al.), *6011*

Skinner (G.T.), see Soong (T.T.), *4328*

Skinner (J.), carbides, coatings, friction (sliding), gases, high pressure, lubricants (gas), wear, *9948*

Skobelev (B.Yu.), see Struminskii (V.V.), *4642*

Skoda (Z.), aerodynamic performance, airplanes, mathematical models, unsteady flow, *9665*

Skorodinskii (I.T.), optimal control, singular control, variational methods, *3183*

Skovoroda (A.R.), impact, ogives, plates, *3394*

- composite structures, dynamic analysis, plasticity, waves, Shapiro (G.S.), *6195*

Skowronski (J.M.), see Vincent (T.L.), *4241*

Skrocki (H.), see Miastkowski (J.), *8437*

Skrovanek (S.D.), cast steel, composite materials, fibers, high temperature, materials properties, Herron (R.H.), *6954*

Skrzynski (S.), see Ostrowski (J.), *5492*

Skudrzyk (E.J.), modal analysis, shells (spherical), shells (thin), vibration (free), *1278*

Skuridin (G.A.), see Pletnev (V.D.), *2897*

Skurin (L.I.), see Polyanskii (A.F.), *5416*

Skvortsov (G.E.), relaxing media, statistical continuum mechanics, viscoelastic fluids, *8489*

slabs, conduction (heat), heat addition, transient loading, Fhts (P.B.) Jr., De Witt (K.J.), *773*

- bending, plates (rectangular), twisting, Nielsen (M.P.), Bach (F.), *1228*
- containment, reinforced concrete, seismic loading, stiffness, strength, White (R.N.), Perdikaris (P.C.), (et al.), *1462*
- green function, heat addition, nonuniform flow, Dudukovic (M.P.), *1689*
- anisotropic media, composite materials, laminates, thermoelasticity (steady), Tauchert (T.R.), *1838*
- beams (composite), cracking, reinforced concrete, shrinkage, Johnson (R.P.), Allison (R.W.), *2265*
- stiffness, Wong (Y.C.), Coull (A.), *2267*
- frequency response, vibration (free), Stoyan (Yu.G.), Makarovskii (E.L.), *2336*
- shear strength, stress analysis, ultimate strength, Garas (F.K.), Waine (B.R.), (et al.), *2517*
- cracking, reinforced concrete, Fujii (F.), *2520*
- design, reinforced concrete, Hornung (R.K.), Oesterle (E.), *2522*
- bridges, elastic behavior, prestressed concrete, waffle slabs, Kennedy (J.B.), El-Sebakhy (I.S.), *2530*
- analytical methods, plasma, wave interactions, waveguides, Phalswal (D.R.), Singh (Y.P.), (et al.), *2901*
- earthquake effects, shear walls, Paulay (T.), Taylor (R.G.), *3010*
- beams (composite), concrete, steel, Pyle (J.C.), *3315*
- foundations, nonhomogeneous soils, Malikova (T.A.), *3407*
- columns, flexure, punch problems, reinforced concrete, strength, Gesund (H.), Goli (H.B.), *3532*
- bridges, composite structures, design, Heins (C.P.), *3545*
- bending, floors, shear walls, stiffness, Coull (A.), Wong (Y.C.), *3553*
- ultimate strength, Wilby (C.B.), *4367*
- cracking, deflections, plates (circular), reinforced concrete, Desayi (P.), Muthu (K.U.), *4531*
- punch problems, reinforced concrete, shear strength, Petcu (V.), Stanculescu (G.), (et al.), *4534*
- materials processing, overlap formation, rolling, Stahlberg (U.), Soderberg (J-O.), (et al.), *5277*
- deformation, dynamic loads, plates, reinforced bodies, Parker (D.F.), *6198*
- composite materials, failure, floors, Davies (J.M.), Fisher (J.), *6229*
- junctions, sound propagation, stochastic processes, transmission, vibration, Wohle (W.), Beckmann (T.), (et al.), *6894*
- curved elements, finite element techniques, shells, shells (shallow), Mohr (G.), *7207*
- design (ultimate strength), plates (skew), reinforced concrete, Kwiecinski (M.), Wojewodzki (W.), *7604*
- columns, plates (rectangular), structural analysis, waffle construction, Karasudhi (P.), Hovichitr (I.), (et al.), *8241*
- composite structures, conduction (heat), layered media, thermal contact resistance, Duhamel (P.), Gosse (J.), *8732*
- energy density, thermoelasticity (transient), Day (W.A.), *8879*
- ductility, reinforced concrete, strength, Mirza (S.A.), Macgregor (J.G.), *9445*
- bearing capacity, collapse, foundations, plastic behavior, Doliński (K.), Sawczuk (A.), *10176*
- bridges, structural analysis, Bakht (B.), Jaeger (L.G.), (et al.), *10364*
- fire, models, pyrolysis, wood, Holve (D.J.), Kanury (A.M.), *10717*
- conductivity, convection (benard), convection (free), heat addition, thermal instability, Proctor (M.R.E.), *11763*
- absorption, integral methods, radiant interchange, reflection, scattering, Stramigioli (C.), Santarelli (F.), (et al.), *11766*

Sladek (J.), cracks, elasticity (three dimensional), elliptical cracks, *466*

- cracks, fredholm equations, plates (thick), stress intensity factor, Sumec (J.), *10294*

Sladkov (S.I.), arches, axial loading, bending, buckling, energy methods, *5149*

Slagle (W.P.), aluminum alloys, crack retardation, fatigue, hold time, metallurgy, Mahulikar (D.), (et al.), *5310*

Slaouti (A.), cylindrical bodies, end effects, reynolds number (small), wakes, Gerrard (J.H.), *7732*

Slater (G.L.), see Keskar (D.A.), *1626*

Slatinskii (N.D.), see Shishkin (L.A.), *10748*

Slattery (J.C.), see Lin (C.-Y.), *10405*

Slavin (M.E.), buildings, clay, damage, nonhomogeneous soils, swell, *1321*

Slawianowski (J.J.), dynamic analysis, rigid bodies, vibration (torsional), *10193*

Slawomirski (M.R.), constitutive equations, unsteady flow, viscoelastic fluids, *5381*

Sleath (J.F.A.), see Du Toit (C.G.), *9517*

slender bodies, design, vehicles, vortex shedding, Ericsson (L.E.), Reding (J.P.), *686*

- aerodynamic loads, vortex shedding, wakes, Fidler (J.E.), *689*
- currents, irrotational flow, ship motion, Triantafyllou (M.S.), *4101*
- aerodynamic performance, cascades, drag, nozzles, optimization, relaxation drag, Schilling (H.), *4625*
- aerodynamic loads, incompressible flow, yawing, Reding (J.P.), Ericsson (L.E.), *5495*
- metals, penetration, Vantoyan (A.A.), *6359*
- penetration, soils, Yankelevsky (D.Z.), Adin (M.A.), *6361*
- experimental results, vortex flow, vortex shedding, Calarese (W.), *8600*
- dust, hypersonic flow, Barron (R.M.), Wiley (J.T.), *8692*
- asymptotic methods, free boundary, ship motion, Troesch (A.W.), *9006*
- flow obstructions, interaction, shallow water, ship dynamics, Yeung (R.W.), Tan (W.T.), *9007*
- asymptotic methods, diffraction, ocean waves, ships, wave interactions, Beck (R.F.), Troesch (A.W.), *9012*
- compressible flow, oscillatory flow, transonic flow, Oshanskii (V.Yu.), *9560*
- critical region, heaving, pitching, shallow water, Plotkin (A.), *9942*
- axial flow, cylindrical bodies, flexible bodies, oscillations, resonance, Paidoussis (M.P.), Issid (N.T.), (et al.), *10765*
- asymptotic methods, irrotational flow, ship resistance, wavemaking resistance, Adachi (H.), *10879*
- boundary value problems, diffraction, ships, wave interactions, Liapis (N.), Faltinsen (O.M.), *12086*

slender wings, leading edge, lifting surfaces, separated flow, vortices, Wagner (B.), *10505*

- finite difference methods, perturbation theory, transonic flow, wings, Van Der Vooren (J.), Huizing (G.H.), (et al.), *11729*

Slesarenko (A.P.), see Rvachev (V.L.), *3811*

sliding, bifurcation, differential equations (ordinary), trajectories, Grishin (S.A.), Utkin (V.I.), *1143*

- contact angle, drops, thin films, two dimensional flow, Hocking (L.M.), *1534*
- abrasion, particle size, wear, Bayer (R.G.), *1927*
- modes, optimization, pontryagin's extremal, Kaganovich (S.L.), *2129*
- failure, friction (sliding), scuffing, thermoelasticity, wear, Durkee (D.B.), Cheng (H.S.), *3037*
- cams, wear, Dyson (A.), *3040*
- earth, earth's crust, faults, stress concentration, viscoelasticity, Mukherji (P.), Pal (B.P.), (et al.), *4031*
- excavation, prediction, rocks, stability, walls, Priest (S.D.), *4467*
- friction (sliding), stiffness, vibration, Budanov (B.V.), Kudinov (V.A.), (et al.), *4892*
- contact problems, friction (sliding), friction (solid solid), Lisowski (Z.), Stolarski (T.), *5091*

- friction (sliding), interference fits, temperature, thermocouples, Spurr (R.T.), *7085*
- articulated vehicles, kinematics, slipping, vehicles, wheels, Dudzinski (P.), *8096*
- creep, edge dislocations, fracture, Wirmark (G.), Nilsson (J.-O.), (et al.), *9393*

slip flow, convection (free), magneto fluid dynamics, plates (perforated), rotating bodies, Vidyanidhi (V.), Raju (G.K.), (et al.), *859*
- boundary layer, damping, liquids, oscillations, u-shaped tube, Kozlov (L.F.), Nikitina (G.D.), *3661*
- liquid gas mixture, two phase flow, Chernyy (I.M.), Kuzmenko (L.M.), (et al.), *5813*
- channel flow, ducts (curved), non newtonian flow, power law fluids, screw machinery, Pervadchuk (V.P.), Yankov (V.I.), (et al.), *10442*

slip line methods, combined loading, wedges, Collins (I.F.), *271*
- indentation, nonhomogeneous media, work hardening, Bhasin (Y.P.), Oxley (P.L.B.), (et al.), *2234*
- extrusion, plane strain, Murakami (T.), Takahashi (H.), *4470*
- anisotropic media, granular media, plastic flow, Lippmann (H.), *5107, book*
- anisotropic media, brittle materials, plasticity, Levitas (V.I.), *6177*
- necking, plane strain, strips, Dei (G.D.), Oding (S.S.), *8203*
- indentation, machinability, wedges, Petryk (H.), *8406*

Slifer (G.E.), impact, missiles, punch problems, walls, *510*

Slivker (V.I.), elastic foundations, elasticity (linear), layered media, *5073*

Silwa (S.M.), airplane structures, design (optimum), optimization, *3523*

Sloan (D.M.), boundary conditions, computing techniques, hyperbolic equations, stability (numerical), *5004*
- see Bramley (J.S.), *6065*
- see Barratt (P.J.), *11368*

Sloan (I.H.), infinite medium, integration, integro differential equations, *10046*

Sloan (S.W.), see Toh (C.T.), *6382*
- finite element techniques, matrices (sparse), solid mechanics, stiffness matrix, *9131*

Slobodkina (F.A.), see Gonopolskii (A.M.), *10761*

slopes, earth pressure, frozen ground, retaining walls, soil mechanics, Novikov (F.Ya.), *420*
- failure, rocks, Wyllie (D.C.), *2386*
- computing techniques, stability, Franciosi (V.), Migliore (M.), *3415*
- buckling, rocks, Cavers (D.S.), *5267*
- probability, soil stability, Vanmarcke (E.H.), *6393*
- computing techniques, soil mechanics, stability, Chugh (A.K.), Smart (J.D.), *9360*
- collapse, limit analysis, soils, stability, De Josselin De Jong (G.), *9361*
- numerical methods, soils, stability, Baker (R.), *9362*
- landslides, mountains, soils, stability, Okimura (T.), *9363*

sloping bottom, diffraction, gravity waves, surface waves, Lozano (C.), Liu (P.L.-F.), *666*
- film flow, reynolds number (small), wavy walls, Wang (C.-Y.), *1511*
- experimental results, gravity waves (breaking), nonlinear waves, Flick (R.E.), Guza (R.T.), (et al.), *1611*
- coastal engineering, flow measurement, sediment transport, visualization, Honji (H.), Matsunaga (N.), *2589*
- interference, sound propagation, underwater acoustics, Bannister (R.W.), Pedersen (M.A.), *5724*
- numerical methods, sound propagation, underwater acoustics, wave equations, Lee (D.), Papadakis (J.S.), *5788*
- gravity waves (finite depth), korteweg de vries equation, nonlinear analysis, Lugovtsov (A.A.), *6695*
- currents, gravity waves (finite depth), nonlinear analysis, Christoffersen (J.B.), Jonsson (I.G.), *6697*
- baroclinic instability, oceanography, stratification, Wright (D.G.), *8023*
- gravity waves (surface), theorems, uniqueness, Wen (S.-L.), Sastry (M.S.K.), *11571*
- diffraction, gravity waves (surface), refraction, Houston (J.R.), *11576*

sloshing, containers (partially filled), coriolis forces, spinning bodies, vorticity, El-Raheb (M.), Wagner (P.), *673*
- containers (partially filled), surface waves, tanks, wedge-shaped tanks, Bauer (H.F.), *674*
- containers (partially filled), hydroelasticity, rectangular container, tanks, Bauer (H.F.), *675*
- containers (partially filled), hydroelasticity, shells (fluid-filled), surveys, Dimaggio (F.L.), *676*
- containers (partially filled), dynamic loads, excitation, fluid-structure interaction, membranes, Bauer (H.F.), *4681*
- containers (partially filled), nonlinear analysis, oscillations, pitching, Nakayama (T.), Washizu (K.), *5483*
- containers (partially filled), eigenvalue problems, hydroelasticity, Kondo (H.), *6704*
- containers (partially filled), honeycomb structures, seismic loading, Kuriyama (Y.), Fukuda (H.), *7774*
- finite element methods (hybrid), finite element techniques, fluid mechanics, free boundary, solitary waves, Wellford (L.C.) Jr., Ganaba (T.H.), *9146*
- containers (partially filled), nonlinear analysis, pendulum analogy, shells (spherical), Seyar (B.A.), Baumgarten (J.R.), *9632*
- boundary elements, containers (partially filled), finite element techniques, Nakayama (T.), Washizu (K.), *11640*
- containers (partially filled), finite element techniques, seismic loading, Aslam (M.), *11662*
- impact, pressure distribution, ships, tanks, Gran (S.), *11667*
- approximations (higher order), containers (partially filled), nonlinear analysis, Lukovskii (I.A.), *11679*
- containers (partially filled), nonlinear analysis, reservoirs, variational methods, Limarchenko (O.S.), *11683*

slots, convection (free), layered media, Wirtz (R.A.), Reddy (C.S.), *819*
- bingham fluid, creeping flow, oscillatory flow, Sobolik (V.), *1561*
- analysis, laminar flow, micropolar media, Walicki (E.), Walicka (A.), *1562*
- pressure distribution, roughness, stokes flow, Phan-Thien (N.), *2649*
- cellular flow, convection (free), Ruth (D.W.), *2789*
- bottom irregularities, channel flow, free boundary, Nasser (M.S.), Venkataraman (P.), (et al.), *3599*
- boundary conditions, computing techniques, walls, Cooke (C.H.), *3655*
- moving surfaces, turbulent flow, two dimensional flow, Tognola (S.), *3663*
- pipe flow, sudden expansion, velocity profiles, Skawinski (R.), Lasowska (A.), (et al.), *5443*
- film cooling, hypersonic flow, laminar flow, thermal protection, Richards (B.E.), Stollery (J.L.), *5561*
- beams, boundary conditions, design (optimum), photoelasticity, plates (holed), Durelli (A.J.), Rajaiah (K.), *6504*
- couette flow, heat transfer, rollers, rotating cylinders, Miesch (H.), *6650*
- drag reduction, jets, polymers, viscoelasticity, Fruman (D.H.), Galivel (P.), *7667*
- jets, turbulent flow, Marsters (G.F.), Fotheringham (J.), *7733*
- airfoils, lift, unsteady flow, vortices, wakes, Howe (M.S.), *7783*
- blades, heat transfer, rotating bodies, turbomachinery, Kogan (G.A.), Dergach (A.A.), *7842*
- channel flow, convection (forced), thermal stresses, turbulent flow, Ryadno (A.A.), Franko (N.V.), *9683*

slug flow, computer programming, heat transfer (combined modes), nuclear reactors, tube bundles, Yeung (M.R.), Wolf (L.), *789*
- pipelines, pneumatic transport, two phase flow, waves, Tomita (Y.), Jotaki (T.), (et al.), *1839*
- finite difference methods, heat transfer, mass transfer, Antonini (G.), Guiffant (G.), *2855*
- transient effects, two phase flow, Fukano (T.), Sekoguchi (K.), (et al.), *4825*
- pipelines, two phase flow, Schmidt (Z.), Brill (J.P.), (et al.), *6969*
- measurements, two phase flow, void fraction, Subbotin (V.I.), Pokhvalov (Yu.Ye.), (et al.), *6978*
- conduction (heat), convection (forced), heat exchangers, heat transfer (combined modes), pipe flow, Vick (B.), Ozisik (M.N.), *8745*
- annular flow, critical heat flux, critical region, pipe flow, Bonn (W.), Krebs (R.), (et al.), *9689*
- pipe flow, risers, two phase flow, Schmidt (Z.), Brill (J.P.), (et al.), *11499*

Sluman (T.J.), boundary layer (atmospheric), injection, modeling, velocity measurement, wind tunnels, Van Maanen (H.R.E.), (et al.), *1648*

slurries, compressional waves, detonation (two phase), explosives, layered media, liquid gas mixture, Trebinski (R.), Trzcinski (W.), (et al.), *1595*
- cavitation, closed conduit flow, piping systems, transient effects, Chaudhry (M.H.) eds., Yevjevich (V.), *3596, book*
- particle fluid flow, pipes, pressure drop, sediment transport, Morikawa (Y.), *3607*
- diffusion, particles, pipelines, trajectories, two phase flow, Okuda (K.), *4011*
- propagation, transient, two phase flow, Thorley (A.R.D.), *6962*
- coal, heat transfer, multiphase flow, prediction, Trela (M.), *7962*
- density, measurements, Clift (R.), Clift (D.H.M.), *7969*
- concentration, discharges, friction (skin), pressure drop, Carstens (M.R.), Addie (G.), *10398*
- multiphase flow, suspensions, transport, Bajura (R.A.) ed., *10820*
- pipelines, pulsatile flow, Round (G.F.), *10822*
- particle size, pipes, transport, two phase flow, Parzonka (W.), Kenchington (J.M.), (et al.), *10823*
- coal, experimental results, pipe flow, Shook (C.A.), Haas (D.B.), (et al.), *11498*
- drag, mechanical properties, spherical bodies, Tsai (S.-T.), *12018*
- hydraulic transport, pipelines, surveys, Round (G.F.), *79999*

Slutskii (L.I.), adaptive systems, control, man machine systems, *5065*

Slutskii (V.G.), see Lesnyak (S.A.), *9627*

Slutskin (M.A.), geophysics, magnetic field, numerical methods, Tsirel (V.S.), *9916*

Smadici (C.), discrete systems, existence theorems, integer programming, optimization, scheduling problems, uniqueness, *3114*

Smallwood (R.H.), biomathematics, gastrointestinal system, mathematical models, myoelectrical activity, oscillations, Linkens (D.A.), (et al.), *2207*

Smart (A.E.), lasers, optical techniques, rotors, turbomachinery, velocity measurement, Wisler (D.C.), (et al.), *4687*

Smart (J.D.), see Chugh (A.K.), *9360*

Smart (J.H.), currents, oceanography, shear flow, *1891*

Smart (N.R.), see Kinloch (A.J.), *2572*

Smarun (A.B.), see Andreichenko (K.P.), *3668*

Smedley (G.P.), floating structures, offshore structures, *528*

Smelser (R.E.), see Atkinson (C.), *8881*

Smetana (F.O.), see Jones (C.B.), *1722*

Smiegielski (J.), design, electromagnetic loading, flow measurement, linearization, *5509*
Smiglelski (J.), calibration, electromagnetic loading, flow measurement, geometrical properties, magnetic stabilization, *4683*
Smirnov (B.I.), see Lyusin (V.M.), *9974*
Smirnov (G.F.), see Afanasev (B.A.), *9687*
Smirnov (N.N.), detonation (two phase), explosions, ignition, propagation, *8853*
Smirnov (S.A.), see Abramov (Yu.I.), *11746*
Smirnov (S.V.), see Sirazetdinov (T.K.), *4292*
Smirnov (V.A.), clouds, fog, holography, optical techniques, Yaskevich (G.F.), *992*
Smirnov (V.N.), cosserat solids, micromechanics, thermoelasticity, *5798*
- see Reznichenko (V.V.), *10609*

Smit (C.H.), arteries, blood flow, compressional waves, pulsatile flow, *6018*
Smith (A.C.), see Guram (G.S.), *4136*
Smith (B.S.), shear walls, structural analysis, walls, Abate (A.), *6527*
Smith (B.W.), see Sorrell (F.Y.), *9593*
Smith (C.O.), design (optimum), pressure vessels, shells (ellipsoidal), shells (toroidal), stress analysis, *2547*
Smith (C.R.), see Mauck (G.W.), *4120*
Smith (C.W.), crack propagation, mixed mode fracture, photoelasticity, stress intensity factor, surface flaws, Peters (W.H.), (et al.), *3479*
Smith (D.A.), heat transfer, thermodynamic processes, thermodynamics, thermodynamics (nonequilibrium), *2775*
Smith (D.G.E.), columns, composite materials, reinforced concrete, shape factors, *7355*
Smith (D.L.), algorithms, elastoplasticity, linear programming, plasticity, wolfe-markowitz algorithm, *2507*
Smith (E.), crack growth, crack opening displacement, plane strain, *467*
- crack opening displacement, fracture, multiple cracks, yield condition, *5305*
- see Pilkington (R.), *8383*
- crack initiation, cracks, yield condition, *9383*
- crack initiation, crack opening displacement, j-integral, *9402*

Smith (E.K.), see Sigbjornsson (R.), *7614*
Smith (E.M.), heat transfer, heat transfer (combined modes), packed beds, *9857*
Smith (F.T.), computing techniques, fluid injection, laminar flow, navier stokes equation, reynolds number, Dennis (S.C.R.), *4613*
- see Dennis (S.C.R.), *6649*
- cylindrical bodies, eddies, finite difference methods, reynolds number (small), *9540*
- boundary layer, flow obstructions, laminar flow, separated flow, singularities, Daniels (P.G.), *9569*
- boundary layer, flow obstructions, reynolds number (high), two dimensional flow, Brighton (P.W.M.), (et al.), *10423*

Smith (G.F.), elasticity (linear), isotropic materials, mathematical methods, tensor methods, vector methods, *6060*
- see Smith (M.M.), *9093*

Smith (H.C.), flight tests, porous walls, vortices, wakes, wings, *2730*
Smith (H.L.), averaging, bifurcation, differential equations (ordinary), hopf bifurcation, *7155*
Smith (I.), beams (sandwich), wood structures, *2259*
Smith (I.G.), creep, pressure vessels, prestressed concrete, thermal effects, *10357*
Smith (I.J.), bridges (box girder), cable stayed bridges, dynamic response, wind loads, *519*
Smith (I.M.), dynamic response, fatigue, foundations, loads, offshore structures, resonance, Molenkamp (F.), *3558*
Smith (J.C.), bonding, computing techniques, mathematical models, networks, paper, *1137*
Smith (J.D.), see Daly (K.J.), *485*
- dynamic contact, dynamic loads, gear teeth, *1308*

Smith (J.H.), see De Wit (R.), *7531*
Smith (J.K.) Jr., see Kalb (C.E.), *4012*
Smith (J.M.), see Gill (A.E.), *8020*
Smith (K.G.), see Harrison (R.), *8021*
Smith (L.), fluid mechanics, hydraulic transport, sand, stratified flow, *3004*
- dispersion, groundwater, mass transportation, models, stochastics, Schwartz (F.W.), *10671*

Smith (L.H.) Jr., see Adkins (G.G.) Jr., *10623*
Smith (M.B.), anisotropic media, porous media, rocks, Cheatham (J.B.) Jr., *2390*
- see Nolte (K.G.), *6398*

Smith (M.J.), see Mcdonald (C.F.), *2750*
- see Squire (L.C.), *3649*

Smith (M.M.), mathematical methods, matrix methods, tensor methods, Smith (G.F.), *9093*
Smith (O.E.), gust loads, rockets, stochastics, Adelfang (S.I.), *9819*
Smith (P.), biomathematics, heat transfer (biological), human body, temperature, Twizell (E.H.), *6027*
- finite element methods, heat transfer (biological), human body, variational methods, Twizell (E.H.), *9069*

Smith (P.M.), see Grantham (W.D.), *2960*
Smith (P.W.) Jr., acoustic waves, response, scattering, waveguides, *4797*
Smith (R.), drag reduction, heat transfer, pipe flow, turbulent flow, Edwards (M.F.), *3708*
- contamination, discharges, environmental control, estuaries, rivers, water pollution, *7657*
- see Edwards (M.F.), *8572*

Smith (R.D.), see Clements (R.M.), *2860*
Smith (R.E.), infiltration, rainfall, runoff, sediment transport, *4573*
Smith (R.L.), monte carlo analysis, radiography, scattering, x ray techniques, *7564*
Smith (R.M.), finite difference methods, finite element techniques, galerkin method, peclet number, *6120*
Smith (R.N.), bearings (journal), peclet number, reynolds equation, temperature, viscosity, Tichy (J.A.), *9039*
- see Catton (I.) eds., *9682, book*
- see Constantinescu (V.N.), *10695*

Smith (S.D.), boundary layer (atmospheric), friction coefficient, friction velocity, heat transfer (atmospheric), ocean air interaction, reynolds stresses, turbulence (geophysical), *8997*
Smith (S.H.), boundary layer, nonlinear analysis, rotating fluids, spin-up, *580*
- bodies of revolution, reynolds number (small), rotating bodies, secondary flow, separated flow, *8527*

Smith (T.), attenuation, ducts, lagging, noise abatement, Rao (J.M.), (et al.), *1820*
Smits (A.J.), bodies of revolution, pressure distribution, wind tunnels, Lee (S.P.), (et al.), *6624*
- experimental methods, heat transfer, hot wire, turbulence, Perry (A.E.), *10481*

Smits (F.P.), design, gravity platforms, offshore structures, structural analysis, *7613*
Smohal (F.), see Voll (L.), *9766*
smoke stacks, mixing, plumes, Sandroni (S.), Bacci (P.), (et al.), *2679*
- aerodynamic interference, strakes, vibration (flow induced), wind loads, wind tunnels, Ruscheweyh (H.), *2910*
- elastic foundations, footings, winkler foundation, Barvashov (V.A.), Fedorovsky (V.G.), *7321*
- air pollution, boundary layer (atmospheric), plumes, turbulence (geophysical), Ooms (G.), Mahieu (A.P.), *8028*
- measurements, plumes, power plants, Volkov (E.P.), Gribkov (A.M.), *11518*
- boundary layer, convection, dispersion, thermal plumes, Venkatram (A.), *11519*

smoke tunnels, lasers, mixing layers, turbulent flow, visualization, Mensing (P.), Fiedler (H.), *9679*
Smolin (B.S.), see Smorodinov (M.), *10251*
Smolinska (B.), film thickness, interferometry, optical instruments, Wasowski (J.J.), *1396*
Smolskii (V.M.), cracking, failure, griffith cracks, random loading, stochastic systems, *8411*
smoothing of data, functional analyis, variational methods, Penenko (V.V.), Obraztsov (N.N.), *2028*
- composite materials, continuum mechanics, Fishman (L.), Mccoy (J.J.), *3276*
- fredholm equations, optimization, regularization, Butler (J.P.), Reeds (J.A.), (et al.), *9116*
- decision theory, differential equations (partial), dynamic programming, transforms, Angel (E.S.), *10023*

Smorodinov (M.), anchors, buried structures, soil mechanics, structures, underground, Smolin (B.S.), *10251*
Smulski (I.I.), see Kislykh (V.I.), *10543*
Smyth (R.), axisymmetric flow, heat transfer, reattachment, separated flow, thermal measurements, turbulent flow, *3780*
- heat exchangers, heat exchangers (rod baffle), tube bundles, vibration isolation, *10516*

snap-through, iterative methods, numerical methods, Crisfield (M.A.), *4401*
- buckling, frames, impulsive loading, Kounadis (A.N.), *5187*
- elastoplasticity, shells (axisymmetric), Toi (Y.), Ishinabe (M.), (et al.), *7365*
- buckling, dynamic response, nonlinear analysis, structural analysis, Kamat (M.P.), Hayduk (R.J.), *10362*

Sneil (C.), boundary value problems, computing techniques, finite difference methods, Vesey (D.G.), (et al.), *10938*
Sneyd (A.D.), boundary layer, induced drag, magneto fluid dynamics, perturbation methods, rotating fluids, *860*
Snidle (R.W.), see Evans (H.P.), *9027*
Sniedovich (M.), algorithms, control, dynamic programming, reservoirs, *11085*
snow, avalanches, landslides, modeling, Pariseau (W.G.), *1330*
- avalanches, landslides, modeling, Danilova (E.M.), Eglit (M.E.), *1331*
- freezing, permeability, soils, thawing, Shtykov (V.I.), *3402*
- dynamic analysis, plasticity, shear, tracked vehicles, vehicles, Brown (R.L.), *5396*
- condensation, melting, sublimation, Matsuo (T.), Sasyo (Y.), *5614*
- melting, sublimation, Matsuo (T.), Sasyo (Y.), *5615*
- drifting, Iversen (J.D.), *5906*
- porous media, pressure measurement, Wankiewicz (A.), *5908*
- safety, shock, ski bindings, Brossard (J.P.), Pascal (R.), (et al.), *6360*
- roughness, wind tunnels, Kikuchi (T.), *7959*
- gages, particle fluid flow, precipitation, wind tunnels (environmental), Haasz (A.A.), Raimondo (S.), *9002*

Snyder (R.L.), gravity waves (surface), ocean air interaction, pressure, surface waves, turbulence (geophysical), Dobson (F.W.), (et al.), *12080*

Snyder (W.H.), see Hunt (J.C.R.), *582*
So (B.Y.C.), lubricants (liquid), pressure, viscosity, Klaus (E.E.), *5989*
So (R.M.C.), aerodynamic loads, crossflow, cylindrical bodies, gust loads, Savkar (S.D.), *4755*
- laminar flow, vortex flow, wind power, *5670*
- reynolds stresses, shear flow, stress strain relationships, turbulence model, turbulent flow, Peskin (R.L.), *11559*

Soare (M.V.), coding, structural analysis, *10363*
Soavi (F.), dynamic response, machinery, tools, vibration (self excited), *6315*
Sobel (L.H.), see Ashour (H.A.), *10180*
Sobin (S.S.), see Fung (Y.C.), *4911*
Sobin (V.M.), film flow, heat transfer, nusselt number, velocity profiles, *5536*
Sobkolov (B.N.), see Akimov (G.A.), *3639*
Sobolik (V.), bingham fluid, creeping flow, oscillatory flow, slots, *1561*
Sockel (H.), aerodynamic loads, buildings, geometrical properties, pressure distribution, unsteady flow, Taucher (R.), *5698*
Soden (P.D.), see Barton (D.C.), *10367*
Soden (P.D.W.), see Highton (J.), *10325*
Soderberg (J-O.), see Stahlberg (U.), *5277*
Sodha (M.S.), solar distillation, solar energy, wick, Kumar (A.), (et al.), *2833*
- focusing, laser plasma interaction, propagation, theory, wave absorbers, Sinha (S.K.), (et al.), *2904*
- convection, energy conversion, solar collectors, thermosyphons, Tiwari (G.N.), *8764*
- energy storage, solar collectors, solar ponds, transient loading, Bansal (P.K.), (et al.), *9737*
- energy conversion, heating, solar collectors, solar ponds, Tiwari (G.N.), (et al.), *10633*

sodium, bubble dynamics, conduction (heat), Miyazaki (K.), *5820*
- boiling, compressional waves, hydrodynamic stability, nuclear reactors, thermal instability, Galati (A.), *6770*
- bubbly flow, cavitation inception, choked flow, water, Kamiyama (S.), Yamasaki (T.), *11753*

Soedel (W.), plates, shells, vibration, *7388*
Soeder (R.H.), see Braithwaite (W.M.), *10730*
Soenarko (B.), see Seybert (A.F.), *4802*
Sofoluwe (A.B.), see Royles (R.), *11114*
Sofrata (H.), condensation (filmwise), laminar flow, theory, waves, *1724*
Sofrata (H.M.), air conditioning, analytical methods, cooling, heat exchangers, *2838*
Sofrin (T.G.), fans, jet engines, noise, Mathews (D.C.), *4773*
Sofronie (R.), bridges (suspension), design (minimum weight), optimization, prestressed structures, shape factors, *2533*
- see Petre (A.), *3910*
- bridges (suspension), deflections, prestressed structures, *5368*
- cable stayed bridges, structural analysis, towers, *9454*
- bridges (suspension), design (optimum), prestressed structures, *9455*

Sogomonyan (E.S.), see Karavai (M.F.), *3177*
Soh (A.K.), see Allison (I.M.), *87*
Sohngen (B.), boundary integral methods, fredholm equations, free boundary, gates, irrotational flow, Bischoff (H.), *10401*
Sohoni (V.), computing techniques, kinematics, mathematical methods, optimization, state space techniques, Haug (E.J.), *10006*
soil consolidation, clay, saturation, semi infinite media, Deresiewicz (H.), *412*
- experimental results, peat soil, Amaryan (L.S.), *1319*
- integral methods, porous media, Sukharev (B.V.), *3401*
- boundary value problems, green function, initial value problems, Bowen (R.M.), *4160*
- deformation (finite), elastoplasticity, Carter (J.P.), Booker (J.R.), (et al.), *6386*
- nonlinear theory, numerical methods, Siriwardane (H.J.), Desai (C.S.), *9356*
- deposition, self weight effects, strain, Lee (K.), Sills (G.C.), *9357*
- experimental methods, shape factors, size factors, Subba Rao (K.S.), *10247*
- analytical methods, design, piles, Randolph (M.F.), Wroth (C.P.), *11179*

soil mechanics, earth pressure, frozen ground, retaining walls, slopes, Novikov (F.Ya.), *420*
- modeling, railroads, Chang (C.S.), Adegoke (C.W.), (et al.), *422*
- fluid mechanics, infinite medium, interpolation, rock mechanics, Lynn (P.P.), Hadid (H.A.), *3132*
- earth pressure, finite element methods, nonlinear programming, Basudhar (P.K.), Vaisangkar (A.J.), (et al.), *3403*
- infiltration, porous media, Reeder (J.W.), *5839*
- prediction, settlements, Asaoka (A.), Matsuo (M.), *6384*
- equilibrium, failure, Protosenya (A.G.), Chernikov (A.K.), *6397*
- clay, excavation, structural stability, tunnels, Davis (E.H.), Gunn (M.J.), (et al.), *6526*
- elastic foundations, ocean bed, pipelines, stress analysis, underwater structures, winkler foundation, Hobbs (R.E.), *6551*
- constitutive relations, deformation (plastic), plasticity, Borcia (E.), *7439*
- hydraulics, interaction, Lindenberg (J.), Kenter (C.J.), *8513*
- experimental methods, pore pressure, Premchitt (J.), Brand (E.W.), *9352*
- computing techniques, slopes, stability, Chugh (A.K.), Smart (J.D.), *9360*
- analytical methods, earth pressure, experimental results, walls, Roth (W.H.), Crandall (L.), *9364*
- explosions, explosive loading, explosive solid interactions, impulsive loading, Baranov (E.G.), Kovalenko (V.A.), (et al.), *9841*
- explosions, explosive loading, explosive solid interactions, impulsive loading, Artyshev (S.G.), Dunin (S.Z.), (et al.), *9842*
- canals, seepage, Orasanu (M.T.), *9890*
- anchors, buried structures, structures, underground, Smorodinov (M.), Smolin (B.S.), *10251*
- internal flow, near ground effects, runoff, saturation, Ahuja (L.R.), Ross (J.D.), (et al.), *10831*

soil stability, soil grouting, tunnels, Tan (D.Y.), Clough (G.W.), *1333*
- bifurcation, plane strain, sand, Vardoulakis (I.), *4389*
- probability, slopes, Vanmarcke (E.H.), *6393*
- boreholes, electromagnetic waves, measurements, Laine (E.F.), Lytle (R.J.), (et al.), *6396*

soil structure interaction, pressure distribution, vehicles, vehicles (tracked), Garber (M.), Wong (J.Y.), *531*
- approximation methods, sh waves, Chu (L.L.), Askar (A.), (et al.), *967*
- computing techniques, finite element methods, Ito (Y.M.), England (R.H.), (et al.), *968*
- buried structures, pipes, seismic waves, underground, Parnes (R.), Weidlinger (P.), *969*
- nuclear reactors, probability theory, seismic loading, Jaeger (T.A.) eds., Boley (B.A.), *1325, book*
- finite element techniques, foundations, substructuring, Dasgupta (G.), *1881*
- dynamic response, structural response, Harada (T.), Kubo (K.), (et al.), *2345*
- dynamic response, plates, Savidis (S.A.), Richter (T.), *2346*
- anchors, elastic behavior, influence charts, Rowe (R.K.), Booker (J.R.), *2384*
- boundary integral methods, finite element methods (hybrid), Underwood (P.), Geers (T.L.), *3009*
- dynamic response, elastic foundations, vibration (forced), Iguchi (M.), Luco (J.E.), *3375*
- dynamic response, rails, vibration (free), Moritoh (Y.), *3376*
- foundations, piles, scale models, soils, Wiesner (T.J.), Brown (P.T.), *3409*
- bridges, layered media, piles, Takemiya (H.), Yamada (Y.), *4036*
- chimneys, seismic loading, Aranda (G.R.), *4846*
- foundations, layered media, seismic loading, Waas (G.), *4847*
- finite element methods, flow, Runesson (K.), Tagnfors (H.), (et al.), *6385*
- foundations, modeling, seismic loading, Fedock (J.J.), Schreyer (H.L.), *7033*
- foundations, seismic loading, Ellis (B.R.), *7036*
- foundations, half space, seismic loading, Hamidzadeh-Eraghi (H.R.), Grootenhuis (P.), *7037*
- beams, elastic foundations, plates, Wolfer (K.-H.), *7612*
- dynamic response, friction, piles, vibration, Akiyoshi (T.), *8014*
- finite element techniques, seismic loading, Ushijima (R.), Kausel (E.), *8017*
- computing techniques, rayleigh ritz method, vibration, Solari (G.), Stura (D.), *8963*
- modeling, seismic loading, Balendra (T.), Tan (Y.-P.), (et al.), *8964*
- buckling, buried structures, pipes, pressurized pipes, Boumazel (C.), *9293*
- earthquake resistant structures, foundations, shear stress, underground, Meade (K.P.), Keer (L.M.), *9346*
- earth pressure, numerical methods, Gioda (G.), Jurina (L.), *9918*
- piles, seismic loading, Kagawa (T.), Kraft (L.M.) Jr., *9919*
- piles, vibration, Nogami (T.), Novak (M.), *10258*
- design, hydraulics, pipe flow, pipelines, Stephenson (D.), *10369*
- hybrid simulation, numerical methods, Gupta (S.), Penzien (J.), (et al.), *10848*
- dams, hydrodynamic pressure, seismic loading, Chopra (A.K.), Gupta (S.), *10849*
- foundations, vibration, Saha (S.), Chattopadhyay (B.C.), *11150*

soils, conical bodies, penetration, stress analysis, Forrestal (M.J.), Norwood (F.R.), (et al.), *406*
- foundations, optimization, sampling, Rats (M.V.), Pyrchenko (V.A.), *409*
- continental slope, physical properties, structure, Mcgregor (B.A.), Bennett (R.H.), (et al.), *410*
- dissipation, modeling, pore pressure, Verruijt (A.), *411*
- compaction, field tests, granular media, Leonards (G.A.), Cutter (W.A.), (et al.), *418*
- field tests, pressure change, Clough (G.W.), Denby (G.M.), *421*
- field tests, pore pressure, river beds, sedimentation, Bennett (R.H.), Faris (R.), *423*
- heat transfer, mass transfer, moisture, thermal instability, transient, Hartley (J.G.), Black (W.Z.), *830*
- plastic behavior, yield criteria, Van Eekelen (H.A.M.), *1315*
- frost, heaving, modeling, Gilpin (R.R.), *1322*
- bearing capacity, piles, Rollberg (D.), *1326*
- bearing capacity, piles, Murff (J.D.), *1327*
- acoustic waves, cylindrical waves, diffraction, sound propagation, Hebault (D.), Filippi (P.), *1808*
- heat transfer (atmospheric), hydrology, mass transfer, meteorology (physical), Lykosov (V.N.), Palagin (E.G.), *1907*
- anisotropy, layered media, strength, Krishna Murthy (M.), Nagaraj (T.S.), (et al.), *2379*
- field tests, penetration, Singh (A.), Verma (M.S.), *2380*
- modeling, plasticity, Mroz (Z.), *2381*

- load transfer, loads, piles, porous media, saturation, Niumpradit (B.), Karasudhi (P.), *2385*
- classification, grainsize, Bhujangarao (C.H.), *3395*
- embankments, inclusions, Andrawes (K.Z.), Mcgown (A.), (et al.), *3397*
- anisotropic media, stress strain relationships, Yoshida (S.), *3400*
- freezing, permeability, snow, thawing, Shtykov (V.I.), *3402*
- bearing capacity, footings, layered media, Satyanarayana (B.), Garg (R.K.), *3405*
- displacement, foundations, layered media, Gazetas (G.), *3406*
- field tests, piles, saturation, stress strain relationships, Bartolomei (A.A.), Yushkov (B.S.), (et al.), *3408*
- foundations, piles, scale models, soil structure interaction, Wiesner (T.J.), Brown (P.T.), *3409*
- piles, seismic loading, Nuti (C.), *3410*
- highways, loads, wheels, Corapcioglu (M.Y.), Ural (A.N.), *3416*
- liquefaction, penetration, Tatsuoka (F.), Iwasaki (T.), (et al.), *3419*
- anisotropic media, experimental methods, plasticity, Murff (J.D.), *4461*
- footings, winkler foundation, Gazetas (G.), *4463*
- deformation, elastoplasticity, Sporykhin (A.N.), *4464*
- salt dissolution, stefan problem, transport mechanisms, Klykov (V.E.), Kulagin (V.L.), (et al.), *4466*
- drainage, mathematical models, porous media, Polyakov (V.L.), *4838*
- dynamic properties, shear strength, swell, Au (W.-C.), Chae (Y.S.), *5252*
- experimental results, field tests, penetration, tools, Spektor (M.), *5253*
- construction, heaving, Pchelintsev (A.M.), Komarov (V.I.), *5254*
- acoustic emission, Lord (A.E.) Jr., Koerner (R.M.), *5255*
- flexure, foundations, Selvadurai (A.P.S.), *5257*
- experimental methods, tension, Thorne (C.R.), Tovey (N.K.), (et al.), *5261*
- experimental methods, thermal measurements, transport properties, Abdel-Wahed (R.M.), Pfender (E.), (et al.), *5527*
- groundwater, porous media, Kalyuzhnyi (I.L.), Pavlova (K.K.), *5899*
- penetration, slender bodies, Yankelevsky (D.Z.), Adin (M.A.), *6361*
- disturbance, experimental methods, sampling, Broms (B.B.), *6373*
- constitutive relations, foundations, numerical analysis, Zienkiewicz (O.C.), *6374*
- cyclic testing, triaxial tests, Kokusho (T.), *6381*
- anisotropic media, collapse, failure, finite element methods, Toh (C.T.), Sloan (S.W.), *6382*
- cyclic loading, drainage, Zienkiewicz (O.C.), Chang (C.T.), (et al.), *6387*
- freezing, modeling, phase changes, Hromadka (T.V.) II, Guymon (G.L.), *6388*
- cyclic testing, elastic constants, freezing, Czajkowski (R.L.), Vinson (T.S.), *6389*
- freezing, tunneling, Miyoshi (M.), Tsukamoto (T.), (et al.), *6390*
- experimental methods, Berends (B.E.), Ko (H.-Y.), *6391*
- earth pressure, Shankar (N.B.), *6392*
- excavation, statistical design, Matsuo (M.), Kawamura (K.), *6394*
- irrigation, seepage, Bruch (J.C.) Jr., *7009*
- elastoplasticity, stress strain relationships, Ohmaki (S.), *7436*
- finite element methods, mathematical models, plasticity, Desai (C.S.), Phan (H.V.), (et al.), *7438*
- cavitation, compressional waves, Kotlyarevskii (V.A.), Maiorova (E.G.), (et al.), *7440*
- mechanical properties, prediction, statistical theory, Tabba (M.M.), Yong (R.N.), *7441*
- field tests, penetration, Kezdi (A.), Mlynarek (Z.), *7442*
- electro-osmosis, field tests, mechanical properties, Banerjee (S.), Mitchell (J.K.), *7445*
- electro-osmosis, field tests, mechanical properties, Mitchell (J.K.), Banerjee (S.), *7446*
- field tests, penetration, Baligh (M.M.), Vivatrat (V.), (et al.), *7447*
- dynamic response, seismic loading, vibration, Gazetas (G.), *8349*
- diffusion coefficient, galerkin method, moisture, Hromadka (T.V.) II, Guymon (G.L.), *8779*
- absorption, diffusion, galerkin method, moisture, Tolikas (P.K.), Tzimopoulos (C.D.), (et al.), *8780*
- erosion, Kelly (W.E.), Gularte (R.C.), *9353*
- constitutive relations, shear, Nakai (T.), Matsuoka (H.), *9354*
- experimental results, freezing, Booth (D.B.), *9358*
- contact points, granular media, particle dynamics, structure, Athanasiou-Grivas (D.), Harr (M.E.), *9359*
- collapse, limit analysis, slopes, stability, De Josselin De Jong (G.), *9361*
- numerical methods, slopes, stability, Baker (R.), *9362*
- landslides, mountains, slopes, stability, Okimura (T.), *9363*
- cement stabilized soils, compression, concrete, dynamic testing, elastic constants, statics, tension, Kolias (S.), Williams (R.I.T.), *9427*
- cyclic loading, impact, tools, Spektor (M.), *10248*
- granular media, gravitational stabilization, nonlinear theory, Shahinpoor (M.), *10249*
- piles, vibration, vibratory driving, Rodger (A.A.), Littlejohn (G.S.), *10252*
- cyclic loading, ocean bed, pore pressure, Martin (G.R.), Lam (I.), (et al.), *10253*
- piles, stresses, Chickanagappa (L.S.), Ramiah (B.K.), (et al.), *10256*
- conduction (heat), freezing, phase changes, Mostaghimi (J.), Pfender (E.), *10563*
- earthquake resistant structures, resonance, structural response, Herzog (M.A.M.), *10853*
- freezing, kinetics, Danielyan (Yu.S.), Yanitskii (P.A.), *11774*
- infiltration, layered media, surface effect, Moore (I.D.), *12064*

Sokolov (A.A.), heat transfer, hydrology, mass transfer, Kharchenko (S.I.), *1898*

Sokolov (A.S.), see Lebedev (A.D.), *11791*

Sokolov (A.V.), fluidized beds, heat transfer, walls, Baskakov (A.P.), (et al.), *7994*

Sokolov (B.B.), automation, deformation, moire methods, strain analysis, *2473*

Sokolov (B.N.), see Zaremba (A.T.), *174*

Sokolov (E.A.), composite materials, creep, plastics, polymers, Maksimov (R.D.), *2228*

Sokolov (M.), boundary layer, laminar flow, similarity methods, turbulence (transport), Antonia (R.A.), (et al.), *3648*
- axisymmetric flow, coherent structure, jets, spark discharge, Kleis (S.J.), (et al.), *5451*
- see Moalem-Maron (D.), *8696*
- see Van Atta (C.W.), *10471*

Sokolov (V.B.), see Gorbachev (L.P.), *8635*

Sokolovskaya (I.I.), dynamic analysis, equations of motion, shells (nonlinear), shells (orthotropic), *4377*

Sokolovskii (V.Z.), see Stoyan (Yu.G.), *3199*

Sokolskii (A.G.), see Ivanov (A.P.), *4947*

Sokovishin (Yu.A.), boundary layer (thermal), convection (free), heat transfer, laminar flow, plates (vertical), Semenov (A.G.), *3796*

Solan (A.), see Toren (M.), *8718*
- see Toren (M.), *9559*

Solanki (H.T.), beam columns, bending, reinforced concrete, *5147*

solar cells, distillation, energy conversion, solar collectors, solar energy, Veziroglu (T.N.) ed., *1652, book*
- optical instruments, radiant interchange, solar concentrators, Peters (R.P.), *3832*
- energy conversion, solar energy, Fonash (S.J.), *4722, book*

solar collectors, radiant interchange, radiation properties, Klein (S.A.), Theilacker (J.C.), *779*
- radiant interchange, thermal properties, Manrique (J.A.), Suarez (R.), *781*
- distillation, energy conversion, solar cells, solar energy, Veziroglu (T.N.) ed., *1652, book*
- air conditioning, cooling, radiant interchange, Jones (C.B.), Smetana (F.O.), *1722*
- channel flow, convection, nusselt number, Mouton (H.), Couanon (J.C.), (et al.), *2808*
- energy conversion, solar energy, wind power, Kreider (J.F.), Kreith (F.), *2831, book*
- energy conservation, energy storage, Wolfson (R.L.T.), Harvey (H.S.), *2832*
- cooling, heating, solar distillation, Ward (D.S.), *2834*
- climatology, meteorology, Page (J.K.), Rodgers (G.G.), (et al.), *2835*
- radiant interchange, solar energy, solar radiation, Alben (R.), Hardcastle (K.), *3829*
- codes, numerical methods, solar energy, solar radiation, Mustacchi (C.), Cena (V.), (et al.), *3830*
- conductivity, convection (free), energy conversion, radiant interchange, Aranovitch (E.), *3842*
- solar ponds, stratified flow, thermal loading, Hawlader (M.N.A.), Brinkworth (B.J.), *3843*
- solar concentrators, solar energy, Mills (D.R.), *3844*
- energy conversion, radiant interchange, solar energy, Hildebrandt (A.F.), Dasgupta (S.), *4725*
- absorption, energy storage, radiant interchange, solar ponds, thermal instability, Tabor (H.), *5602*
- solar energy, Kreith (F.), Lof (G.O.G.), (et al.), *5905*
- solar energy, thermosyphons, Young (M.F.), Bergquam (J.B.), *5955*
- convection, nusselt number, solar energy, Malhotra (A.), Garg (H.P.), (et al.), *6821*
- control, cycles, fluid conveyance, Schiller (S.R.), Warren (M.L.), (et al.), *6822*
- energy conservation, energy storage, optimization, solar energy, Veziroglu (T.N.) ed., *7862, book*
- convection, heat transfer, laminar flow, plates (parallel), power law geometrics, Naidu (G.M.), Agarwal (J.P.), *7864*
- panels (flat), plates, vibration (nonlinear), Zak (M.A.), *8300*
- energy storage, heat exchangers, mathematical models, solar energy, thermosyphons, Mertol (A.), Place (W.), (et al.), *8756*
- adsorption, cooling, energy conservation, latent heat, Peng (C.S.P.), Howell (J.R.), *8763*
- convection, energy conversion, thermosyphons, Sodha (M.S.), Tiwari (G.N.), *8764*
- energy conservation, energy storage, solar ponds, Kooi (C.F.), *8765*
- energy conversion, energy storage, heat transfer, packed beds, stratified flow, Phillips (W.F.), *8766*
- energy storage, optical techniques, radiant interchange, Gaul (H.), Rabl (A.), *8767*
- focusing, optical techniques, radiant interchange, Bendt (P.), Gaul (H.), (et al.), *8768*
- convection (forced), heat transfer, separated flow, Sparrow (E.M.), Samie (F.), (et al.), *9736*
- energy storage, solar ponds, transient loading, Sodha (M.S.), Bansal (P.K.), (et al.), *9737*

- heat transfer, solar energy, Lunde (P.J.), *9738*
- thermal loading, transient loading, unsteady flow, El-Refaie (M.F.), Hashish (M.A.), *9739*
- channel flow, convection, heat transfer (combined modes), plates (parallel), radiant interchange, Liu (C.H.), Sparrow (E.M.), *10610*
- combustion, heat addition, solar energy, solar radiation, Becker (B.), Finckh (H.H.), (et al.), *10632*
- energy conversion, heating, solar ponds, Sodha (M.S.), Tiwari (G.N.), (et al.), *10633*
- energy storage, heat pumps, solar energy, Thomas (W.R.L.), *10634*
- reflection, solar radiation, Kamikdzhanov (A.Kh.), *10636*
- convection (forced), cooling, heat transfer (atmospheric), wind, Ramsay (J.W.), Charmchi (M.), *10637*
- aerodynamic loads, wind loads, Randall (D.E.), Mcbride (D.D.), (et al.), *10874*

solar distillation, solar energy, wick, Sodha (M.S.), Kumar (A.), (et al.), *2833*
- cooling, heating, solar collectors, Ward (D.S.), *2834*

solar energy, distillation, energy conversion, solar cells, solar collectors, Veziroglu (T.N.) ed., *1652, book*
- energy, energy (alternative sources), wave energy, wood, Veziroglu (T.N.) ed., *1966, book*
- control, heating, solar heating, Auslander (D.M.), Tomizuka (M.), (et al.), *2187*
- energy, energy conservation, energy conversion, Veziroglu (T.N.) ed., *2785, book*
- energy conversion, solar collectors, wind power, Kreider (J.F.), Kreith (F.), *2831, book*
- solar distillation, wick, Sodha (M.S.), Kumar (A.), (et al.), *2833*
- radiant interchange, solar collectors, solar radiation, Alben (R.), Hardcastle (K.), *3829*
- codes, numerical methods, solar collectors, solar radiation, Mustacchi (C.), Cena (V.), (et al.), *3830*
- solar collectors, solar concentrators, Mills (D.R.), *3844*
- algorithms, boundary value problems, multiple shooting algorithm, numerical methods, singular control, Oberle (H.J.), *4304*
- energy conversion, ocean, power plants, thermoelectric phenomena, Bohn (M.S.), Benson (D.K.), (et al.), *4718*
- energy conversion, solar cells, Fonash (S.J.), *4722, book*
- energy storage, solar ponds, thermal diffusion, Poplawsky (C.J.), Incropera (F.P.), (et al.), *4723*
- cycles, heat exchangers, thermodynamic processes, Johnston (A.M.), O'Sullivan (C.H.), *4724*
- energy conversion, radiant interchange, solar collectors, Hildebrandt (A.F.), Dasgupta (S.), *4725*
- cycles, helium, power generation, turbomachinery, Duben (P.), *5603*
- energy conservation, energy storage, latent heat, Shamsundar (N.), Srinivasan (R.), *5604*
- solar collectors, Kreith (F.), Lof (G.O.G.), (et al.), *5605*
- energy conversion, lasers, propulsion, radiation, space, Billman (K.W.) ed., *5664, book*
- solar collectors, thermosyphons, Young (M.F.), Bergquam (J.B.), *5965*
- air conditioning, energy conservation, heat pumps, heating, Veziroglu (T.N.) ed., *6818, book*
- energy conservation, energy storage, solar ponds, Wittenberg (L.J.), Harris (M.J.), *6819*
- energy storage, heating, mathematical models, Rabinovich (M.D.), Fert (A.R.), *6820*
- convection, nusselt number, solar collectors, Malhotra (A.), Garg (H.P.), (et al.), *6821*
- energy conservation, energy storage, optimization, solar collectors, Veziroglu (T.N.) ed., *7862, book*
- concrete, convection (forced), energy storage, fins, Ortega (J.K.E.), Bingham (C.E.), (et al.), *7863*
- absorption, coolers, Grossman (G.), Bourne (J.R.), (et al.), *7869*
- atmosphere, solar radiation, Bird (R.E.), Hulstrom (R.L.), *8035*
- energy storage, heat exchangers, mathematical models, solar collectors, thermosyphons, Mertol (A.), Place (W.), (et al.), *8756*
- closed conduit flow, convection, solar furnaces, Hubbard (M.), Brewer (J.W.), *8770*
- disks, heat addition, radiant interchange, Zyablova (Zh.I.), Komissarchik (M.G.), (et al.), *9726*
- heat transfer, solar collectors, Lunde (P.J.), *9738*
- heat transfer, heating, Nasonov (E.A.), Bondarenko (Yu.I.), *10631*
- combustion, heat addition, solar collectors, solar radiation, Becker (B.), Finckh (H.H.), (et al.), *10632*
- energy storage, heat pumps, solar collectors, Thomas (W.R.L.), *10634*

solar engines, thermal effects, thermoelectric phenomena, Gorodetskii (S.M.), Iordanishvili (E.K.), (et al.), *722*

solar furnaces, closed conduit flow, convection, solar energy, Hubbard (M.), Brewer (J.W.), *8770*

solar pressure, dust, orbit stability, perturbation theory, stochastics, Bakshian (B.T.), Nazirov (R.R.), (et al.), *8843*

solar radiation, anisotropic media, convection, cylindrical bodies, radiant interchange, Edwards (D.K.), *1695*
- radiant interchange, solar collectors, solar energy, Alben (R.), Hardcastle (K.), *3829*
- codes, numerical methods, solar collectors, solar energy, Mustacchi (C.), Cena (V.), (et al.), *3830*
- helmholtz equation, meteorology, thermal sciences, three dimensional formulation, transfer theory, Ou (S.-C.S.), Liou (K.-N.), *4180*
- energy transport, greenhouses, Mcbean (E.A.), Haycock (D.), (et al.), *5606*
- cylindrical bodies, gravity gradient, space vehicle structures, thermal effects, Furukawa (M.), *5702*
- atmosphere, invariant imbedding, optical thickness, quasilinearization, radiant interchange, Ueno (S.), *6075*
- absorption, coatings, heat shields, radiant interchange, space vehicles, spectral analysis, thermal loading, Bosma (J.), Lavadou (F.), *6807*
- atmosphere, solar energy, Bird (R.E.), Hulstrom (R.L.), *8035*
- adsorption, buoyant flow, convection (free), heat transfer (combined modes), radiant interchange, Fathalah (K.A.), Elsayed (M.M.), *9729*
- combustion, heat addition, solar collectors, solar energy, Becker (B.), Finckh (H.H.), (et al.), *10632*
- reflection, solar collectors, Kamikdzhanov (A.Kh.), *10636*

solar system, astrodynamical constants, circumnavigation, gravity, Moyer (T.D.), *869*
- periodic orbits, planetary satellites, resonance, stability theory, Wiesel (W.), *872*
- averaging, resonance, spinning bodies, Robinson (C.), Murdock (J.), *2915*
- resonance, three body problem, Mettler (E.), *2917*
- gravity, orbits, restricted three body problem, swing-by, Farquhar (R.W.), Dunham (D.W.), *5706*
- lunar theory, perturbation theory, planetary satellites, planetary theory, Standsert (D.), *6874*
- floquet theory, lunar theory, periodic orbits, periodic orbits, planetary satellites, planetary satellites, solar system, Wiesel (W.E.), *6876*
- floquet theory, lunar theory, periodic orbits, periodic orbits, planetary satellites, planetary satellites, solar system, Wiesel (W.E.), *6876*
- jacobian constant, planetary theory, restricted three body problem, stability theory, Szebehely (V.), Mckenzie (R.), *8837*
- circumnavigation, damage, probability theory, tides, Ziglina (I.N.), *8838*
- bifurcation, circumnavigation, libration theory, mathematical methods, n body problems, periodic orbits, Szebehely (V.) ed., *10769, book*

solar wind, alfven number, dispersion relation, earth, magneto plasma dynamics, Guielmi (A.V.), *2899, book*
- conformal mapping, hypersonic flow, magneto plasma dynamics, three dimensional flow, Belotserkovskii (O.M.), Mitnitskii (V.Ya.), *7902*

Solari (G.), computing techniques, rayleigh ritz method, soil structure interaction, vibration, Stura (D.), *8963*

Solberg (P.), field tests, fluid injection, fracture, geothermal energy, hydraulics, rocks, Lockner (D.), (et al.), *5884*

soldered joints, inspection, thermography, Bekeshko (N.A.), *1477*

soldering, brazed joints, creep rupture, welded joints, Williams (J.A.), *6429*

Solecki (J.S.), cylindrical bodies, finite element techniques, singularities, stress analysis, Swedlow (J.L.), *2073*

Solenski (N.), algorithms, guidance, linear systems, poie placement, pursuit, time varying systems, *10092*

Soler (A.), see Barrett (D.), *89*

solid boundaries, drops, impact, pressure distribution, Yakovlev (V.Ya.), *5484*

solid fuels, flames (diffusion), numerical analysis, pyrolysis, Feng (C.C.), Tien (J.S.), *835*
- ignition, thermal excitation, Babenko (Yu.I.), *3858*
- combustors, ramjets, regression rate, Hewett (M.E.), Netzer (D.W.), *5646*
- ballistics (interior), blast effects, launching, projectiles, Taylor (T.D.), Lin (T.C.), *6891*
- fluidized beds, velocity profiles, Livshits (Yu.E.), Tamarin (A.I.), *7368*
- combustion, models, Strunin (V.A.), Manelis (G.B.), *9775*
- burning rate, combustion, Seetharamacharyulu (D.), Pai Verneker (V.R.), (et al.), *11788*

solid mechanics, constitutive equations, correspondence principle, viscoelasticity, Rajagopal (K.R.), Wineman (A.), *259*
- materials properties, shock waves (normal), Shea (R.), Mescall (J.F.), *1311*
- mechanics, structures, Pister (K.S.) ed., *1421, book*
- conservation laws, constitutive equations, continuum mechanics, fluid mechanics, Spencer (A.J.M.), *1966, book*
- conservation laws, constitutive equations, continuum mechanics, crystallography, deformation, Billington (E.W.), Tate (A.), *1973, book*
- continuum mechanics, elasticity, structural analysis, Ugural (A.C.), Fenster (S.K.), *2208, book*
- continuum mechanics, mechanics, waves, Strelkov (S.P.), *3074, book*
- elasticity (linear), fracture, stress analysis, Faupel (J.H.), Fisher (F.E.), *4330, book*
- continuum mechanics, elasticity (linear), energy methods, Eisenberg (M.A.), *4331, book*
- elasticity (linear), singularities, variational methods, Rozin (L.A.), *4338, book*
- continuum mechanics, elasticity (nonlinear), fluid mechanics, rheology, Gurtin (M.E.), *4924, book*
- crystals, shock waves, Klimenko (V.Yu.), Dremin (A.N.), *4931*
- elasticity, functional analyis, plasticity, Necas (J.), Hlavacek (I.), *5068, book*
- beams, continuum mechanics, elasticity, shells, Reismann (H.), Pawlik (P.S.), *5069, book*

- beams, elasticity (linear), torsion, Singh (P.N.), Jha (P.K.), *5070, book*
- constitutive equations, continuum mechanics, deformation (finite), elasticity (nonlinear), Gurtin (M.E.), *5080, book*
- constitutive equations, equations of state, high pressure, Filimonov (V.A.), *5525*
- energy methods, strain energy, structures, Germain (P.), *6035*
- diffusion, metals, mixture theories, Aifantis (E.C.), *6045*
- deformation (finite), nonlinear theory, shells (thin), Mollmann (H.), *6216, book*
- continuum mechanics, shells, variational methods, Mason (J.), *7129, book*
- composite materials, elasticity, plasticity, Hopkins (H.G.) eds., Sewell (M.J.), *8179, book*
- finite element techniques, matrices (sparse), stiffness matrix, Sloan (S.W.), *9131*
- dynamic analysis, finite element methods, Mang (Kh.), Fisher (U.), (et al.), *9138*

solid propellants, design (optimum), rockets, Sforzini (R.H.), *1768*
- design, rockets, space vehicle structures, Zimmerman (C.A.), *1769*
- control, rockets, space vehicles, thrust, Verble (A.J.) Jr., Mccool (A.A.), (et al.), *1770*
- combustion, cracks, flame propagation, Kumar (M.), Kovacic (S.M.), (et al.), *2966*
- combustion, doppler effect, pressure measurement, Strand (L.D.), Magiawala (K.R.), (et al.), *5638*
- exhaust gases, particles, plumes, rockets, Strand (L.D.), Bowyer (J.M.), (et al.), *5809*
- combustion, fire spread, flame propagation, ignition, Andoh (E.), Mizomoto (M.), (et al.), *6845*
- higher order theories, nonlinear waves, rockets, Culick (F.E.C.), *7425*
- combustion instability, frequency response, thermal waves, De Luca (L.), *8799*
- filament winding, nonmetals, wirewound vessels, Lamalle (J.), Cabenol (D.), *9465*
- hypergolic propellants, self ignition, thermal instability, Kulkarni (S.G.), Panda (S.P.), *10715*
- ignition, rockets, space shuttle, thrust, transient effects, Caveny (L.H.), Kuo (K.K.), (et al.), *10723*
- design, impulse, rockets, Landsbeum (E.M.), Salinas (M.P.), (et al.), *10726*
- missiles, ramjets, rockets, testing equipment, Readey (H.J.) Jr., Cobb (E.R.), *10729*
- combustion, models, Becksteed (M.W.), Mccarty (K.P.), *11786*
- burning rate, combustion, wires, Kubota (N.), Ichida (M.), (et al.), *11787*
- burning rate, chemical kinetics, deflagration, models, Ben-Reuven (M.), Caveny (L.H.), *11790*

solid solid interface, elastic waves, reflection, transmission, Fokkema (J.T.), *2370*
- conduction, contact problems, thermal contact resistance, Kokorev (L.S.), Shelagin (Yu.N.), (et al.), *3818*
- blades, finite element techniques, impact, jet engines, Brown (K.W.), Krahula (J.L.), *7211*
- damping, heat transfer, liquid solid interface, rayleigh waves, Van Der Sluijs (J.C.A.), Van Der Sluijs (M.J.), *9339*

solid-fluid interaction, attenuation, interface waves, reflection, stonely waves, Hawker (K.E.), *4788*
- stability, stratification, tornados, vortices, Nikulin (V.V.), *9528*

solidification, heat transfer, melting, phase changes, velocity profiles, Ramachandran (N.), Jakuria (Y.), (et al.), *769*
- casting, thermal properties, vacuum technology, Fukusako (T.), Kubo (K.), (et al.), *2403*
- latent heat, melting, stefan problem, Solomon (A.), *2814*
- models, nonlinear analysis, Wollkind (D.J.), Notestine (R.D.), *2846*
- concentration, convection (free), models, Zavgorodnii (P.F.), Kolesnik (V.I.), (et al.), *2847*
- boussinesq equation, convection, liquid solid interface, melting, Povkh (I.L.), Zavgorodnii (P.F.), (et al.), *3819*
- freezing, integral methods, liquid solid interface, solutions (material), O'Callaghan (M.G.), Cravalho (E.G.), (et al.), *3821*
- heat transfer, insulating materials (thermal), Zhuk (V.I.), Zavgorodnii (P.F.), (et al.), *4705*
- gases, imperfection sensitivity, thermal properties, Manzhelii (V.G.), Freiman (Yu.A.), (et al.), *5528*
- corrosion, fouling, heat exchangers, heat transfer, microbial fouling, precipitation, Somerscales (E.F.C.) eds., Knudsen (J.G.), *5597, book*
- casting, numerical methods, Pratt (T.K.), Landis (F.), (et al.), *6801*
- alloys, mathematical methods, mixtures, moving surfaces, Tao (L.N.), *6802*
- extended surfaces, fins, heat transfer, melting, Batheit (A.G.), Viskanta (R.), *7853*
- heat transfer, liquid liquid interface, precipitation, Moresco (L.L.), Marschall (E.), *8737*
- crossflow, cylindrical bodies, ice mechanics, melting, Cheng (K.C.), Inaba (H.), (et al.), *8739*
- cylindrical bodies, heat transfer, mathematical methods, Beckett (P.M.), *8775*
- casting, ingots, isotopes, multiphase media, Deryabina (G.N.), Ripp (A.G.), *9434*
- freezing, ice, Hsu (T.R.), Pizey (G.), *9716*
- cooling, critical flow, drawing, glass, Kunitomo (T.), Ebisu (A.), *10596*
- bubble dynamics, diffusion, freezing, liquid solid interface, two phase flow, Petrie (D.J.), Linehan (J.H.), (et al.), *10598*
- low gravity, metals, schlieren methods, Owen (R.B.), Johnston (M.H.), *10659*
- peclet number, pipe flow, Lee (S.L.), Hwang (G.J.), *10662*
- deposition, oil flow, pipe flow, wax, Krasovitskii (B.A.), Maron (V.I.), *11486*

solids (fluid immersed), beams, elastic behavior, vibration (random), Dinca (D.), *10194*

solids with liquids, axisymmetric flow, electrical properties, magneto fluid dynamics, mass transfer, Polyanin (A.D.), Pryadkin (P.A.), *7897*

Solignac (J.-L.), afterbodies, pressure gradient, separation, trailing edge, turbulence, *4610*
- afterbodies, pressure gradient, separation, trailing edge, turbulence, *4611*

Soliman (H.M.), augmentation, convection, fins, heat transfer, laminar flow, tubes, Chau (T.S.), (et al.), *3786*

Soliman (M.O.), see Baker (A.J.), *1138*
- boundary layer (turbulent), computing techniques, convergence, galerkin method, Baker (A.J.), *6639*
- boundary layer, convergence, finite difference methods, finite element techniques, galerkin method, Baker (A.J.), *9573*

solitary waves, finite amplitude, surveys, wave interactions, Phillips (O.M.), *662*
- rotational flow, shear flow, stratified flow, Gibbon (J.D.), James (I.N.), (et al.), *4653*
- rossby waves, Antipov (S.V.), Nezlin (M.V.), (et al.), *7051*
- film flow, nonlinear analysis, surface waves, Tsvelodub (O.Yu.), *7762*
- korteweg de vries equation, perturbation methods, Grimshaw (R.), *8621*
- finite element methods (hybrid), finite element techniques, fluid mechanics, free boundary, sloshing, Wellford (L.C.) Jr., Ganaba (T.H.), *9146*
- boussinesq equation, differential equations (partial), korteweg de vries equation, nonlinear waves, scattering, Ablowitz (M.J.), Segur (H.), *10017*
- hyperbolic equations, nonlinear analysis, nonlinear waves, sine gordon equation, Olsen (O.H.), Samuelsen (M.R.), *10018*
- gravity waves (finite depth), gravity waves (solitary), korteweg de vries equation, radial waves, Djordjevic (V.D.), *11569*
- hydrodynamic stability, nonlinear analysis, rossby waves, Malanotte Rizzoli (P.), Hendershott (M.C.), *11617*
- bottom irregularities, nonlinear analysis, rossby waves, Malanotte Rizzoli (P.), *11618*

Solnechnyi (E.M.), linear systems, linear theory, robustness, sensitivity, stability theory, *4251*

Solntsev (Yu.P.), brittle fracture, dimensional analysis, impact, thermal effects, Zamyatnin (M.M.), (et al.), *6368*

Solodovnikov (V.V.), see Milov (L.T.), *3157*

Sololev (L.G.), analytical methods, operational methods, time varying systems, transient effects, *4239*

Solomat (S.A.), see Iber (J.P.), *10266*

Solomeshch (M.A.), see Goldshtein (Yu.B.), *1422, book*

Solomon (A.), latent heat, melting, solidification, stefan problem, *2814*

Solomon (A.D.), boundary conditions, convection, melting, pcm body, *2816*
- convection (forced), heat transfer, melting, surface effect, *2820*

Solomon (J.M.), see Berger (A.E.), *3117*
- see Wardlaw (A.B.) Jr., *9551*

Solonenko (O.P.), see Lebedev (O.N.), *7734*

Solonnikov (V.A.), equations of motion, existence theorems, polar fluids, rheology, viscoelastic fluids, Kazhikhov (A.V.), *3076*
- see Ladyzhenskaya (O.A.), *7169*

Solopenko (V.I.), boundary value problems, hydrodynamic stability, orr sommerfeld equation, *635*

Solopenko (V.M.), boundary layer, navier stokes equation, stability theory, turbulent flow, viscous flow, *6615*

Soloukhin (R.I.), see Rolin (M.N.), *9728*
- see Rolin (M.N.), *10608*

Solovev (A.S.), see Levchenko (V.Ya.), *3699*

Soltesz (U.), see Arenz (R.J.), *1391*

Soltis (L.A.), beams, floors, joints, spliced joints, wood structures, *3297*

solutions (material), shear waves, surface waves, viscoelastic fluids, De Feijter (J.A.), Benjamins (J.), *1489*
- diffusion, dispersion, magneto fluid dynamics, plates (parallel), Annapurna (N.), Gupta (A.S.), *2882*
- freezing, integral methods, liquid solid interface, solidification, O'Callaghan (M.G.), Cravalho (E.G.), (et al.), *3821*
- heat exchangers, heat pipes, Semena (M.G.), Myuller (R.), *8762*
- liquids, mixtures, thermal diffusion, Bukhtilova (M.A.), Gorogush (V.M.), (et al.), *10654*
- boiling, dispersed flow, heat addition, Berman (M.I.), Gorbis (Z.R.), *10606*
- channel flow, dispersion, mass transfer, non newtonian flow, Soundalgekar (V.M.), Mohiuddin (M.), *11505*

Som (S.K.), atomization, nozzles, swirl, Mukherjee (S.G.), *6986*

Somasundaram (S.), see Pande (S.S.), *1936*
- see Pande (S.S.), *7098*

Somayaji (S.), bond characteristics, crack resistance, cracking, reinforced concrete, Shah (S.P.), *7602*

Somekh (E.), design (minimum weight), design (optimum), optimization, trusses, Kirsch (U.), *9439*

Somerscales (E.F.C.) eds., corrosion, fouling, heat exchangers, heat transfer, microbial fouling, precipitation, solidification, Knudsen (J.G.), *5597, book*

Sommeijer (B.P.), boundary conditions, conduction (unsteady), dirichlet problem, parabolic equations, time dependence, Van Der Houwen (P.J.), (et al.), *5002*

Sommer (R.), multivariable systems, nonlinear systems, pole placement, time varying systems, *2085*

Sommerer (J.), digital simulation, dynamic behavior, magnetically suspended structures, railroads, state space techniques, vibration, *73*

Son (J.E.), see Krieg (R.D.), *8500*

Song (C.C.S.), channel flow, energy dissipation, free boundary, variational methods, Yang (C.T.), *7660*

Song (Y.H.), coal, combustion, combustion products, oxidation, Pohl (J.H.), (et al.), *11788*

Soni (A.H.), algorithms, linkages, mechanisms (planes), synthesis, Azeez (S.A.), *540*

- see Patwardhan (A.G.), *1978*
- see Tsai (Y.C.), *8479*

sonic booms, characteristic methods, shock waves, supersonic flow, three dimensional flow, Hendriks (T.P.M.), *4592, book*

- nonlinear waves, shock waves, sound propagation, supersonic flow, Weber (M.E.), Donn (W.L.), *11916*

Sonin (A.A.), discharges, modeling, steam, valves, *11366*

Sonn (A.), see Lerner (Y.), *6991*

- augmentation, cylindrical pin fins, extended surfaces, fins, heat transfer, optimization, Bar-Cohen (A.), *11771*

Sonnad (V.), see Bathe (K.-J.), *1608*

Soo (P.), alloys, environmental tests, high cycle fatigue, high temperature, low cycle fatigue, Chow (J.G.Y.), *7478*

Soom (A.), attenuation, near ground effects, sound propagation, Gu (R.-R.), *6934*

Soong (T.-C.), contact problems, cylindrical bodies, rolling, Li (C.), *6168*

Soong (T.T.), see Chang (J.C.H.), *222*

- buildings (tall), oscillations, structural stability, vibration, vibration (flow induced), wind loads, Skinner (G.T.), *4328*

Soos (E.), extrusion, material testing, simulation, steel, Teodosiu (C.), (et al.), *3423*

- see Teodosiu (C.), *5273*
- extrusion, kinematics, torsion (plastic), Teodosiu (C.), (et al.), *6408*

Soos (F.), heat transfer, pipe flow, *9734*

soot, flames, models, radiation, Gouesbet (G.), *6842*

soot formation, combustors, flames, radiation, Claus (R.W.), *3969*

- combustors, gas turbines, mathematical models, pyrolysis, Kesten (A.S.), Sangiovanni (J.J.), (et al.), *3871*
- combustion, Haynes (B.S.), Wagner (H.G.), *9744*
- combustion products, flames (diffusion), Nishida (O.), *11795*

Sophocleous (M.), fluid conveyance, heat transfer, porous media, *959*

Soranzo (M.), see Ricceri (G.), *3399*

Sorel (J.), see Lucas (G.), *6893*

- detonative ignition, explosions, ignition, impact, Lucas (G.), (et al.), *8856*

Sorensen (A.) Jr., see Fossman (R.), *365*

Sorensen (S.I.), see Arnesen (A.), *7603*

Sorensen (W.K.), see Pariseau (W.G.), *7610*

Sorey (M.L.), geothermal reservoirs, nonlinear characteristics, two phase flow, wells, Grant (M.A.), (et al.), *9903*

Sorheim (H.-R.), currents, mooring, ship motion, stability theory, wind, *3032*

Soriano (H.L.), dynamic response, eigenvalues, vibration (free), *9303*

Sorina (T.G.), see Suvorova (Yu.V.), *7298*

Sorokin (G.M.), ductility, hardness, steel, wear, Oleinikov (N.E.), (et al.), *4516*

- abrasion, hardness, heat treatment, mechanical properties, steel, wear, Milancheva (N.V.), *5334*

Sorokin (O.V.), see Fraifeld (V.E.), *2229*

Sorokin (V.N.), see Kolos (V.P.), *6814*

Sorokin (Yu.S.), see Tubin (A.A.), *822*

Sorokina (V.V.), see Seiezov (I.T.), *11589*

Sorrell (F.Y.), diffusers, jets, mixing, plumes, Smith (B.W.), *9593*

Sosedko (Yu.P.), see Repik (Ye.U.), *2630*

Sosnin (A.V.), see Boichenko (Yu.A.), *5333*

Sosnovskii (L.A.), see Troshchenko (V.T.), *7485*

- see Troshchenko (V.T.), *7537*

Sosov (N.V.), see Lysov (M.I.), *3421*

Sote (W.), controllability, large scale systems, observability, structural analysis, *2086*

Sotina (N.B.), cavitation flow, free boundary, singularities, wedges, Fominykh (V.V.), *1503*

Sotnichenko (L.V.), chemical reactions, convection (free), gas solid interface, Shtessel (E.A.), *2851*

sound, absorption, mass transfer, Wei (R.-J.), Wu (J.-R.), *6996*

- panels, plates (sandwich), transmission, Narayanan (S.), Shanbhag (R.L.), *11935*
- scattering, vortex rings, Kambe (T.), Oo (U.M.), *11963*
- echos, reflection, scattering, Ueda (M.), Ichikawa (H.), *11967*
- barriers, diffraction, sound fields, Kawai (T.), *11968*
- radiation, resonance, tubes, Zuckerwar (A.J.), Meredith (R.W.), *11975*
- diffraction, trailing edge, vortex shedding, Rienstra (S.W.), *11978*
- boundary value problems, porous media, radiation, Oie (S.), Takeuchi (R.), *11981*
- boundary value problems, porous media, radiation, Oie (S.), Takeuchi (R.), *11982*
- boundary value problems, porous media, radiation, Oie (S.), Takeuchi (R.), *11983*
- nonlinear waves, wave interactions, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *12007*

sound (random), acoustic measurements, ducts, sound fields, spectral analysis, Seybert (A.F.), Soenarko (B.), *4802*

sound fields, circuits, finite element techniques, Kagawa (Y.), Yamabuchi (T.), *1798*

- noise, Oelkers (C.I.), *1823*
- acoustic measurements, diffraction, lasers, sound propagation, transducers, Kleszczewski (Z.), *1827*
- ocean bed, shallow water, sound generation, Ageeva (N.S.), Krupin (V.D.), *2933*
- acoustics, elastic bodies, resonance, scattering, Flax (L.), Raju (P.K.), (et al.), *2935*
- acoustic waves, nonlinear waves, scattering, viscous effects, Woodsum (H.C.), Westervelt (P.J.), *2945*
- elastic bodies, green function, sound generation, Kouzov (D.P.), *3939*
- acoustics, arrays, Cantoni (A.), Godara (L.C.), *3964*
- acoustics, antennas, arrays, diffraction, Adekola (S.A.), *3967*
- interferometry, ultrasonics, Higgins (F.P.), Norton (S.J.), (et al.), *3977*
- impulse, transducers, vibrators, Stephanishen (P.R.), *4762*
- acoustic waves, half space, moving surfaces, reflection, spectra, Hwang (Y.F.), Tichy (J.), *4763*
- ducts, end effects, noise abatement, orifices, Pollack (M.L.), *4777*
- arrays, Greene (C.R.), Wood (R.C.), *4793*
- acoustic measurements, ducts, sound (random), spectral analysis, Seybert (A.F.), Soenarko (B.), *4802*
- fluids, ultrasonics, Gabrielli (I.), Zugna (S.), *5760*
- jets, sound propagation, Fletcher (N.H.), Thwaites (S.), *5768*
- coherent structure, reverberation, Chu (W.T.), *5770*
- reverberation, Ebeling (K.J.), Freudenstein (K.), *5772*
- acoustic measurements, ducts, Davies (P.O.A.L.), Bhattacharya (M.), (et al.), *5779*
- interface phenomena, nonlinear waves, plates, vibration, Ginsberg (J.H.), *5781*
- acoustic waves, diffraction, optical techniques, scattering, Saiga (N.), Suzuki (T.), *5792*
- boundary value problems, duct flow, vibration (flow induced), Myers (M.K.), *6935*
- rings, sound generation, Lvova (E.A.), Khimunin (A.S.), *6937*
- noise (aerodynamic), trailing edge, turbulent flow, Howe (M.S.), *7937*
- arrays, underwater acoustics, Neubert (J.A.), *7945*
- calibration, impulse, transducers (pressure), ultrasonics, Jones (S.M.), Carson (P.L.), (et al.), *7946*
- burners, energy methods, flow irregularities, Magiawala (K.R.), Culick (F.E.C.), *10793*
- scattering, surface barrier, Dassios (G.), *10796*
- ocean, shallow water, sound propagation, Jensen (F.B.), *11899*
- damping, ducts, vibration, walls, Loh (H.-T.), Reethof (G.), *11928*
- reverberation, transient effects, Lyle (C.D.), *11937*
- boundary value problems, cylindrical bodies, oscillating bodies, Rubanov (I.L.), *11951*
- experimental methods, plates, vibration, Vyalyshev (A.I.), Dubinin (A.I.), (et al.), *11954*
- barriers, diffraction, sound, Kawai (T.), *11968*
- impulse, transient, ultrasonics, Stepanishen (P.R.), Fisher (G.), *12010*

sound flow interaction, hydrodynamic stability, perturbations, tollmien schlichting waves, Murdock (J.W.), *9602*

- coherent structure, shear flow, turbulence, turbulence (structure), Kleis (S.J.), Hussain (A.K.M.F.), (et al.), *10470*
- nonlinear characteristics, turbulent flow, Lvov (V.S.), Mikhailov (A.V.), *11965*

sound generation, bubble dynamics, noise, nonhomogeneous media, viscosity, Mccomb (W.D.), Ayyash (S.), *889*

- acoustic measurements, acoustics, ducts, Meyer (W.L.), Daniel (B.R.), (et al.), *900*
- acoustics, reverberation, Yousri Gerges (S.N.), *901*
- fans, noise abatement, Fukano (T.), Kodama (Y.), (et al.), *905*
- bubble dynamics, radiation, two phase flow, Kozyaev (E.F.), Naugolnykh (K.A.), *906*
- acoustics, arrays, Sullivan (E.J.) Jr., *908*
- acoustics, jet engines, noise, supersonic flow, Zhmulin (E.M.), Munin (A.G.), (et al.), *910*
- moving source, sound propagation, Flanagan (R.P.), Weinberg (N.L.), *918*
- noise abatement, sound propagation, vibration, Andrzejewski (M.), Campel (C.), *1805*
- hydrodynamic pressure, pipe flow, turbulent flow, vibration (flow induced), Bull (M.K.), Norton (M.P.), *1807*
- digital simulation, noise (traffic), noise abatement, Jones (R.R.K.), Hothersall (D.C.), (et al.), *1812*
- ocean bed, shallow water, sound fields, Ageeva (N.S.), Krupin (V.D.), *2933*
- acoustic waves, nonlinear waves, vibration, Ginsberg (J.H.), *2938*
- acoustic waves, elastic bodies, spherical bodies, Hasegawa (T.), Ochi (M.), (et al.), *2939*

- acoustic waves, nonlinear waves, vibration, Ginsberg (J.H.), *2940*
- boundary layer (turbulent), noise (aerodynamic), trailing edge, Howe (M.S.), *2941*
- impact, noise abatement, Richards (E.J.), *2956*
- acoustic measurements, acoustic sources, Billingsley (J.), *3935*
- elastic bodies, green function, sound fields, Kouzov (D.P.), *3939*
- distortion, doppler effect, loudspeakers, Villchur (E.), Allison (R.F.), *3974*
- axial fans, noise, Fukano (T.), Kodama (Y.), (et al.), *4765*
- elastic bodies, impulse, plates, Mackertich (S.S.), Hayek (S.I.), *4766*
- far field radiation, nonlinear waves, sound propagation, Fenlon (F.H.), Mckendree (F.S.), *4785*
- helmholtz resonator, transducers, underwater acoustics, Henriquez (T.A.), Young (A.M.), *4804*
- absorption, lasers, underwater acoustics, Hunter (S.D.), Jones (W.V.), (et al.), *5717*
- electric effects, ocean, wave generation, Harker (K.J.), Fraser-Smith (A.C.), *5720*
- acoustic waves, far field radiation, sound propagation, Levine (H.), *5765*
- piston driven flow, vibration (flow induced), Harris (G.R.), *5776*
- piezoelectrics, vibration, wave generation, Kinh (N.V.), Pajewski (W.), *5783*
- rings, sound fields, Lvova (E.A.), Khimunin (A.S.), *6937*
- jets, noise, Schaffar (M.), Hancy (J.P.), *7934*
- feedback, noise (aerodynamic), orifices, Czarnecki (S.), Czechowicz (M.), (et al.), *7938*
- attenuation, reverberation, Thunder (T.D.), *7944*
- acoustics (physiological), arteries, blood flow, muscles, Grigoryan (S.S.), Saakyan (Yu.Z.), (et al.), *8077*
- hull propeller interaction, hulls, noise (aerodynamic), Plunt (J.), Mcqueen (D.), *9011*
- aerothermoacoustics, incompressible flow, wave equations, Meecham (W.C.), *9844*
- cylindrical waves, green function, moving media, Tanaka (K.), Ishii (S.), *9847*
- bubble dynamics, cavitation, fluids, Barabanova (G.Ya.), Ilin (V.P.), (et al.), *9853*
- axisymmetric flow, bodies of revolution, cavitation flow, turbulence, ultrasonics, Murai (H.), Ihara (A.), *10532*
- noise, noise abatement, piston driven flow, positive displacement pumps, Lechner (E.), Stich (B.), *10721*
- bridges, infrasonics, oscillating bodies, Imaichi (K.), Tsujimoto (Y.), (et al.), *10790*
- fluid-structure interaction, panels, Schroter (V.), Fahy (F.J.), *10791*
- noise, vortex tubes, vortices, Legendre (R.), *10794*
- flow irregularities, jets, noise abatement, Shivashankara (B.N.), Bhat (W.V.), *10795*
- edge effects, noise, plates, Amiet (R.K.), *10804*
- cylindrical bodies, transducers, Guz (A.N.), Ryabukha (Yu.N.), (et al.), *11914*
- optical techniques, thermal effects, Lyamshev (L.M.), Sedov (L.V.), *11915*
- acoustics, gases, thermal effects, vibration (self excited), Kilchinskaya (G.A.), Protsenko (O.P.), *11920*
- jet engines, sound propagation, Rice (E.J.), Heidelberg (L.J.), *11929*
- fluid-structure interaction, plates (stiffened), radiation, Mace (B.R.), *11942*
- helicopters, propellers, rotors, Farassat (F.), *11944*
- experimental methods, friction (sliding), roughness, Yokoi (M.), Nakai (M.), *11945*
- experimental methods, friction (sliding), Yokoi (M.), Nakai (M.), *11946*
- plates (circular), vibration, Kojima (N.), Ikoma (K.), (et al.), *11948*
- plates (reinforced), vibration, Evseev (V.N.), Ivanov (V.S.), (et al.), *11949*
- beams, vibration, Rzhevkin (S.N.), *11950*
- plates (circular), vibration, Czarnecki (S.), *11952*
- experimental methods, impulse, plates, Nakayama (I.), Nakamura (A.), *11953*
- jet engines, shock waves, supersonic flow, Norum (T.D.), Seiner (J.M.), *11956*
- ducts, fluid conveyance, pumps, Kojima (E.), Nagakura (H.), *11957*
- flight, jet engines, turbulent flow, Obermeier (F.), *11959*
- shock waves, supersonic flow, transonic flow, Gusev (V.E.), Karabutov (A.A.), *11964*
- diffraction, elliptical bodies, sound propagation, Demidov (V.P.), *12005*
- numerical methods, transducers, Sayhi (M.N.), Ousset (Y.), (et al.), *12006*

sound propagation, modes, ocean, ocean bed, underwater acoustics, Thompson (I.J.), *887*

- arrays, eddies, Baer (R.N.), *888*
- nonlinear waves, ocean bed, sedimentation, underwater acoustics, Hovem (J.M.), *892*
- impedance, ocean, ocean bed, refraction, underwater acoustics, Stickler (D.C.), Ahluwalia (D.S.), *893*
- modes, ocean, underwater acoustics, Tindle (C.T.), *894*
- ocean, stochastic processes, underwater acoustics, Watson (J.G.), Siegmann (W.L.), (et al.), *895*
- acoustic waves, arctic, layered media, Schulkin (M.), Garrison (G.R.), (et al.), *898*
- acoustic measurements, acoustics, impedance, Panicker (V.B.), Munjal (M.L.), *902*
- moving source, sound generation, Flanagan (R.P.), Weinberg (N.L.), *918*
- acoustic waves, diffraction, ocean, Esswein (R.), Flatte (S.M.), *1799*
- acoustics, arrays, ocean, shallow water, Buckingham (M.J.), *1802*
- noise abatement, sound generation, vibration, Andrzejewski (M.), Campel (C.), *1805*
- barriers, ducts, Cummings (A.), *1806*
- acoustic waves, cylindrical waves, diffraction, soils, Hebeult (D.), Filippi (P.), *1808*
- acoustics, attenuation, noise abatement, Attenborough (K.), *1811*
- acoustic measurements, machinery, noise abatement, Schirmer (W.), *1818*
- acoustic measurements, noise (traffic), noise abatement, Jones (H.W.), Stredulinsky (D.C.), (et al.), *1822*
- acoustic measurements, diffraction, lasers, sound fields, transducers, Kleszczewski (Z.), *1827*
- absorption, surface waves, Kligman (R.L.), *2361*
- crystals, scattering, ultrasonics, Grigorev (O.A.), Shermergor (T.D.), *2930*
- absorption, cavities, ducts, porous media, silencers, Yoshida (H.), *2934*
- attenuation, bends, ducts (curved), green function, El-Raheb (M.), Wagner (P.), *2936*
- moving sources, ocean, underwater acoustics, Kays (J.L.), Jacobson (M.J.), (et al.), *3927*
- acoustics, atmosphere, stratification, Mitsumura (Y.), Makino (M.), *3929*
- acoustics (architectural), Bodycombe (H.), *3930*
- ocean, underwater acoustics, Floyd (E.R.), *3941*
- acoustic waves, caustics, ocean, Kinney (W.A.), Pierce (A.D.), *3943*
- acoustics, estimation, source motion, Carter (G.C.), Abraham (P.B.), *3945*
- nonhomogeneous media, waveguides, Canevet (G.), *3948*
- jet engines, noise abatement, wings, Wang (M.E.), *4770*
- absorption, acoustics (architectural), transmission, Hurst (C.J.), *4776*
- acoustic waves, half space, reflection, Nusayr (A.-M.), *4781*
- far field radiation, nonlinear waves, sound generation, Fenlon (F.H.), Mckendree (F.S.), *4785*
- ocean bed, reflection, underwater acoustics, Harrison (C.H.), *4790*
- scattering, underwater acoustics, Ewart (T.E.), Ehrenberg (J.E.), (et al.), *4792*
- ground effect, impedance, reflection, Dumin (J.), Bertoni (H.L.), *4794*
- acoustics, wave equations, Mccoy (J.J.), *4812*
- underwater acoustics, Robertson (G.H.), *5722*
- modeling, underwater acoustics, Etter (P.C.), *5723*
- interference, sloping bottom, underwater acoustics, Bannister (R.W.), Pedersen (M.A.), *5724*
- interface phenomena, ocean bed, reflection, refraction, underwater acoustics, Frisk (G.V.), Doutt (J.A.), (et al.), *5725*
- ocean, underwater acoustics, Kohler (W.E.), *5726*
- underwater acoustics, Weston (D.E.), *5727*
- currents, nonhomogeneous media, underwater acoustics, Newhall (B.K.), Jacobson (M.J.), (et al.), *5728*
- ocean, underwater acoustics, Spiesberger (J.L.), Spindel (R.C.), (et al.), *5729*
- explosions (underwater), underwater acoustics, Mitchell (S.K.), Bedford (N.R.), (et al.), *5730*
- eddies, underwater acoustics, Baer (R.N.), *5731*
- diffraction, modes, underwater acoustics, Leung (R.), Deferrari (H.A.), *5732*
- attenuation, porous media, sand, saturation, viscosity, Hovem (J.M.), Ingram (G.D.), *5733*
- acoustics, gaussian beams, nonlinear waves, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *5734*
- attenuation, ocean bed, underwater acoustics, Tindle (C.T.), *5735*
- turbulence, underwater acoustics, Unni (S.), Kaufman (C.), *5741*
- acoustics, bubble dynamics, Gaunaurd (G.C.), Uberall (H.), *5742*
- ocean bed, underwater acoustics, Cavanagh (R.C.), Renner (W.W.), *5746*
- underwater acoustics, Robertson (G.H.), Wagner (R.L.), *5751*
- acoustic waves, nonhomogeneous media, Clark (J.A.), *5757*
- bottom irregularities, ocean bed, underwater acoustics, Rutherford (S.R.), Hawker (K.E.), (et al.), *5759*
- explosions (underwater), sound speed, underwater acoustics, Mitchell (S.K.), Hampton (L.D.), *5763*
- acoustic waves, far field radiation, sound generation, Levine (H.), *5765*
- airplanes, atmosphere, noise, nonlinear waves, Morfey (C.L.), Howell (G.P.), *5766*
- green function, layered media, underwater acoustics, wave equations, Dinapoli (F.R.), Deavenport (R.L.), *5767*
- jets, sound fields, Fletcher (N.H.), Thwaites (S.), *5768*
- acoustic waves, nonhomogeneous media, Chivers (R.C.), *5769*
- ducts, modes, pipes, vibration, Kerschen (E.J.), Johnston (J.P.), *5773*
- ducts, modes, noise, Kerschen (E.J.), Johnston (J.P.), *5777*
- acoustic measurements, impulse, Gibbs (B.M.), Davies (J.C.), *5778*
- acoustic waves, impedance, interface phenomena, jets, turbulence (geophysical), Daigle (G.A.), *5784*
- acoustic waves, finite element methods (hybrid), Fix (G.J.), Nicolaides (R.A.), *5787*
- numerical methods, sloping bottom, underwater acoustics, wave equations, Lee (D.), Papadakis (J.S.), *5788*
- junctions, slabs, stochastic processes, transmission, vibration, Wohle (W.), Beckmann (T.), (et al.), *6894*
- plates (perforated), reynolds number (high), turbulent flow, unsteady flow, vortex shedding, Howe (M.S.), *6897*
- composite materials, elastic waves, inclusions, scattering, spherical waves, Berryman (J.G.), *6898*

- sound speed, thermal effects, thermoelasticity, Tokuoka (T.), *6901*
- acoustic waves, nonlinear waves, Tokuoka (T.), *6903*
- ocean bed, sedimentation, underwater acoustics, Stoll (R.D.), *6905*
- acoustic waves, internal waves, ocean, refraction, Uscinski (B.J.), *6908*
- spectra, underwater acoustics, wave equations, Stickler (D.C.), Ammicht (E.), *6909*
- ducts, shear flow, Mani (R.), *6910*
- ocean, underwater acoustics, Jensen (F.B.), Kuperman (W.A.), *6911*
- diffraction, eddies, underwater acoustics, Munk (W.H.), *6912*
- modes, underwater acoustics, Gordon (D.F.), *6914*
- nonlinear characteristics, ocean, shock waves, underwater acoustics, Fridman (V.E.), *6916*
- half space, interface phenomena, layered media, liquids, Bucker (H.P.), *6918*
- half space, layered media, porous media, Attenborough (K.), Hayek (S.I.), (et al.), *6919*
- gases, mixtures, modes, Huck (R.J.), Johnson (E.A.), *6920*
- acoustic waves, nonhomogeneous media, Chivers (R.C.), *6922*
- suspensions, Fleury (F.), *6923*
- underwater acoustics, waveguides, Ahluwalia (D.S.), Reiss (E.L.), (et al.), *6924*
- absorption, ducts, modal analysis, Nilsson (B.), Brander (O.), *6926*
- bifurcation, ducts, modes, reflection, Nilsson (B.), Brander (O.), *6927*
- elastic bodies, fluid-structure interaction, waveguides, Levitskii (L.A.), *6928*
- ducts (variable area), three dimensional formulation, Osipov (A.A.), *6929*
- attenuation, near ground effects, Soom (A.), Gu (R.-R.), *6934*
- acoustic measurements, orifices, Lebedeva (I.V.), *6936*
- impedance, Thomasson (S.-I.), *6938*
- ducts, underwater acoustics, Weston (D.E.), *7933*
- ducts (curved), modes, Cabelli (A.), Shepherd (I.C.), *7935*
- ducts (variable area), one dimensional flow, Mani (R.), *7936*
- boreholes, ducts, Schoenberg (M.), Marzetta (T.), (et al.), *7939*
- roughness, stratified flow, surface waves, Tolstoy (I.), *8859*
- gases, mixtures, sound speed, Huck (R.J.), Johnson (E.A.), *8860*
- ducts, eigenvalue problems, Ko (S.-H.), *8861*
- analogies, noise (aerodynamic), Lighthill (J.), *8863*
- ducts, scattering, Mohring (W.), *8864*
- acoustic waves, ground effect, impedance, reflection, surface waves, Habault (D.), Filippi (P.J.T.), *8865*
- eigenvalues, modes, ocean, Williams (A.O) Jr., *10782*
- nonhomogeneous media, ocean, underwater acoustics, Emery (W.J.), Reid (T.J.), (et al.), *10783*
- acoustic waves, acoustics, burgers equation, nonlinear waves, Enflo (B.O.), *10784*
- attenuation, ducts (curved), Rostafinski (W.), *10785*
- ducts, walls, Cummings (A.), *10786*
- acoustics (architectural), noise abatement, Heckl (M.), *10788*
- rarefied gases, transport, transport phenomena, ultrasonics, Woods (L.C.), Troughton (H.), *11438*
- eigenvalues, underwater acoustics, waveguides, Arnold (J.M.), *11895*
- layered media, ocean bed, Weinberg (H.), *11896*
- caustics, ocean, Worcester (P.F.), *11897*
- ocean, shallow water, sound fields, Jensen (F.B.), *11899*
- eddies, random media, Newhall (B.K.), Jacobson (M.J.), (et al.), *11904*
- random media, underwater acoustics, Spiesberger (J.L.), Worcester (P.F.), *11905*
- caustics, underwater acoustics, White (D.), *11911*
- nonlinear waves, shock waves, sonic booms, supersonic flow, Weber (M.E.), Donn (W.L.), *11916*
- absorption, attenuation, ducts, Krizan (P.), Kuscer (I.), *11917*
- ducts, ducts (variable area), Osipov (A.A.), *11918*
- acoustics, burgers equation, nonhomogeneous media, Parker (D.F.), *11921*
- heat transfer, liquid vapor interface, mass transfer, Azamatov (A.Sh.), Shagapov (V.Sh.), *11923*
- cylindrical bodies, ducts, Fagerlund (A.C.), Chou (D.C.), *11926*
- jet engines, sound generation, Rice (E.J.), Heidelberg (L.J.), *11929*
- ducts, ducts (variable area), finite element techniques, Baumeister (K.J.), *11933*
- ducts (curved), modes, reflection, Shepherd (I.C.), Cabelli (A.), *11934*
- ducts, flow, Lean (J.N.), *11941*
- junctions, modes, plates, vibration, Craven (P.G.), Gibbs (B.M.), *11947*
- chemical reactions, thermal effects, Tal (R.T.), *11958*
- absorption, attenuation, diffusers, Holger (D.K.), *11961*
- rings, screens, transmission, De Smedt (R.), *11988*
- nonlinear characteristics, numerical methods, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *11990*
- cylindrical waves, nonlinear waves, spherical waves, Scott (J.F.), *12004*
- diffraction, elliptical bodies, sound generation, Demidov (V.P.), *12005*

sound speed, acoustic properties, acoustic waves, Kuczera (F.), *896*
- acoustic waves, steam, Droban (N.V.), Zaytsev (V.P.), (et al.), *899*
- conductivity, liquids, physical properties, thermal properties, Mamedov (A.M.), *1656*
- acoustics, arrays, Hinich (M.J.), *3959*
- acoustic measurements, interferometry, optical techniques, solids, Thanh (V.), Burov (J.), (et al.), *3970*
- liquid gas mixture, two phase flow, Nguyen (D.L.), Winter (E.R.F.), (et al.), *4823*
- inverse method, ocean, stratification, underwater acoustics, Gray (S.H.), *5721*
- ocean, underwater acoustics, Lovett (J.R.), *5761*
- doppler effect, tracking, underwater acoustics, Wilcox (R.E.), *5762*
- explosions (underwater), sound propagation, underwater acoustics, Mitchell (S.K.), Hampton (L.D.), *5763*
- sound propagation, thermal effects, thermoelasticity, Tokuoka (T.), *6901*
- ocean, underwater acoustics, Mackenzie (K.V.), *8858*
- gases, mixtures, sound propagation, Huck (R.J.), Johnson (E.A.), *8860*
- dispersion, porous media, ultrasonics, Sayers (C.M.), *11925*

Soundalgekar (V.M.), see Pop (I.), *752*
- convection, jets, porous walls, Vighnesam (N.V.), (et al.), *1676*
- convection (free), porous walls, rotating disks, rotating fluids, Pop (I.), *2804*
- constitutive equations, dynamic viscoelasticity, rayleigh problem, viscoelastic fluids, Dasgupta (A.K.), *3589*
- boussinesq equation, heat transfer, oscillatory flow, plates, porous surfaces, Hiremath (S.B.), *6622*
- blood flow, couple stresses, diffusion, non newtonian flow, Chaturani (P.), *6655*
- heat addition, magneto fluid dynamics, numerical methods, plates, similarity methods, Takhar (H.S.), (et al.), *9784*
- see Takhar (H.S.), *10583*
- channel flow, circuits, heat transfer, magneto plasma dynamics, rarefied gases, Akolkar (S.P.), *10737*
- convection (free), magneto fluid dynamics, oscillating bodies, plates (vertical), unsteady flow, Patil (M.R.), (et al.), *10739*
- convection (free), magneto fluid dynamics, oscillating bodies, plates (vertical), stokes flow, Patil (M.R.), (et al.), *10740*
- convection, magneto fluid dynamics, plates (vertical), semi infinite media, theory, Takhar (H.S.), *10750*
- channel flow, dispersion, mass transfer, non newtonian flow, solutions (material), Mohiuddin (M.), *11505*

Soward (A.M.), convection (free), geostrophic flow, heat, magneto fluid dynamics, rotating fluids, *1514*

Sowell (E.F.), geothermal reservoirs, mathematical models, rock mechanics, Curry (R.L.), *956*

Sozou (C.), flow fields, force, nonlinear theory, plates, singularities, walls, Pickering (W.M.), *11388*

Sozzi (G.L.), see Hochreiter (L.E.) eds., *4693, book*

space frames, structural stability, Hoff (N.J.), Fernandez-Sintes (J.), *344*
- constitutive relations, continuum theory, thermoelasticity, Nayfeh (A.H.), Hefzy (M.S.), *522*
- eccentric loading, matrix methods, second order analysis, structural analysis, Subramanian (N.), Chettiar (C.G.), *3548*
- dynamic loads, inelasticity, Uzgider (E.A.), *4540*
- design (optimum), roofs, Stenker (H.), Michael (A.), (et al.), *4543*
- buckling, plates (folded), roofs, structural stability, Subramanian (N.), Ganapathy Chettiar (C.), *6532*
- geometric nonlinearities, matrix methods, structural analysis, textiles, Stubbs (N.), Fluss (H.), *7311*
- beams (open section), beams (thin section), finite element techniques, geometric nonlinearities, three dimensional formulation, Minozzi (D.), Odorizzi (S.), (et al.), *8153*
- damping, optimal control, space structures, space vehicle structures, stability theory, Joshi (S.M.), Groom (N.J.), *8850*
- dissipation, space structures, space vehicle structures, Hughes (P.C.), *8851*
- combined loading, design (optimum), plasticity, structural analysis, Grierson (D.E.), Aly (A.A.), *11319*

space shuttle, friction, landing, runways, Yager (T.J.), Horne (W.B.), *1332*
- ablators, arcjets, insulating materials (thermal), joints, reentry, Brewer (W.D.), Pittman (C.M.), (et al.), *1723*
- control, design, guidance systems, Anderson (W.W.), Groom (N.J.), (et al.), *2927*
- combustion, zero g phenomena, Cochran (T.H.), *3876, book*
- airplanes, flight control, lateral stability, stochastics, Stengel (R.F.), *4672*
- arcjet engines, magneto fluid dynamics, thrusters, Kuriki (K.), *5668*
- optimal control, penalty function, stability theory, tethered systems, Bainum (P.M.), Kumar (V.K.), *5701*
- experimental mechanics, structural analysis, windows, Dote (H.), Theodore (K.T.), *6547*
- optimization, orbit transfer, payloads, thrusters, Macklis (H.), Sackheim (R.L.), (et al.), *7892*
- aerodynamic heating, aerodynamic loads, delta wings, structural analysis, Macconochie (I.O.), Lomessurier (R.W.), (et al.), *8643*
- ignition, rockets, solid propellants, thrust, transient effects, Caveny (L.H.), Kuo (K.K.), (et al.), *10723*
- orbit transfer, propulsion, space vehicles, Martin (J.A.), *10724*
- design, propulsion, systems, Sackheim (R.L.), Fritz (D.E.), (et al.), *10725*
- dynamic behavior, heat shields, nonlinear characteristics, Housner (J.M.), Edighoffer (H.H.), (et al.), *11128*
- dynamic stresses, heat shields, mathematical models, vibration (random), Doyle (G.R.) Jr., *11155*

space vehicle structures, antennas, trusses, Bush (H.G.), Heard (W.L.) Jr., *1461*
- design, rockets, solid propellants, Zimmerman (C.A.), *1769*

- artificial satellites, control, satellites, structural response, Lightner (E.B.), *2178*
- control, stability theory, Hughes (P.C.), Abdel-Rahman (T.M.), *2922*
- control, flexible bodies, Asner (B.A.) Jr., Seltzer (S.M.), *2924*
- aerospace vehicles, design, Hedgepeth (J.M.), Miller (R.K.), (et al.), *3562*
- aerospace vehicles, Vaughan (D.H.), *3563*
- attitude control, flexible bodies, riccati equation, Fenton (J.), Gill (K.F.), *3921*
- asymptotic methods, control, feedback, stability theory, Balas (M.J.), *3922*
- digital control, optimal control, structural response, Gran (R.), Rossi (M.), (et al.), *4297*
- control, feedback, structural response, Balas (M.J.), *4298*
- artificial satellites, cables, flexible bodies, tethered systems, Weber (R.), Wehrli (R.), *4758*
- cylindrical bodies, gravity gradient, solar radiation, thermal effects, Furukawa (M.), *5702*
- aerospace vehicles, optimization, space platforms, Heard (W.L.) Jr., Bush (H.G.), (et al.), *6546*
- attitude control, flexible appendages, spinning bodies, stability theory, Lips (K.W.), Modi (V.J.), *6884*
- control, modal control, sensitivity, structural response, vibration, Hallauer (W.L.) Jr., Barthelemy (J.-F.M.), *7257*
- beams (flexural), control, structural analysis, Schaechter (D.B.), *7413*
- control, damping, gyrodynamics, gyroscopic stabilization, stabilization, Joshi (S.M.), Groom (N.J.), *7415*
- algorithms, computing techniques, equations of motion, orbit mechanics, space vehicles, Kane (T.R.), Levinson (D.A.), *7916*
- artificial satellites, attitude control, flexible bodies, modal control, Sellappan (R.), Bainum (P.M.), *8947*
- adaptive systems, flexible bodies, modal control, Johnson (C.R.) Jr., *8949*
- damping, optimal control, space frames, space structures, stability theory, Joshi (S.M.), Groom (N.J.), *8950*
- dissipation, space frames, space structures, Hughes (P.C.), *8951*
- dynamic behavior, flexible bodies, modes, vibration, Hablani (H.B.), *9309*
- attitude control, control, guidance systems, vibration, Anderson (R.H.), Haung (C.-C.), (et al.), *10774*
- actuators, controllability, design, optimization, oscillations, Arbel (A.), *11047*
- artificial satellites, dynamic analysis, oscillations, solar arrays, Khoroshilov (V.S.), *11336*

space vehicles, estimation, kalman filters, navigation, Madrid (G.A.), Bierman (G.J.), *194*

- optimal control, trajectories, Farrenkopf (R.L.), *197*
- discrete systems, distributed parameters, modal control, spinning bodies, Meirovitch (L.), Van Landingham (H.F.), (et al.), *198*
- gyrodynamics, gyroscopes, optimal control, Oz (H.), Meirovitch (L.), *881*
- control, rockets, solid propellants, thrust, Verble (A.J.) Jr., Mccool (A.A.), (et al.), *1770*
- interplanetary probes, trajectories, Frauenholz (R.B.), *1792*
- attitude control, orbit correction, x ray techniques, Rose (R.E.), Berkery (E.A.), *1794*
- convection, heat, internal flow, vibration, Kamotani (Y.), Prasad (A.), (et al.), *2906*
- ablation, boundary layer (turbulent), heat transfer, mass transfer, transpiration, Suzuki (K.), *3967*
- orifices, propellants, spinning bodies, vortices, Pasley (G.F.), *5404*
- containers (partially filled), spacelab, visualization, zero g phenomena, Vreeburg (J.P.B.), Van Den Assem (D.), *5477*
- cooling, heat pipes, thermal loading, Vasiliev (L.L.), Gil (V.V.), (et al.), *5599*
- heat pipes, Kaufman (W.B.), Tower (L.K.), *5601*
- libration theory, orbit mechanics, rotating bodies, three body problem, Barkin (Yu.V.), *5699*
- doppler effect, electric propulsion, estimation, random error, Asher (R.B.), Eller (T.J.), (et al.), *5714*
- kinematics, maneuverability, quaternions, Mayo (R.A.), *5715*
- dynamic interaction, transient loading, vibration (forced), Chen (J.C.), Zagzebski (K.P.), (et al.), *6314*
- absorption, coatings, heat shields, radiant interchange, solar radiation, spectral analysis, thermal loading, Bosma (J.), Levadou (F.), *6807*
- nozzles, propulsion, rockets, supersonic flow, Ellis (R.A.), Hammond (R.N.), (et al.), *6851*
- control, modeling, thrusters, Garg (S.), *6852*
- control, design, propulsion, Finston (R.), Spicer (L.M.), *6853*
- isotopes, nuclear power, steam power plants, Raab (B.), *6854*
- aerodynamic heating, reentry, Wurster (K.E.), Eldred (C.H.), *6888*
- aerodynamic interference, nozzles, rockets, side forces, staging, Sadunas (J.A.), French (E.P.), (et al.), *7893*
- astronautics, celestial mechanics, design, mission analysis, optimization, orbits, trajectories, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*
- algorithms, computing techniques, equations of motion, orbit mechanics, space vehicle structures, Kane (T.R.), Levinson (D.A.), *7916*
- attitude control, hamiltonian equations, resonance, spinning bodies, Cochran (J.E.), Holloway (H.E.), *7923*
- ablation, finite difference methods, heat transfer, nucleate boiling, Sutton (G.W.), *8771*
- control, stabilization, Yuan (J.S.-C.), *8948*
- control, dynamics, spinning bodies, Juang (J.N.), Balas (M.J.), *8952*
- fins, heat addition, heat pipes, radiant interchange, radiators, Furukawa (M.), *9735*
- orbit transfer, propulsion, space shuttle, Martin (J.A.), *10724*
- launching, propulsion, systems, Koyama (A.), Takenaka (Y.), *10728*
- launching, magnetic field, Lemke (E.H.), *11803*

Spaid (F.W.), airfoils, computing techniques, holography, interferometry, shock waves, supercritical flow, Bachalo (W.D.), *2726*

- airfoils, boundary layer, supercritical flow, transonic flow, wind tunnels, Stivers (L.S.) Jr., *3764*

Spajer (M.), see Rastogi (P.K.), *9419*

Spalding (D.B.), multiphase flow, power plants, prediction, *1851*

- heat transfer, mass transfer, metallurgy, Afgan (N.H.), *2854, book*
- see Markatos (N.C.), *8796*

spallation, dynamic fracture, fracture mechanics, material testing, micromechanics, Gokubev (V.K.), Novikov (S.A.), (et al.), *5291*

- fracture, impulsive loading, Dremin (A.N.), Molodets (A.M.), *10246*

Spanos (P.-T.D.), digital simulation, oscillators, stochastic processes, van der pol oscillator, *4956*

- aerodynamic loads, random excitation, structures, Chen (T.W.), *5697*
- dynamic analysis, probability theory, random excitation, Lutes (L.D.), *7374*
- averaging, dynamic analysis, random excitation, vibration (nonlinear), *10195*

spark discharge, axisymmetric flow, coherent structure, jets, Sokolov (M.), Klein (S.J.), (et al.), *5451*

spark ignition, control, internal combustion engines, knocking, pressure measurement, Randall (D.W.), Powell (J.D.), *5853*

spark ignition engines, combustion products, flames, mathematical models, methanol, quenching, Browning (L.H.), Pefley (R.K.), *840*

- exhaust gases, heat transfer, one dimensional flow, thermal measurements, Alkidas (A.C.), *6948*
- flame propagation, hot wire, modeling, Arques (P.), *6949*
- combustion, emissions, hydrocarbons, oil films, Kaiser (E.W.), Lorusso (J.A.), (et al.), *7882*
- flame propagation, flames (turbulent), models, Tabaczynski (R.J.), Trinker (F.H.), (et al.), *10700*

Sparrow (C.T.), analog simulation, chaos, differential equations (ordinary), feedback, *8104*

Sparrow (E.M.), channel flow, convection, emissivity, heat transfer (combined modes), radiation, Shah (S.), (et al.), *782*

- boundary layer (thermal), buoyant flow, closed conduit flow, convection (free), plane flow, Prakash (C.), *1681*
- convection (forced), heat transfer, orifices, surface effect, Gurdal (U.), *1691*
- conduction (heat), convection, convection (free), fins, Acharya (S.), *1709*
- conduction (heat), convection, extended surfaces, fins, heat transfer, Hsu (C.F.), *1715*
- heat transfer (combined modes), radiant interchange, radiation, thermal sciences, Cess (R.D.), *3826, book*
- see Eckert (E.R.G.), *4694*
- boundary layer (thermal), convection (free), heat transfer, plates (vertical), Feghri (M.), *4697*
- extended surfaces, fins, heat transfer, laminar flow, pipe flow, Charmchi (M.), *4699*
- see Hsu (C.F.), *5577*
- duct flow, experimental results, flow obstructions, heat transfer, turbulence, turbulent flow, Molki (M.), (et al.), *6689*
- convection (free), cylindrical bodies, extended surfaces, heat transfer, plates, Chrysler (G.M.), *6791*
- see Lau (S.C.), *7751*
- convection (free), cylindrical bodies, interaction, interference, Niethammer (J.E.), *7836*
- augmentation, channel flow, convection (free), extended surfaces, heat transfer, plates (parallel), rayleigh number, Prakash (C.), *9699*
- convection (forced), heat transfer, separated flow, solar collectors, Samie (F.), (et al.), *9736*
- see Liu (C.H.), *10610*

Spathis (G.D.), adhesion, effective elastic moduli, materials properties, metallic composites, resins, Sideridis (E.P.), (et al.), *5124*

spatial mechanisms, dynamic analysis, kinematics, structural elements, Nitescu (P.N.), *4937*

Spatschek (K.H.), see Laedke (E.W.), *7744*

Specht (B.), see Wissmann (J.W.), *5032*

special functions, fluidized beds, inversion, laplace transform, multiphase flow, numerical analysis, Petho (A.), Kuhne (J.), *1101*

- harmonic analysis, sampling, walsh functions, Kawamura (M.), Tanaka (S.), *2022*
- airy function, asymptotic behavior, nonlinear mechanics, Miles (J.W.), *4951*
- kepler orbits, three body problem, variational methods, Waldvogel (J.), *9814*

specific heat, conduction (heat), conductivity, liquids, Mulyukov (R.R.), Pavlov (P.A.), *5518*

- phase changes, thermophysical properties, Kuleshov (G.G.), *10660*
- heat transfer, regenerators, Maclaine-Cross (I.L.), *10624*

specimen design, brittle materials, compression, finite element methods, tests, Kvitka (A.L.), Dyachkov (I.I.), *492*

- brittle materials, composite materials, compression, tests, Kvitka (A.L.), Dyachkov (I.I.), *3491*
- calibration, fracture toughness, notch tests, stress intensity factor, Bubsey (R.T.), Munz (D.), (et al.), *9430*
- calibration, crack growth, finite element methods, fracture toughness, stress intensity factor, Beech (J.F.), Ingraffea (A.R.), *10337*
- crack tip geometry, fracture, fracture toughness, plane strain, Wei (S.), Tingshi (Z.), (et al.), *10338*

spectra, experimental results, turbulence, turbulence (geophysical), turbulence (structure), Newberger (P.A.), Caldwell (D.R.), *644*

- statistical theory, stratified flow, turbulence, Sazontov (A.G.), *651*
- internal waves, surface waves, wave interactions, Basovich (A.Ya.), *669*
- shock waves (normal), structural response, Matsuzaki (Y.), *1309*
- convection, pipe flow, turbulence, turbulence (correlations), Mcconachie (P.J.), *1584*
- earthquake effects, prediction, Enescu (D.), Plavita (R.), *1886*
- eddies, nonlinear theory, turbulence (isotropic), turbulence (structure), vortex rings, Tung (T.C.), Adrian (R.J.), *2687*
- inhomogeneities, turbulence, turbulence (correlations), turbulence model, Gurvich (A.S.), *2689*
- oscillatory flow, tides, turbulence, Anwar (H.O.), Atkins (R.), *2695*
- machinery, noise, simulation, Sasaki (K.), Sato (T.), (et al.), *2957*
- breakers, shallow water, surface waves, Iwata (K.), *3015*
- meteorology, Meriloes (P.E.), *3027*
- computer programming, data analysis, imaging systems, real time solution, Meredith (B.D.), Kelly (W.L.) IV, *3129*
- diffusion, turbulence, Moffatt (H.K.), *4643*
- acoustic waves, half space, moving surfaces, reflection, sound fields, Hwang (Y.F.), Tichy (J.), *4763*
- breakers, currents, gravity waves (internal), internal waves, oceanography, thermocline, Eriksen (C.C.), *4871*
- bottom irregularities, eddies, turbulence (geophysical), Holloway (G.), *4876*
- acoustics (physiological), fourier transform, Teaney (D.T.), Moruzzi (V.L.), (et al.), *5789*
- turbulence, turbulence model, Yanase (S.), Tatsumi (T.), *6680*
- cascades, turbulence, turbulence model, Gledzer (Ye.B.), Makarov (A.L.), *6682*
- navier stokes equation, turbulence, turbulence (structure), Deissler (R.G.), *6684*
- ocean waves, singularities, Harper (E.Y.), *6696*
- crossflow, tube bundles, vortex shedding, Katinas (V.I.), Markevicius (A.A.), (et al.), *6706*
- blades, propellers, vibration (forced), wind turbines, Akesson (B.), Sandstrom (S.), *6870*
- sound propagation, underwater acoustics, wave equations, Stickler (D.C.), Ammicht (E.), *6909*
- earthquake resistant structures, inelasticity, Lai (S.-S.P.), Biggs (J.M.), *7047*
- earthquakes, structural response, Yang (J.N.), Liu (S.C.), *7048*
- data analysis, ocean waves, stochastic processes, surface waves, Long (R.B.), *7058*
- differential operators, discrete spectra, hilbert space, mathematical methods, Reed (T.T.), *7161*
- frequency response, mathematical models, wavemakers, Hudspeth (R.T.), Leonard (J.W.), *7809*
- gravity waves, gravity waves (surface), ocean waves, surface waves, wind-wave interaction, Naeser (H.), *8018*
- surface waves, wind-wave interaction, Komen (G.J.), *8026*
- chaos, computing techniques, hamiltonian equations, Blacher (S.), Perdang (J.), *8107*
- gravity waves (surface), ocean waves, oceanography, surface waves, wind-wave interaction, Komen (G.J.), *8998*
- currents, ocean air interaction, oceanography, rossby waves, wind-wave interaction, Willebrand (J.), Philander (S.G.H.), (et al.), *9000*
- atmosphere, shear flow, stratified flow, turbulence (geophysical), Weinstock (J.), *9607*
- dimensional analysis, turbulence, turbulence (isotropic), Szablewski (W.), *9613*
- boundary layer (atmospheric), turbulence (geophysical), wind-wave interaction, Antonia (R.A.), Chambers (A.J.), *9939*
- similarity methods, turbulence, turbulence model, velocity profiles, Driscoll (R.J.), Kennedy (L.A.), *11542*
- compressible flow, turbulence, vorticity, Moiseev (S.S.), Tur (A.V.), (et al.), *11544*
- buoyancy, stratified flow, turbulence, Ogino (F.), Komori (S.), (et al.), *11550*
- dispersion relation, gravity waves (surface), nonlinear analysis, Crawford (D.R.), Lake (B.M.), *11574*
- experimental methods, ocean waves, Kats (A.V.), Spevak (I.S.), *11582*
- inertial waves, rotating cylinders, shells (fluid-filled), Scott (W.E.), *11597*
- nonlinear analysis, ocean waves, wave loads, Sharma (J.N.), Dean (R.G.), *11663*
- experimental results, gravity waves (shallow water), ocean waves, Thompson (E.F.), *11696*
- earthquakes, seismic waves, simulation, Doblare (M.), Alarcon (E.), (et al.), *12071*
- ocean waves, swell, wind-wave interaction, Joseph (P.S.), Kawai (S.), (et al.), *12073*

spectral analysis, jets, laser doppler velocimeters, velocity measurement, Roberts (J.B.), Downie (J.), (et al.), *1645*

- gases, polyatomic gases, spectroscopy, thermal properties, Miller (G.H.), Mulac (A.J.), *1660*
- detection, flames, ionization, Nicholson (A.J.C.), Swingler (D.L.), *1750*
- acoustic measurements, acoustics, filters, Williams (J.R.), Ricker (G.G.), *1824*
- acoustic measurements, bearings (ball), diagnostics, vibration, vibroacoustics, Cempel (C.), *2480*
- atmosphere, radiant interchange, radiation properties, scattering, transmission, Arst (Kh.Yu.), Kostyanoy (G.N.), *2823*
- flame propagation, turbulent flow, Gokalp (I.), Lasek (A.), *2864*
- combustion, flames (diffusion), lasers, scattering, Bard (S.), Pagni (P.J.), *3878*
- acoustic measurements, combustion, ducts, Miles (J.H.), Raftopoulos (D.D.), *3957*
- acoustics, Robertson (G.H.), *3962*
- acoustics, Altes (R.A.), *3963*
- acoustics, noise, Robertson (G.H.), *3965*
- noise, seismic waves, Kats (S.A.), Ptetsov (S.N.), *4034*
- damage (cumulative), locomotives, stochastic processes, suspension systems, Garivaltis (D.S.), Garg (V.K.), (et al.), *4485*
- acoustic measurements, ducts, sound (random), sound fields, Seybert (A.F.), Soenarko (B.), *4802*
- arrays, underwater acoustics, Tuteur (F.B.), Presley (J.A.) Jr., *4811*
- cracks, flaw detection, vibration (nonlinear), Wedig (W.), Brautgam (H.), *5205*
- blades, turbines, vibration, Egorov (I.V.), *5215*
- blades, gas turbines, vibration, Kanunnikov (I.P.), Sidorenko (M.K.), *5216*
- stratified flow, two dimensional flow, vortex flow, Myers (R.B.), Taylor (T.D.), (et al.), *5396*
- finite difference methods, navier stokes equation, numerical methods, Roy (P.), *5410*
- molecular theory, radiating flow, Khodyko (Yu.V.), Vitkin (E.I.), (et al.), *5587*
- electron beams, excitation, lasers, plasma, Ono (K.), Kamimoto (G.), (et al.), *5691*
- acoustics, discrete systems, filters, fourier transform, Williams (J.R.), *5790*
- defects, flaw detection, surface flaws, ultrasonics, Vopilkin (A.Kh.), Ermolov (I.N.), (et al.), *6492*
- absorption, atmosphere, spectroscopy, Emerry (R.J.), Moffat (P.H.), (et al.), *6758*
- absorption, coatings, heat shields, radiant interchange, solar radiation, space vehicles, thermal loading, Bosma (J.), Levadou (F.), *6807*
- combustion products, contamination, exhaust gases, interferometry, optical techniques, propellants, Roux (J.A.), Wood (B.E.), (et al.), *6817*
- control, distributed parameters, linear systems, Azarov (V.L.), Lupichev (L.N.), (et al.), *7236*
- fast fourier transform, vibration, vibration (random), Gossmann (E.), Waller (H.), *7377*
- cavities, elastic waves, scattering, Sancar (S.), Pao (Y.-H.), *7432*
- cavities, elastic waves, scattering, Sancar (S.), Sachse (W.), *7433*
- faults, seismic waves, Landa (Ye.I.), Mitrofanov (G.M.), *8011*
- eigenvalues, mathematical models, model reduction, Allemong (J.J.), Kokotovic (P.V.), *8157*
- hydrodynamic stability, mathematical models, navier stokes equation, Taylor (T.D.), Murdock (J.W.), *8608*
- damage (cumulative), fissured systems, fracture, surveys, Fras (G.), Pons (J.C.), (et al.), *8951*
- control, feedback, linear systems, stability theory, transfer functions, Schober (J.), *9166*
- moving loads, structural analysis, time dependence, Padovan (J.), *9332*

spectral density, pulsatile flow, two phase flow, Krokovnyi (P.M.), *2678*

- state space techniques, stochastic systems, Putyatin (V.V.), *6134*

spectral loading, offshore structures, stochastic processes, structural response, wave loads, Spidsoe (N.), Sigbjornsson (R.), *8460*

spectroscopy, convection (free), mass transfer, particles, Govindaraj (V.M.H.), Lakshminarayanan (H.), *826*

- acoustic properties, liquids, optical techniques, relaxation, Gladkov (S.M.), Korotsev (N.I.), *919*
- molecular theory, radiation, Bernstein (L.S.), *1653*
- gases, polyatomic gases, spectral analysis, thermal properties, Miller (G.H.), Mulac (A.J.), *1660*
- lasers (gasdynamic), radiant interchange, Dorogov (V.G.), Demenik (I.V.), (et al.), *1708*
- experimental methods, metals, plasma, rotating fluids, Brand (G.F.), James (B.W.), (et al.), *3903*
- auger analysis, electron spectroscopy, surfaces, wear, Mathieu (H.J.), Landolt (D.), (et al.), *4116*
- convection, gases, heat transfer, radiant interchange, radiation, Mattick (A.T.), *5585*
- absorption, atmosphere, spectral analysis, Emerry (R.J.), Moffat (P.H.), (et al.), *6758*
- cracks, fracture mechanics, stress corrosion, torsion, Briggs (A.), Airey (R.), (et al.), *9391*

Spektor (M.), experimental results, field tests, penetration, soils, tools, *5253*

- cyclic loading, impact, soils, tools, *10248*

Spektorov (I.Sh.), see Lyapkov (A.A.), *6494*

Spelt (J.K.), channel flow, granular media, heat transfer, nusselt number, peclet number, Brennen (C.E.), (et al.), *10570*

Spencer (A.C.), see Takeuchi (K.), *11625*
Spencer (A.J.M.), conservation laws, constitutive equations, continuum mechanics, fluid mechanics, solid mechanics, *1966, book*
Spencer (S.E.), gravity, half space, holes, stress analysis, tunnels, Sinclair (G.B.), *7264*
Sperb (R.P.), diffusion, diffusion-reaction, mass transfer, mathematical methods, mathematical models, *6829*
Spevak (I.S.), see Kats (A.V.), *11582*
Speziale (C.G.), noncircular pipes, secondary flow, turbulence model, turbulent flow, *9578*
- closure, continuum mechanics, reynolds stresses, turbulence, *9612*

spherical bodies, blood flow, reynolds number (small), trajectories, Starobin (I.M.), *571*
- ellipsoids, reflection, shock waves, Nosenko (N.I.), Sysoev (N.N.), (et al.), *681*
- magneto fluid dynamics, nonlinear characteristics, rotating fluids, vessels, Kirushin (V.V.), *868*
- acoustics, cylindrical bodies, resonance, scattering, Flax (L.), Dragonette (L.R.), (et al.), *907*
- heat transfer, mass transfer, particles, Hughmark (G.A.), *937*
- dynamic analysis, viscoelastic materials, Vilke (V.G.), *1066*
- bearings (ball), contact problems, elastoplasticity, Shenderov (I.B.), *1196*
- non newtonian flow, rotating bodies, simple fluids, viscoelastic fluids, Fosdick (R.L.), Kao (B.G.), *1484*
- finite difference methods, navier stokes equation, rotating bodies, viscous flow, Dennis (S.C.R.), Ingham (D.B.), (et al.), *1507*
- axisymmetric flow, drops, stokes flow, viscous flow, Zinchenko (A.Z.), *1509*
- inertial waves, ray method, rotating bodies, shells (fluid-filled), London (S.), Shen (M.C.), *1599*
- oscillating bodies, stratified flow, virtual mass, Lai (R.Y.S.), Lee (C.-M.), *1602*
- radiation, shape factors, Chung (B.T.F.), Naraghi (M.H.N.), *1704*
- granular media, mass transfer, Badatov (E.V.), Matros (Yu.Sh.), (et al.), *1732*
- cavities, diffusion, infinite medium, mathematical methods, Akkas (N.), Bauld (N.R.) Jr., *2010*
- dirichlet problem, kinetics, Kapila (A.K.), Matkowsky (B.J.), (et al.), *2852*
- approximations, magneto fluid dynamics, rotating bodies, torque, Natyaganov (V.L.), *2888*
- acoustic waves, elastic bodies, sound generation, Hasegawa (T.), Ochi (M.), (et al.), *2939*
- drag coefficient, porous surfaces, reynolds number (small), Masliyah (J.H.), Polikar (M.), *3632*
- free boundary, potential flow, Khabarov (G.S.), *3634*
- creeping flow, rarefied gases, stokes flow, Obayashi (T.), Tougou (H.), *3645*
- annular flow, convection (free), grashof number, stratified flow, Singh (S.N.), Elliott (J.M.), *3801*
- cylindrical bodies, mass transfer, power law fluids, Kumar (S.), Tripathi (P.K.), (et al.), *3857*
- acoustic waves, elastic bodies, scattering, Bostrom (A.), *3938*
- elastic waves, resonance, scattering, shear waves, Brill (D.), Gaunaurd (G.), (et al.), *3947*
- inviscid fluid, unsteady flow, vortex flow, vortices, Mindlin (I.M.), *4579*
- aerodynamic interference, lift, turbulent flow, walls, Willetts (B.B.), Murray (C.G.), *4670*
- acoustic waves, fluids, scattering, Gaunaurd (G.), Uberall (H.), *4774*
- half space, inclusions, torsion, Dhaliwal (R.S.), Singh (B.M.), (et al.), *5090*
- initial value problems, internal flow, stokes flow, Bykov (V.M.), *5403*
- additives, drag, polymers, structure, velocity profiles, Puris (B.I.), Polesskii (E.P.), (et al.), *5428*
- heat transfer, laminar flow, rotating bodies, Suwono (A.), *5559*
- elastic bodies, scattering, torsional waves, Grilitskii (D.V.), Poddubnyak (A.P.), *6362*
- impact, plasticity, Rickerby (D.G.), Macmillan (N.H.), *6365*
- colloids, electro fluid dynamics, hydrodynamics, particle fluid flow, Adler (P.M.), *6580*
- cylindrical bodies, friction, rotating bodies, viscous flow, Greenstein (T.), Zocco (J.G.), *6623*
- conduction (heat), conductivity, dispersed flow, thermodynamic functions, viscosity, Endler (B.S.), *6759*
- coatings, mie scattering, radiant interchange, radiation properties, scattered light, thin films, Shafey (H.M.), Kunitomo (T.), *6804*
- coatings, mie scattering, radiant interchange, radiation properties, scattered light, thin films, Kunitomo (T.), Shafey (H.M.), (et al.), *6805*
- geomechanics, vibration (torsional), Kalachnikov (A.A.), *7022*
- deformation, granular media, micromechanics, statistical continuum mechanics, Vaisman (A.M.), Goldshtik (M.A.), *7270*
- film flow, stokes flow, surface tension, Johnson (R.E.), *7668*
- axisymmetric flow, connected bodies, drag, stokes flow, Wakiya (S.), *7669*
- boundary layer (turbulent), friction (skin), roughness, stanton number, transpiration cooling, velocity profiles, Ligrani (P.M.), Kays (W.M.), (et al.), *7824*
- acoustic measurements, acoustic waves, impulse, scattering, Deprez (G.), Hazebrouck (R.), *7941*
- cavities, dynamic analysis, gyrodynamics, spinning bodies, Nunn (R.H.), Bloomer (J.W.) II, *8098*
- couple stresses, micropolar media, polar fluids, rotating bodies, Lakshmana Rao (S.K.), Iyengar (T.K.V.), *8487*
- base pressure, blunt bodies, compressible flow, experimental results, subsonic flow, Kuptsov (V.M.), *8553*
- couette flow, hydrodynamic stability, rotating bodies, vortices, Hocking (L.M.), *8605*
- aerodynamic interference, drag, walls, wind tunnels, Awbi (H.B.), Tan (S.H.), *8672*
- convection (forced), cooling, cylindrical bodies, film boiling, stagnation point, Epstein (M.), Hauser (G.M.), *8687*
- combustion, convection (free), numerical methods, Potter (J.M.), Riley (N.), *8793*
- earth, magneto fluid dynamics, modes, rotating bodies, Gubbins (D.), *8816*
- dynamic properties, reinforced concrete, shells (thick), transient loading, Bak (G.), *9320*
- asymptotic methods, reynolds number (small), unsteady flow, Sano (T.), *9530*
- force, stokes flow, torque, viscous flow, Brenner (H.), *9531*
- internal flow, reynolds number (small), rotating bodies, Rumez (W.), *9536*
- drag coefficient, particle dynamics, reynolds number (small), visualization, Boillat (J.L.), Graf (W.H.), *9541*
- drag coefficient, impact, surfaces, water, Moghisi (M.), Squire (P.T.), *9629*
- film boiling, porous walls, thermal contact resistance, Kuzma-Kichta (Yu.A.), Lenkov (V.A.), (et al.), *9686*
- analytical methods, biot number, conduction (heat), cylindrical bodies, heisler charts, unsteady flow, Sha (W.C.), Ganic (E.N.), *9714*
- bubble dynamics, creeping flow, non newtonian flow, viscoelasticity (dynamic), Tiefenbruck (G.), Leal (L.G.), *10412*
- gravity waves (shallow water), numerical methods, rotating bodies, Gilliland (R.L.), *10484*
- convection (free), cylindrical bodies, heat transfer, viscous effects, Ingham (D.B.), *10589*
- mass transfer, Sandoval-Robles (J.G.), Riba (J.P.), (et al.), *10681*
- euler equations, inviscid fluid, numerical methods, vortex lines, Dhanak (M.R.), *11361*
- creeping flow, heat transfer, nuclear waste, singularities, viscous flow, Krank (S.), *11363*
- stokes flow, unsteady flow, variational methods, viscous flow, Utkina (S.N.), *11364*
- finite difference methods, navier stokes equation, oscillating bodies, streams, Urakawa (T.), Takahashi (K.), *11365*
- boundary layer, convection (free), curvature, cylindrical bodies, oscillations, temperature, Srivastava (A.C.), Bhattacharjee (R.C.), *11370*
- annular flow, numerical methods, reynolds number (high), rotating bodies, Nakabayashi (K.), Nishida (H.), (et al.), *11375*
- jets, pressure measurement, pulsatile flow, unsteady flow, Kovasznay (L.S.G.), Tani (I.), (et al.), *11381*
- bodies of revolution, bubble dynamics, cavitation inception, Parkin (B.R.), *11383*
- compressible flow, hypersonic flow, rarefied flow, Artamonov (A.K.), Arknipov (V.N.), *11409*
- drag, hydrodynamics, kinetic theory, Van Beijeren (H.), Dorfman (J.R.), *11439*
- cylindrical bodies, drag, hydrodynamics, kinetic theory, Van Beijeren (H.), Dorfman (J.R.), *11463*
- compressible flow, hydroelasticity, oscillating bodies, Guz (A.N.), *11686*
- magneto fluid dynamics, mass transfer, surface effect, two phase flow, Oreper (G.M.), *11820*
- magneto fluid dynamics, stokes flow, transport phenomena, two phase flow, Miroshnikov (V.A.), *11825*
- generators, magnetic field, models, rotors, Barash (Yu.S.), Kropachev (E.P.), *11830*
- acoustic measurements, cylindrical bodies, scattering, Quentin (G.J.), De Billy (M.), (et al.), *11974*
- acoustic waves, scattering, Roumeliotis (J.A.), Fikioris (J.G.), *11980*
- acoustics, couplings, vibration, Reese (J.M.), Thompson (W.) Jr., *11994*
- acoustic waves, diffraction, elastic bodies, plates, Saadat (H.), Filippi (P.), *11999*
- drag, mechanical properties, slurries, Tsai (S.-T.), *12018*

spherical waves, mach stem, shock waves, trajectories, triple-point trajectory, Takayama (K.), Sekiguchi (H.), *2721*
- impact, plates, shock waves, Yakupov (R.G.), *5249*
- composite materials, elastic waves, inclusions, scattering, sound propagation, Berryman (J.G.), *6898*
- earth, mantle, oscillating bodies, Odaka (T.), *11170*
- cylindrical waves, nonlinear waves, sound propagation, Scott (J.F.), *12004*

Spicer (L.M.), see Finston (R.), *6853*
Spidsoe (N.), offshore structures, spectral loading, stochastic processes, structural response, wave loads, Sigbjornsson (R.), *8460*
Spiesberger (J.L.), ocean, sound propagation, underwater acoustics, Spindel (R.C.), (et al.), *5729*
- random media, sound propagation, underwater acoustics, Worcester (P.F.), *11905*

spikes, bodies of revolution, oscillatory flow, viscous flow, Shang (J.S.), Hankey (W.L.), (et al.), *7794*
Spiker (R.L.), elasticity, finite element methods (hybrid), interpolation, materials properties, *2061*

- finite element methods (hybrid), interpolation, plates (thick), stress analysis, Munir (N.I.), *2072*
- finite element methods (hybrid), higher order theories, hybrid element methods, plates, Munir (N.I.), *4379*
- convergence, finite element methods (hybrid), structural analysis, Daugirda (D.M.), *5035*
- bones, compression, disks, finite element methods, spine, *6030*
- edge effects, finite element methods (hybrid), laminates, *7304*
- computing techniques, finite element methods (hybrid), laminates, plates (thick), *8226*
- hybrid element methods, plates, Munir (N.I.), *9279*
- bending, hybrid element methods, hybrid techniques, mindlin plates, Munir (N.I.), *9280*
- approximations (polynomial), computing techniques, finite element methods (hybrid), integration, isoparametric elements, Singh (S.P.), *10062*

Spillers (W.R.), design (minimum weight), shape factors, steel, trusses, Kountouris (G.E.), *1429*

spillways, critical flow, finite element techniques, variational methods, O'Carroll (M.J.), *7654*

- channels, discharges, head, shallow water, Sivakumaran (N.S.), Hosking (R.J.), (et al.), *9606*
- baffles, bends, scour, Higgins (D.T.), *9506*
- boundary integral methods, fredholm equations, free boundary, sluices, surface flow, Cheng (A.H.-D.), Liggett (J.A.), (et al.), *10391*

spin recovery, airplanes, separated flow, separation, wings, Feistel (T.W.), Anderson (S.B.), (et al.), *690*

- airplane performance, flight tests, wind tunnels, Tischler (M.B.), Barlow (J.B.), *692*
- airplane performance, stalling, Hreha (M.A.), Lutze (F.H.), *2744*
- airplanes, gyrodynamics, Mccormick (B.W.), *3734*
- airplane performance, design, flight tests, leading edge, wind tunnels, Dicarlo (D.J.), Stough (H.P.) III, (et al.), *10512*
- airplanes, design, rolling motion, wind tunnels, Bihrle (W.) Jr., Bowman (J.S.) Jr., *11734*

Spindel (R.C.), see Spiesberger (J.L.), *5729*

Spindler (K.), see Gross (U.), *775*

spine, musculoskeletal system, scoliosis, x ray techniques, Hindmarsh (J.), Larsson (J.), (et al.), *1964*

- biological joints, biomechanics, Tencer (A.F.), Ahmed (A.M.), *3065*
- bones, human body, prosthetic devices, Banks (A.J.), Dervin (E.), *3071*
- biomechanics, material testing, stress strain relationships, Hung (T.-K.), Chang (G.-L.), *4906*
- blood flow, doppler effect, experimental methods, White (D.N.), Ketelaars (C.E.J.), (et al.), *9024*
- bones, compression, disks, finite element methods, Spilker (R.L.), *6030*
- biomechanics, bones, kinematics, stiffness, stress strain relationships, Laborde (J.M.), Burstein (A.H.), (et al.), *7104*
- experimental methods, nervous system, stress strain relationships, tissues, Hung (T.-K.), Chang (G.-L.), (et al.), *7105*
- biological joints, injuries, prosthetic devices, Ghista (D.N.) ed., *8069, book*
- bones, stress strain relationships, viscoelastic materials, Burns (M.L.), Kaleps (I.), *9049*
- diagnostics, experimental methods, gait, Thurston (A.J.), Whittle (M.W.), (et al.), *9071*

Spingarn (K.), see Kalaba (R.), *20*

- see Kalaba (R.), *5054*
- see Kalaba (R.), *6078*

spinning bodies, discrete systems, distributed parameters, modal control, space vehicles, Meirovitch (L.), Van Landingham (H.F.), (et al.), *198*

- containers (partially filled), coriolis forces, sloshing, vorticity, El-Raheb (M.), Wagner (P.), *673*
- artificial satellites, stability theory, Saakyan (L.S.), *879*
- dynamic stability, gyrodynamics, Singh (S.N.), *1988*
- differential equations (ordinary), eigenvalue problems, resonance, stability theory, Kunitsyn (A.L.), Medvedev (S.V.), *2000*
- averaging, resonance, solar system, Robinson (C.), Murdock (J.), *2915*
- accelerometers, aerodynamic coefficients, digital simulation, reentry, Mcdowell (J.L.), Williamson (W.E.) Jr., *3924*
- beams (cantilever), dynamic analysis, vibration, Utku (S.), El-Essawi (M.), (et al.), *5202*
- eigenvalues, vibration (forced), Osmont (D.), Simon (L.), *5225*
- orifices, propellants, space vehicles, vortices, Pasley (G.F.), *5404*
- lift, optimal control, reentry, topological techniques, Platus (D.H.), *5709*
- attitude control, flexible appendages, space vehicle structures, stability theory, Lips (K.W.), Modi (V.J.), *6884*
- ballooning, textiles, yarn, Lisini (G.G.), Nerli (G.), (et al.), *7314*
- attitude control, data acquisition, guidance theory, tumbling bodies, Hubert (C.), *7920*
- computing techniques, flexible bodies, launching, rockets, Weeks (G.E.), Cost (T.L.), *7922*
- attitude control, hamiltonian equations, resonance, space vehicles, Cochran (J.E.), Holloway (H.E.), *7923*
- lyapunov's functions, rigid bodies, stabilization, Kern (G.), *8097*
- cavities, dynamic analysis, gyrodynamics, spherical bodies, Nunn (R.H.), Bloomer (J.W.) II, *8098*
- conical bodies, heat transfer, rotating bodies, rotating fluids, Vira (N.R.), Fan (D.-N.), *8716*
- control, dynamics, space vehicles, Juang (J.N.), Balas (M.J.), *8852*
- dynamic stability, rotating bodies, vibration (self excited), Rimrott (F.), *9089*
- buckling (local), buckling (plastic), plastic flow, shear spinning, tubes, Gur (M.), Tirosh (J.), *9295*
- axial flow, boundary layer (turbulent), Nakamura (I.), Yamashita (S.), (et al.), *9564*
- damping, stability theory, Buratti (A.), Fusco (G.), *10777*

Spiridonov (Yu.A.), combustion chambers, gas turbines, jets, mixing, Premet (E.I.), (et al.), *5837*

- see Grigorenko (P.P.), *6844*

Spirig (F.), mathematical methods, perturbation theory, series, transforms, *877*

- bifurcation, hopf bifurcation, periodic orbits, stability theory, *6068*

Spirin (G.G.), see Salokhin (V.F.), *1705*

- liquid solid interface, thermal loading, thermal measurements, thermophysical properties, *5535*

Spitzig (W.A.), see Anand (L.), *1196*

Splettstosser (W.), approximations, convolution processes, mathematical methods, stochastic processes, *7174*

splines, boundary value problems, computing techniques, differential equations (ordinary), Usmani (R.A.), Warsi (S.A.), *60*

- algorithms, least squares, matrix methods, Best (M.R.), *65*
- bending, boundary value problems, differential equations (ordinary), plates, Usmani (R.A.), Warsi (S.A.), *2044*
- cauchy integral, collocation, singular integral equations, Napolitano (M.), Rubini (F.), (et al.), *3119*
- approximation theory, finite element methods, multivariable systems, Biega (P.), Coman (G.), *3126*
- dynamic stability, mathematical methods, nonlinear mechanics, Jain (M.K.), *4149*
- boundary layer, collocation, falknerskan equation, Mastro (R.A.), Voss (D.A.), *4615*
- elasticity (linear), finite element techniques, Boyer (J.C.), Trompette (P.), *6171*
- constant velocity couplings, kinematics, shafts, transmissions, Davoli (P.), *6556*
- finite element techniques, interpolation, plates, Qu (S.-N.), *7204*
- boundary value problems, interpolation, Mettke (H.), Pfeifer (E.), (et al.), *8126*
- boundary value problems, differential equations (ordinary), Papamichael (N.), Worsey (A.J.), *8129*
- approximations (polynomial), computing techniques, differential equations (ordinary), initial value problems, Multhei (H.N.), *10049*

spoilers, aerodynamics, drag coefficient, trucks, vehicles, wind tunnels, Menneron (J.-C.), *3732*

sports medicine, biological joints, mechanical design, ski binding, Hull (M.L.), Allen (K.W.), *6001*

- biological joints, experimental methods, impact, injuries, Mclaughlin (T.M.), Miller (N.R.), *7122*

Sporykhin (A.N.), deformation, elastoplasticity, soils, *4464*

spouted beds, particle fluid flow, two phase flow, King (D.F.), Harrison (D.), *5847*

Spradley (L.W.), conservation laws, navier stokes equation, three dimensional flow, Stalnaker (J.F.), (et al.), *5407*

- boundary layer, finite difference methods, navier stokes equation, parabolic equations, shear flow, Stalnaker (J.F.), (et al.), *7684*

spray flow, boundary layer (atmospheric), ocean air interaction, wind-wave interaction, Wang (C.S.), Street (R.L.), *996*

- compressible flow, two phase flow, Kinoshita (T.), *4020*
- heat transfer, laminar flow, mist flow, pipe flow, Yao (S.-C.), Rane (A.), *8697*

sprays, airplanes, lift, potential flow, streamlines, trajectories, vortices, Wickens (R.H.), *1620*

- cooling, heat transfer, high temperature, hydrodynamics, impingement cooling, Urbanovich (L.I.), Goryainov (V.A.), (et al.), *1663*
- boiling, cooling, film cooling, impingement cooling, Ishigai (S.), Nakanishi (S.), (et al.), *1664*
- dispersion, sedimentation, Kumar (A.), Vohra (D.K.), (et al.), *1867*
- impingement cooling, leidenfrost phenomenon, liquids, Grissom (W.M.), Wierum (F.A.), *2939*
- combustors, fluid injection, gas turbines, Simmons (H.C.), Harding (C.F.), *5955*
- convection, convection (forced), crossflow, cylindrical bodies, heat transfer, unsteady flow, Basilico (C.), Jung (G.), (et al.), *6775*
- atomization, drops, measurements, Picot (J.J.C.), Tomey (T.D.), (et al.), *6985*
- drops, experimental methods, two phase flow, Ow (C.S.), Crane (R.I.), *7972*
- boundary layer, entrainment, interface phenomena, Macha (J.M.), Norton (D.J.), *8910*
- heat transfer, interaction, interface phenomena, three dimensional flow, Palaszewski (S.J.), Jiji (L.M.), (et al.), *8911*
- contact problems, dispersed flow, heat transfer, liquid liquid interface, spray columns, Moreaco (L.L.), Marschall (E.), *9731*
- channel flow, coolers, cooling, power generation, spray canals, Chaturvedi (S.K.), Porter (R.W.), *10542*

- combustion, drops, evaporation, Umemura (A.), Ogawa (S.), (et al.), *10709*
- combustion, evaporation, liquid fuels, Tambour (Y.), *10716*

Spring (U.), conduits, finite difference methods, ice mechanics, lakes, unsteady flow, Hutter (K.), *6608*
- binary flow, channel flow, glaciers, Hutter (K.), *7872*

Springer (E.K.), electromagnetic waves, flow measurement, *3765*
Springer (G.S.), heat transfer, nucleation, *2844*
Springer (H.), bearings (journal), bearings (tilted pad), damping, dynamic behavior, vibration, *4111*

springs, testing equipment, vibration isolation, Barker (H.A.), Noble (A.E.), (et al.), *226*
- dynamic stability, shells (cylindrical), shells (stiffened), Palamarchuk (V.G.), *356*
- dynamic response, railroads, vehicles, Carman (R.W.), Kieres (K.C.), *532*
- nonlinear materials, thermoelasticity (transient), viscoelastic materials, Senchenkov (I.K.), Gumenyuk (B.P.), *927*
- control, helicopters, rotors, vibration, Drees (J.M.), Dooley (L.W.), (et al.), *2745*
- creep, deformation, stresses, Sritharan (T.), Jones (J.), *3498*
- bearings, elasticity (nonlinear), elastomers, loads, Lehmann (D.), *3571*
- compression, design (minimum weight), Khare (A.K.), *4553*
- copper alloys, disks, machine design, steel, Curti (G.), Orlando (M.), (et al.), *5374*
- deformation (finite), strips, torsion, Mansfield (E.H.), *6218*
- cyclic loading, probabilistic design, reliability analysis, My Dao Thien, Massoud (M.), *6518*
- attenuation, noise, noise measurements, Meltzer (G.), Melzig-Thiel (R.), *6695*
- beams (curved), deformation (finite), Reissner (E.), *7324*
- elasticity (nonlinear), sheet metal, Wang (C.-Y.), *8234*
- bearings (ball), design, stiffness, vibration, Tamura (H.), Tsuda (Y.), *8474*
- design, high speed, linkages, mechanisms (planes), synthesis, Griffin (J.N.), Matthew (G.K.), *9477*
- beams (flexural), large displacement, nonlinear analysis, Watson (L.T.), Wang (C.Y.), *10143*

Spurr (A.), cascades, compressible flow, three dimensional flow, transonic flow, turbomachinery, *5412*

Spurr (R.T.), friction (sliding), interference fits, sliding, temperature, thermocouples, *7085*
- abrasion, friction (sliding), metals, wear, *9951*

Spurrier (J.), see De Castro (P.M.S.T.), *4506*
Squarer (D.), see Takeuchi (K.), *5663*

squeeze films, grease, lubrication (elastohydrodynamic), Wada (S.), Tsukijihara (M.), *3045*
- damping, design, rotors, Simandiri (S.), Hahn (E.J.), *3576*
- numerical methods, plates (parallel), viscous flow, Aziz (A.), Na (T.Y.), *4581*
- lubrication (elastohydrodynamic), oscillations, rubber, variational methods, Hori (Y.), Kato (T.), (et al.), *4897*
- lubricants (liquid), lubrication (hydrodynamic), reynolds number, Hamza (E.A.), Macdonald (D.A.), *5990*
- film thickness, lubrication (elastohydrodynamic), rolling contact, rotating cylinders, Wada (S.), *5987*
- electro fluid dynamics, film thickness, magneto fluid dynamics, Gupta (J.L.), Vora (K.H.), *7094*
- bearings (porous metal), electro fluid dynamics, film thickness, magneto fluid dynamics, Gupta (J.L.), Patel (K.C.), (et al.), *7095*
- jets, lubricants (liquid), non newtonian flow, polymers, Oliver (D.R.), Shahidullah (M.), *7103*
- flexibility, lubrication (hydrostatic), seals, vibration, Etsion (I.), Dan (Y.), *7628*
- channel flow, incompressible flow, lubrication (hydrodynamic), navier stokes equation, plates (parallel), Verma (R.L.), *8057*
- inertia, lubrication (hydrodynamic), oscillating bodies, plates (parallel), viscoelastic fluids, Roy (J.S.), Biswal (B.), *9026*
- film thickness, lubrication (hydrodynamic), reynolds equation, Vora (K.H.), *9031*
- bearings (porous metal), lubrication (hydrodynamic), magneto fluid dynamics, Patel (K.C.), *9044*
- casting, channel flow, film flow, non newtonian flow, plates (parallel), polymers, Kazankov (Yu.V.), Pervushin (V.E.), *9709*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), power law fluids, viscosity, Shukla (J.B.), Prasad (K.R.), (et al.), *9952*
- bearings (journal), damping, vibration, viscoelasticity, Tichy (J.A.), *9955*
- cartilage, human body, joints, lubrication (hydrodynamic), viscoelasticity, Manohar (K.), Nigam (K.M.), *9958*
- bearings (journal), cavitation, lubrication (hydrodynamic), seals, Pan (C.H.T.), Ibrahim (R.A.), *9959*
- bearings (porous metal), lubrication (hydrodynamic), roughness, surfaces, Prakash (J.), Tiwari (K.), *10689*
- bearings (journal), lubrication (hydrodynamic), non newtonian flow, Singh (C.), Sinha (P.), *10890*
- lubrication (hydrodynamic), navier stokes equation, reynolds number, variational methods, Verma (R.L.), *10892*
- bearings, damping, flexible bodies, rotors, vibration isolation, Cookson (R.A.), Kosse (S.S.), *11340*

Squire (L.C.), boundary layer (turbulent), flow measurement, injection, interaction, shock waves, Smith (M.J.), *3649*
- delta wings, pressure measurement, shock waves, supersonic flow, *5489*

Squire (P.T.), see Moghisi (M.), *9529*
Sreekanth (A.K.), see Dutt (H.N.V.), *9654*
Sreenivasamurthy (S.), see Ramamurti (V.), *372*

- plates, rotating disks, vibration (forced), Ramamurti (V.), *10205*

Sreenivasan (K.R.), decay, grids, mixing, temperature, turbulence, Tavoularis (S.), (et al.), *654*
- cylindrical bodies, turbulent flow, wakes, *5449*
- measurements, turbulent flow, wakes, *6668*
- decay, diffusion, turbulence (isotropic), *7748*
- shear flow, thermal diffusion, turbulent flow, Tavoularis (S.), *10475*

Sribnyi (I.K.), see Gonchar (A.I.), *4046*
Sridhar (K.), see Rankin (G.W.), *2859*

Sridharan (K.), channels, discharges, flood waves, free boundary, saint venants equation, Mohan Kumar (M.S.), *8506*

Sridharan (S.), see Graves Smith (T.R.), *1248*
- see Walkar (A.C.), *6264*
- postbuckling theory, strips, thin walled structures, Graves Smith (T.R.), *6271*

Srimani (P.K.), see Rudraiah (N.), *12069*
Srinivas (K.), damping, diffusion, oscillations, shock tubes, Gururaja (J.), *7682*

Srinivasa Rao (P.), plates (folded), shells, structural analysis, Sitapati Rao (P.), *6533*

Srinivasan (R.), see Shamsundar (N.), *5804*

Srinivasan (V.), buckling, edge effects, plates (annular), saws, stability theory, vibration (forced), Ramamurti (V.), *6296*
- disks, dynamic analysis, finite element techniques, fourier series, Ramamurti (V.), *8152*

Srinivasulu (P.), beams (prestressed), dynamic behavior, prestressed concrete, Shanna (P.C.), *2524*
Sritharan (T.), creep, deformation, springs, stresses, Jones (J.), *3498*

Srivastava (A.C.), boundary layer, convection (free), curvature, cylindrical bodies, oscillations, spherical bodies, temperature, Bhattacharjee (R.C.), *11370*

Srivastava (B.N.), blunt bodies, compressible flow, finite difference methods, inviscid fluid, shock layer, Werle (M.J.), (et al.), *11428*

Srivastava (K.N.), bonding, half space, interface cracks, sh waves, Palaiya (R.M.), (et al.), *6343*

Srivastava (N.K.), see Tshiani (C.), *1219*
- see Patnaik (S.N.), *1430*

Srivastava (R.C.), coalescence, condensation (dropwise), kinetics, models, Passarelli (R.E.), *8773*
Srivastava (R.P.S.), pseudoplastic fluids, two phase flow, void fraction, Narasimhamurthy (G.S.R.), *5814*

Srivastava (R.S.), approximations (higher order), ducts (curved), elliptical cross-section, noncircular pipes, pipe flow, *611*

Srivatsa (S.K.), gates, karnaugh map, networks, synthesis, Biswas (N.N.), *105*
Srokosz (M.A.), approximations (higher order), finite amplitude, gravity waves (surface), highest wave, velocity profiles, *9618*
Srubshchik (L.S.), shells (axisymmetric), shells (shallow), structural stability, *1253*
- buckling, imperfection sensitivity, postbuckling behavior, shells (shallow), *9284*

Staab (G.H.), finite element techniques, fracture mechanics, multiple cracks, singularities, stress intensity factor, Sun (C.T.), *5313*

stability (numerical), eigenvalue problems, elasticity, finite element techniques, lagrange multiplier, Malkus (D.S.), *76*
- finite element techniques, strain softening, Pietruszczak (S.), Mroz (Z.), *94*
- geometric nonlinearities, stability, stiffness matrix, subsonic flow, Hangai (Y.), *330*
- ablation, cylindrical bodies, Parks (P.B.), *795*
- explosions (underwater), fluid-structure interaction, numerical methods, submerged bodies, Nelshlos (H.), Israeli (M.), (et al.), *1604*
- bubbly flow, two phase flow, virtual mass, Lahey (R.T.) Jr., Cheng (L.Y.), (et al.), *1844*
- finite element methods (hybrid), navier stokes equation, variational methods, Letallec (P.), *2078*
- computing techniques, repetition factor, volterra equations, Mckee (S.), Brunner (H.), *4184*
- boundary value problems, green function, green theorem, helmholtz equation, Mattioli (F.), *4982*
- computing techniques, elliptic equations, singularities, Steinberg (J.), *5003*
- boundary conditions, computing techniques, hyperbolic equations, Sloan (D.M.), *5004*
- runge kutta method, stiffness, stiffness matrix, Ehlsberg (E.), *5016*
- combustion, mathematical models, thermal diffusion, Baushev (V.S.), Vilunov (V.N.), (et al.), *5843*
- conduction (unsteady), extrapolation, parabolic equations, Gourlay (A.R.), Morris (J.L.), *6090*
- compressible flow, finite element techniques, transonic flow, Wellford (L.C.) Jr., Hafez (M.M.), *6629*
- matrix methods, runge kutta method, Strehmel (K.), *7189*
- convergence, mathematical methods, parabolic equations, Crouzeix (M.), *7201*

- compressible flow, entropy, finite difference methods, transonic flow, Engquist (B.), Osher (S.), *7686*
- compressible flow, numerical methods, shock waves, supersonic flow, Ivanov (M.J.), Kraiko (A.N.), *7692*
- convection, diffusion, finite difference methods, parabolic equations, Morton (K.W.), *9126*
- boundary conditions, navier stokes equation, numerical methods, stokes flow, vorticity, Quartapelle (L.), Valz-Gris (F.), *9527*
- compressible flow, three dimensional flow, Bosman (C.), Ahrabian (D.), *9557*
- boundary value problems, finite element techniques, hyperbolic equations, initial value problems, Winther (R.), *11694*

stability curve, buoyancy, couette flow, hydrodynamic stability, Kolesov (V.V.), *1576*
- hydrodynamic stability, nonlinear theory, poiseuille flow, Struminskii (V.V.), Skobelev (B.Yu.), *4642*
- annular flow, hydrodynamic stability, perturbations, Garg (V.K.), *11526*

stability derivatives, airplane performance, transonic flow, wind tunnels, Langhans (R.A.), Flechner (S.G.), *3736*
- dynamic response, rails, wheels, Burton (T.D.), *4147*
- aerodynamic performance, missiles, transonic flow, viscous effects, Ericsson (L.E.), *6727*

stability theory, flexible bodies, rotating bodies, rotating shafts, Samsonov (V.A.), *13*
- lorentz model, lyapunov's functions, mechanical systems, Roshchin (N.V.), *30*
- asymptotic behavior, codes, Beaudoin (Y.), Nerenberg (M.A.H.), *66*
- graph theory, large scale systems, nonlinear systems, Vidyasagar (M.), *123*
- Abdullin (R.Z.), Anapolskii (L.Iu.), *126*
- hydraulic machinery, mathematical models, servomechanisms, Bazhenov (A.I.), *127*
- feedback, sensitivity, Francis (B.A.), *131*
- automatic control, state space techniques, Shubladze (A.M.), *166*
- anisotropic media, strain energy, Parry (G.P.), *331*
- hydrodynamic stability, nonlinear theory, Guiraud (J.P.), *640*
- missiles, rolling motion, Ling (Y.L.), Han (K.W.), *693*
- periodic orbits, planetary satellites, resonance, solar system, Wiesel (W.), *872*
- artificial satellites, spinning bodies, Saakyan (L.S.), *879*
- bifurcation, continuum mechanics, Ericksen (J.L.), *1050*
- continuum theory, liquid crystals (nematic), micropolar media, Straughan (B.), *1056*
- gyroscopic stabilization, perturbation methods, Vozlinskii (V.I.), *1074*
- lyapunov's functions, mechanical systems, resonance, Tkhai (V.N.), *1077*
- differential equations (ordinary), lyapunov's functions, nonlinear mechanics, Martynyuk (A.A.), *1081*
- gravity waves, nonlinear waves, thermal waves, three dimensional formulation, Shrira (V.I.), *1083*
- difference equations, stochastic systems, Ma (F.), Caughey (T.K.), *1097*
- linear systems, lyapunov's functions, time varying systems, Kuznetsov (V.P.), Kukareko (E.P.), *1145*
- bifurcation, elastic bodies, energy methods, Corsanego (A.), Tafanelli (A.), *1244*
- galerkin method, hartmann flow, magneto fluid dynamics, nonlinear theory, two dimensional flow, Lifshits (A.M.), Shtern (V.N.), *1771*
- dynamic stability, hamiltonian equations, Leipholz (H.H.E.), *1987*
- asymptotic behavior, periodic orbits, perturbation methods, random excitation, Chow (P.L.), Chiou (K.L.), *1994*
- autonomous systems, differential equations (ordinary), perturbation methods, Huseyin (K.), *1995*
- differential equations (ordinary), eigenvalue problems, resonance, spinning bodies, Kunitsyn (A.L.), Medvedev (S.V.), *2000*
- bifurcation, integro differential equations, periodic orbits, Landman (K.A.), *2018*
- difference equations, stochastic systems, Ma (F.), Caughey (T.K.), *2018*
- dynamic analysis, hamilton principle, Bailey (C.D.), *2329*
- conical bodies, shock waves, supersonic flow, wedges, Rusanov (V.V.), Sharakshanae (A.A.), *2680*
- boundary layer, hydrodynamic stability, orr sommerfeld equation, roughness, shear flow, Lewkowicz (A.K.), *2681*
- end effects, hydrodynamic stability, rotating cylinders, taylor vortices, Walton (I.C.), *2685*
- asymptotic methods, hydrodynamic stability, orr sommerfeld equation, shear layer, Monkewitz (P.A.), Monkewitz (M.A.), *2686*
- boundary layer, shear layer, turbulence (structure), wakes, Taneda (S.), *2692*
- eigenvalue problems, helical flow, magneto fluid dynamics, modes, Lucas (R.J.), *2877*
- gravity, magneto fluid dynamics, theory, waves, Kochar (G.T.), Jain (R.K.), *2891*
- libration theory, restricted three body problem, Meire (R.), *2916*
- control, space vehicle structures, Hughes (P.C.), Abdel-Rahman (T.M.), *2922*
- currents, mooring, ship motion, wind, Sorheim (H.-R.), *3032*
- lyapunov's functions, periodic orbits, Krechetov (G.S.), *3098*
- difference differential equations, runge kutta method, van der pol equation, Bastin (H.), Delchambre (M.), *3102*
- convergence, initial value problems, survey, Parter (S.V.), *3125*
- lyapunov's functions, nonlinear theory, Cook (P.A.), *3148*
- multivariable systems, nyquist theory, robustness, sensitivity, Lehtomaki (N.A.), *3151*
- autonomous systems, large scale systems, linear systems, time lag, Lewis (R.M.), Anderson (B.D.O.), *3154*
- interconnected systems, large scale systems, linear theory, Moylan (P.J.), *3166*
- linear theory, regulator problem, Tkachenko (V.A.), *3167*
- large scale systems, lyapunov's functions, Saeki (M.), Araki (M.), *3168*
- adaptive systems, sensitivity, variable structure systems, Ulanov (G.M.), *3169*
- lyapunov's functions, power generation, transient effects, transient stability, Ohsawa (Y.), Hayashi (M.), *3170*
- algorithms, multivariable systems, nonlinear systems, stochastic systems, Shibata (H.), Mayeda (H.), (et al.), *3171*
- nonlinear systems, nonlinear theory, Liberzon (M.P.), *3172*
- control, design, deterministic control, feedback, nonlinear methods, nonlinear systems, Leitmann (G.), *3174*
- adaptive systems, lyapunov's functions, model reference systems, optimal control, Yadykin (I.B.), *3206*
- control, feedback, plasma, Sen (A.K.), *3213*
- shells, variational methods, Valid (R.), *3242*
- portal frames, structural stability, Davini (C.), *3319*
- compression, elasticity (three dimensional), Zubov (L.M.), *3320*
- dynamic response, dynamic stability, rotating shafts, vibration (forced), Iwatsubo (T.), Kawai (R.), (et al.), *3372*
- brittle fracture, brittle materials, Volkov (S.D.), Dubrovina (G.I.), *3455*
- bed load, sediment transport, shear stress, Nakagawa (H.), Tsujimoto (T.), *3604*
- channel flow, developing flow, hydrodynamic stability, reynolds number (critical), Gupta (S.C.), Garg (V.K.), *3700*
- hydrodynamic stability, poiseuille flow, three dimensional flow, Itoh (N.), *3701*
- baroclinic waves, hydrodynamic stability, multilayer, Donahue (J.F.), *3704*
- modes, nonlinear theory, plasma (toroidal), tokamak, Biskamp (D.), *3896*
- asymptotic methods, control, feedback, space vehicle structures, Bates (M.J.), *3922*
- differential equations (ordinary), lyapunov's functions, Kosolapov (V.I.), *4156*
- eigenvalues, linear systems, matrix methods, Vorotnikov (V.I.), Prokopev (V.P.), *4159*
- approximation theory, compressible flow, difference equations, iterative methods, Samarskii (A.A.), *4169*
- conduction (unsteady), convergence, crank-nicolson scheme, mesh generation, Jamet (P.), *4181*
- linear systems, lyapunov's functions, Bakhilina (I.M.), Lerner (D.M.), *4216*
- frequency domain techniques, linear systems, multivariable systems, nyquist theory, Postlethwaite (I.), Edmunds (J.M.), (et al.), *4225*
- design, feedback, multivariable systems, sensitivity, Safonov (M.G.), Laub (A.J.), (et al.), *4226*
- feedback, linear systems, multivariable systems, time lag, Gosiewski (A.), Olbrot (A.W.), *4231*
- matrix methods, state space techniques, structural analysis, Babak (S.F.), Ilyasov (B.G.), (et al.), *4244*
- algorithms, linear systems, Kostyleva (N.E.), *4245*
- control, control stability, feedback, linear systems, matrix methods, Meilakhs (A.M.), *4246*
- design, stochastic systems, Riashko (L.B.), *4248*
- algorithms, control stability, design, feedback, linear systems, Tannenbaum (A.), *4249*
- control stability, design, feedback, interconnected systems, large scale systems, lyapunov's functions, Mahalanabis (A.K.), Singh (R.), *4250*
- linear systems, linear theory, robustness, sensitivity, Solnechnyi (E.M.), *4251*
- algorithms, dynamic analysis, hybrid simulation, Allison (J.S.), Johnson (H.M.), *4252*
- boundary value problems, linear systems, optimization, regulator problem, Tsygankova (L.A.), *4253*
- algorithms, filters, Salychev (O.S.), *4278*
- filters, kalman filters, tikhonov-correct problem, Podchukayev (V.A.), *4293*
- adaptive systems, control, synthesis, Russell (G.T.), Malcolm (J.M.), *4322*
- dynamic stability, Thompson (J.M.T.), *4390*
- edge cracks, piping systems, reactor structures, Tada (H.), Paris (P.C.), (et al.), *4501*
- hydrodynamic stability, orr sommerfeld equation, shear flow, Salwen (H.), Grosch (C.E.), *4639*
- channel flow, hydrodynamic stability, pipe flow, Stuart (J.T.), Meyer (R.E.), *4641*
- alfven number, plasma, tokamak, turbulence (mechanisms), Hatakeyama (R.), Inutake (M.), (et al.), *4749*
- artificial satellites, n body problems, three body problem, Walker (I.W.), Emslie (A.G.), (et al.), *4756*
- elasticity (nonlinear), elastodynamics, one dimensional waves, Rivlin (R.S.), *4928*
- hamiltonian equations, resonance, second order analysis, Ivanov (A.P.), Sokolskii (A.G.), *4947*
- differential equations (partial), random media, Ahmadi (G.), *4976*
- eigenvalue problems, fourier transform, Malyutin (I.S.), *4987*
- eulerian approaches, fluid mechanics, lagrangian approach, laminar flow, navier stokes equation, Huffenus (J.), Khaletzky (D.), *4999*

- elastica, finite element techniques, mathematical methods, nonlinear characteristics, stiffness matrix, Fried (I.), *5034*
- dynamic stability, vibration (parametric), Takahashi (K.), *5195*
- tools, vibration (forced), Stephan (G.), *5230*
- circumferential cracks, ductile fracture, j-integral, pipes, Zahoor (A.), Kanninen (M.F.), *5303*
- hydrodynamic stability, rotating cylinders, rotational flow, thin films, Iwasaki (Y.), Hasegawa (E.), *5462*
- convection, electro fluid dynamics, inhomogeneities, nonlinear characteristics, Zhakin (A.I.), *5674*
- optimal control, penalty function, space shuttle, tethered systems, Bainum (P.M.), Kumar (V.K.), *5701*
- continuum mechanics, functional analyis, thermodynamics (nonequilibrium), Elzanowski (M.), *6041*
- bifurcation, hopf bifurcation, periodic orbits, Spirig (F.), *6068*
- damping, galerkin method, mathieu-hill equation, Pedersen (P.), *6069*
- differential equations (ordinary), routh-hurwitz criterion, time delay systems, tools, vibration, Stepan (G.), *6070*
- eigenvalues, matrices, nonsymmetric matrices, optimization, variational methods, Kalaba (R.), Spingarn (K.), (et al.), *6078*
- control, discontinuities, lyapunov's functions, nonlinear systems, nonlinear theory, Stalford (H.), *6131*
- plates, shells, stress analysis, vibration, Galimov (K.Z.) eds., Sachenkov (A.V.), *6215, book*
- layered media, plates (circular), plates (sandwich), Grigolyuk (E.I.), Magerramova (L.A.), *6251*
- collapse, panels, plates (rectangular), Satyamurthy (K.), Khot (N.S.), (et al.), *6252*
- lyapunov's functions, shells (cylindrical), Leipholz (H.H.E.), *6258*
- beams, friction, vibration (parametric), Zajaczkowski (J.), *6279*
- dynamic stability, joints, vibration (torsional), Kotera (T.), *6280*
- buckling, edge effects, plates (annular), saws, vibration (forced), Srinivasan (V.), Ramamurti (V.), *6296*
- automobiles, dynamic response, trailers, Mikulcik (E.C.), *6312*
- biaxial loading, crack propagation, stress intensity factor, Alpa (G.), Bozzo (E.), (et al.), *6454*
- boundary layer, navier stokes equation, turbulent flow, viscous flow, Solopenko (V.M.), *6615*
- hydrodynamic stability, Drazin (P.G.), Reid (W.H.), *6674*
- astrophysics, convection, magneto plasma dynamics, models, Sankhla (V.D.), Bhatia (P.K.), *6867*
- libration theory, nonlinear theory, Mckenzie (R.), Szebehely (V.), *6879*
- attitude control, flexible appendages, space vehicle structures, spinning bodies, Lips (K.W.), Modi (V.J.), *6884*
- contact problems, thermoelasticity, Barber (J.R.), *6949*
- bifurcation, diffusion, dynamics, reactors, Pao (C.V.), *7173*
- finite difference methods, marching procedures, mesh generation, navier stokes equation, parabolic equations, Rubin (S.G.), *7191*
- discontinuities, state space techniques, Kovalskii (I.P.), Kudin (G.I.), *7238*
- elastic bodies, lyapunov's functions, rods, Chiorescu (G.), *7354*
- plates, shells, Khoroshun (L.P.), *7357*
- elastic foundations, pendulums, vibration (nonlinear), Breitenberger (E.), Mueller (R.D.), *7370*
- bifurcation, burgers equation, nonlinear analysis, Olmstead (W.E.), Davis (S.H.), *7666*
- bifurcation, circumnavigation, differential equations (ordinary), resonance, Goltser (I.M.), *7917*
- lyapunov's functions, matrix inversion, systems, Ikeda (M.), Siljak (D.D.), *8102*
- asymptotic behavior, differential equations (ordinary), large scale systems, singular perturbations, Grujic (L.T.), *8105*
- multivariable systems, nyquist theory, time delay systems, Mossaheb (S.), *8159*
- feedback, limit cycles, on off systems, oscillations, relay systems, Balasubramanian (R.), *8161*
- bars, buckling, vibration, Panovko (Ya.G.), Gubanova (I.I.), *8257, book*
- asymptotic behavior, shells (shallow), shells (spherical), Larchenko (V.V.), *8268*
- bifurcation, nonlinear analysis, vibration (self excited), Berezovskaia (F.S.), Khibnik (A.I.), *8282*
- dynamic response, harmonic balance, Takahashi (K.), *8288*
- dynamic response, vibration (parametric), Noah (S.T.), Hopkins (G.R.), *8289*
- jacobian constant, planetary theory, restricted three body problem, solar system, Szebehely (V.), Mckenzie (R.), *8837*
- galactic system, kepler orbits, planetary theory, Szebehely (V.), *8944*
- damping, optimal control, space frames, space structures, space vehicle structures, Joshi (S.M.), Groom (N.J.), *8850*
- fluidized beds, vibration (flow induced), Buevich (Yu.A.), Ryzhkov (A.F.), (et al.), *8936*
- convection (forced), mixed flow, porous media, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *8942*
- dilute solutions, linear systems, lyapunov's functions, polymers, turbulent flow, Phan-Thien (N.), Atkinson (J.D.), *9084*
- nonlinear waves, self excitation, van der pol equations, wave equations, Lardner (R.W.), Nicklason (G.), *9103*
- bifurcation, perturbation theory, Rosenblat (S.), Cohen (D.S.), *9110*
- approximations, asymptotic behavior, Mirkina (A.S.), Khodzhaev (K.Sh.), *9112*
- difference equations, lyapunov's functions, stochastics, Bitmead (R.R.), Anderson (B.D.O.), *9119*
- control, feedback, linear systems, spectral analysis, transfer functions, Schober (J.), *9166*
- multivariable systems, nonlinear systems, Herz (B.), *9167*
- distributed parameters, time delay systems, time lag, Zhang (D.-C.), *9168*
- feedback, guidance, navigation, time varying systems, Dornscheidt (F.), Louer (A.), *9169*
- distributed parameters, time varying systems, Gil (M.I.), *9172*
- frequency domain techniques, pole placement, stability margin, state space techniques, Noisser (R.), *9177*
- boundary layer, suction, swept wings, transition flow, Mack (L.M.), *9570*
- reaction kinetics, travelling waves, Bell (J.), *9634*
- liquid metals, magneto fluid dynamics, theory, thin films, Tsebers (A.O.), Maiorov (M.M.), *9792*
- magneto fluid dynamics, relaxation, stress analysis, tensor methods, Simkhovich (S.L.), *9795*
- electro fluid dynamics, elliptical bodies, particles, suspensions, Tsebers (A.O.), *9796*
- acoustic waves, nonlinear theory, plasma, wave energy, Khiet (T.), Abdel-Gawad (H.), *9803*
- bifurcation, periodic orbits, three body problem, Markellos (V.V.), *9809*
- periodic orbits, restricted three body problem, Kammeyer (P.C.), *9813*
- artificial satellites, geosynchronous orbits, Breakwell (J.V.), *9817*
- differential equations (ordinary), nonlinear systems, Vorotnikov (V.I.), *10016*
- diffusion, mathematical methods, quasisolutions, reaction kinetics, Lakshmikantham (V.), Vatsala (A.S.), *10028*
- differential equations (ordinary), differential equations (stiff), integration, Miheicic (M.), Wingerath (K.), *10052*
- conduction (unsteady), finite element techniques, random loading, Tasaka (S.), *10073*
- dynamic analysis, vibration (nonlinear), Trujillo (D.M.), *10188*
- fracture mechanics, tensor methods, triaxial loading, Volkov (S.D.), Dubrovina (G.I.), *10292*
- bending, cracks, jintegral, material testing, pipes, Wilkowski (G.M.), Zahoor (A.), (et al.), *10301*
- convection, hydrodynamic stability, Banerjee (M.B.), Katoch (D.C.), (et al.), *10467*
- annular flow, couette flow, magneto fluid dynamics, rotating cylinders, Antimirov (M.Ya.), Kolyshkin (A.A.), *10746*
- collision models, mathematical methods, n body problems, Simo (C.), Llibre (J.), *10770*
- approximations, restricted three body problem, Markellos (V.V.), Szebehely (V.), *10773*
- damping, spinning bodies, Buratti (A.), Fusco (G.), *10777*
- ill posed problems, iterative methods, Ramm (A.G.), *10936*
- automatic control, discrete systems, feedback, multipass processes, Boland (F.M.), Owens (D.H.), *11045*
- continuous systems, discrete systems, routh-hurwitz method, time delay systems, Thowsen (A.), *11055*
- dynamic analysis, linear systems, Johnson (C.D.), *11056*
- linear systems, linear theory, noise (random), stochastic systems, Prussing (J.E.), *11057*
- control, design, feedback, large scale systems, Anderson (B.D.O.), Moore (J.B.), *11089*
- adaptive systems, model reference systems, Landau (I.D.), *11094*
- adaptive systems, control, model reference systems, Johnstone (R.M.), Shah (S.L.), (et al.), *11096*
- pressurized components, shells (cylindrical), shells (nonlinear), Kabanov (V.V.), Zheleznov (L.P.), *11112*
- bearings (liquid lubricated), dynamic analysis, experimental mechanics, rotating bodies, Iwatsubo (T.), Kawai (R.), (et al.), *11144*
- channel flow, hydrodynamic stability, shear flow, turbulent flow, velocity profiles, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- channel flow, magneto fluid dynamics, mathematical models, pumps, Poklonskii (E.V.), Elkin (A.I.), *11807*
- channel flow, elastoplasticity, magneto fluid dynamics, tensor methods, viscous flow, Simkhovich (S.L.), Ionochkina (L.I.), (et al.), *11809*
- drops, gravity, magneto fluid dynamics, theory, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *11821*
- drops, equilibrium, magneto fluid dynamics, shape, Barkov (Yu.D.), Berkovskii (B.M.), *11822*
- bubble dynamics, experimental results, interfaces, magneto fluid dynamics, Tsebers (A.O.), Maiorov (M.M.), *11823*
- containment, equilibrium, plasma (toroidal), pressure, Kovrizhnykh (L.M.), Shchepetov (S.V.), *11838*
- drift waves, magnetic field, nonhomogeneous media, plasma, Shivamoggi (B.K.), *11839*

stabilization, gait, locomotion, walking apparatus, Bordyug (B.A.), *539*

- flame holders, flames, laser doppler velocimeters, Fujii (S.), Eguchi (K.), *837*
- bubble dynamics, cavitation, permeability, Yount (D.E.), *943*
- control, damping, gyrodynamics, gyroscopic stabilization, space vehicle structures, Joshi (S.M.), Groom (N.J.), *7415*
- oscillating bodies, parachutes, payloads, separated flow, vortex flow, Doherr (K.-F.), *7798*

- lyapunov's functions, rigid bodies, spinning bodies, Kern (G.), *8097*
- design, dynamic loads, landing gears, longitudinal stability, Allen (R.R.), O'Massey (R.C.), *8462*
- dispersion relation, models, oscillations, rayleigh taylor instability, Chakraborty (B.B.), *8825*
- control, space vehicles, Yuan (J.S.-C.), *8848*
- film flow, liquid metals, magneto fluid dynamics, transport phenomena, Bashtovoi (V.G.), Denisenko (T.D.), (et al.), *9785*
- jets, liquid metals, magneto fluid dynamics, theory, Martynov (S.I.), Taktarov (N.G.), *9793*
- burners, flames, Matkowsky (B.J.), Olagunju (D.O.), *10701*
- experimental methods, layered media, magneto fluid dynamics, rotating fluids, Klyukin (A.A.), Kolesnikov (Yu.B.), (et al.), *10742*
- containment, experimental methods, fusio, plasma (toroidal), Schumacher (R.W.), Fukao (M.), (et al.), *10760*

Stabrowski (M.M.), algorithms, computer programming, finite element techniques, linear equations, matrix methods, *5017*

Stacey (G.P.), see Mckenzie (C.K.), *11181*

Stadnik (M.M.), beams (nonhomogeneous), fredholm equations, inclusions, tension, Silovanyuk (V.P.), *6163*

- see Andreikiv (A.E.), *6164*
- cracks, fredholm equations, stress concentration, Gorbachevskii (I.Ya.), *8187*

Staff Of Chemical Engineering, see Cavaseno (V.) eds., *1712, book*

Stafford (L.G.), aerodynamic interference, automobiles, blockage, flexible walls, models, wind tunnels, *5513*

Stages (A.H.), fibers, reinforced concrete, strength, Minor (J.), *2516*

stagnation point, compressible flow, conical flow, supersonic flow, Bakker (P.G.), Bannink (W.J.), (et al.), *584*

- heat transfer, non newtonian flow, power law fluids, transient effects, Gorla (R.S.R.), *759*
- boundary layer, compressible flow, similarity methods, three dimensional flow, unsteady flow, Kumari (M.), Nath (G.), *1545*
- recirculation, separated flow, two dimensional flow, O'Brien (V.), *1547*
- airfoil characteristics, incompressible flow, pressure distribution, trailing edge, Baskaran (V.), Holla (V.S.), *1616*
- boundary layer (thermal), drag, heat transfer, polar fluids, Subhadra Ramachandran (P.), Mathur (M.N.), *1685*
- boundary layer, mathematical models, micropolar media, Unsworth (K.), Chiam (T.C.), *2806*
- navier stokes equation, stream function, unsteady flow, vorticity, De Cunha (D.M.), Noe (V.W.), *3625*
- polar fluids, rheology, Guram (G.S.), Smith (A.C.), *4136*
- finite difference methods, impingement, inviscid fluid, jets, plates, Rubel (A.), *5394*
- boundary layer, boundary value problems, difference equations, nonlinear analysis, Balu (R.), *5436*
- collision models, particle dynamics, particle fluid flow, walls, Matsufuji (H.), Hasegawa (E.), *6047*
- heat transfer, laminar flow, unsteady flow, Sergeev (V.L.), Strogii (A.S.), *6762*
- convection (forced), cooling, cylindrical bodies, film boiling, spherical bodies, Epstein (M.), Hauser (G.M.), *8687*
- boundary layer (thermal), bounded media, convection, hydrodynamic stability, porous media, vortex flow, Hsu (C.T.), Cheng (P.), *8711*
- boundary layer, radiating flow, scattering, Kim (K.H.), Ozisik (M.N.), *8744*
- dissociation, heat transfer, real gas effects, thermal instability, Agranat (V.M.), Bertsun (V.N.), (et al.), *9704*
- fluid injection, hypersonic flow, shock layer, similarity methods, Ptostins (P.), Rubin (S.G.), *10495*
- heat transfer, nonequilibrium flow, real gas effects, Mori (Y.), Himeno (N.), (et al.), *10805*
- ablation, boundary layer, heat transfer, injection, mass transfer, radiant interchange, radiating flow, Rolin (M.N.), Soloukhin (R.I.), (et al.), *10808*
- atmosphere, blunt bodies, froude number, stratified flow, Kitabayashi (K.), *11386*

Stagni (L.), elasticity (linear), half space, inclusions, interference fits, *2211*

Stahl (P.), see Raj (K.), *1944*

Stahlberg (U.), see Melander (A.), *3465*

- materials processing, overlap formation, rolling, slabs, Soderberg (J-O.), (et al.), *5277*
- conical bodies, forging, work hardening, *7455*
- casting, deformation (plastic), forging, random media, void closure, Kolfe (H.), (et al.), *7462*
- see Kolfe (H.), *8359*

Staicu (S.), delta wings, rotating bodies, separated flow, supersonic flow, *2734*

Staikos (V.A.), see Philos (C.G.), *1080*

- see Philos (C.G.), *3100*

Stalford (H.), control, discontinuities, lyapunov's functions, nonlinear systems, nonlinear theory, stability theory, *6131*

Stalford (H.L.), airplane performance, derivatives, dynamic analysis, dynamic testing, modeling, *10510*

stalling, diffusers, numerical methods, plane flow, Bardina (J.), Lyrio (A.), (et al.), *1567*

- bubble dynamics, laminar flow, leading edge, separated flow, Van Den Berg (B.), *2635*
- airplane performance, spin recovery, Hreha (M.A.), Lutze (F.H.), *2744*
- aerodynamic loads, leading edge, lift, vortex lines, wings, Anderson (J.D.) Jr., Corda (S.), (et al.), *3737*
- axial compressors, axisymmetric flow, mathematical models, rotors, Al-Daini (A.J.), Railly (J.W.), *3747*
- axial compressors, rotors, three dimensional flow, waves, Al-Daini (A.J.), Railly (J.W.), *5500*
- airfoils, incompressible flow, turbulent flow, two dimensional flow, viscous flow, Hegna (H.A.), *7788*
- axial compressors, blades, pressure change, Koch (C.C.), *7806*
- centrifugal compressors, surge, turbomachinery, Wachter (J.), Kohn (E.), (et al.), *8658*
- aerodynamic performance, airplanes, maneuverability, optimization, Well (K.H.), Faber (B.), (et al.), *9660*
- airplane performance, leading edge, transonic flow, visualization, wind tunnels, wings, Pavelka (J.), Tatum (K.E.), *10499*

Stallings (R.L.) Jr., aerodynamic performance, reynolds number, supersonic flow, wing body combinations, Lamb (M.), (et al.), *1628*

Stallone (M.J.), see Jutras (R.R.), *10764*

Stallybrass (M.P.), cracks, elasticity (linear), half space, punch problems, *3232*

Stalnaker (J.F.), see Spradley (L.W.), *5407*

- see Spradley (L.W.), *7684*

Stalnaker (R.L.), see Viano (D.C.), *9050*

stamping, elasticity (linear), shells (spherical), stress intensity factor, torsion, Aleksandrov (V.M.), Karpenko (V.A.), *244*

- contact problems, half space, Aleksandrov (V.M.), Filippova (L.M.), *1183*

Stan (A.D.), laminar flow, particle fluid flow, pressure gradient, turbulent flow, Oana (S.), *7716*

Stanbery (S.R.), see Hoberock (L.L.), *2706*

Stanculescu (G.), see Petcu (V.), *4534*

Standaert (D.), lunar theory, perturbation theory, planetary satellites, planetary theory, solar system, *6874*

standing waves, crystals, differential equations (partial), sine-gordon equation, Seeger (A.), Wesolowski (Z.), *10935*

Stanek (P.), see Pokluda (Ya.), *8197*

Staniszewski (B.), see Banaszek (J.), *9151*

Stanley (P.), cylindrical bodies, holes, photoelasticity (three dimensional), stress concentration, Day (B.V.), *2468*

- photoelasticity, plates (circular), thermal stresses, transient, Edward (D.C.), *2470*
- buckling (experimental), experimental mechanics, pressure vessels, shells (toroidal), thin walled structures, Campbell (T.D.), *7622*
- buckling, deformation, pressure vessels, strain, thin walled structures, Campbell (T.D.), *8468*

Stanley-Wood (N.G.), concentration, optical techniques, particle size, velocity measurement, Llewellyn (G.J.), (et al.), *12058*

Stansby (P.K.), cylindrical bodies, shear layer, vortex shedding, *2676*

- cylindrical bodies, inertia, oscillatory flow, virtual mass, *5482*

Stanway (R.), control, flexible bodies, rotating shafts, vibration isolation, Burrows (C.R.), *8318*

Stanzl (S.), see Tschegg (E.), *7473*

Stapleford (R.L.), aerodynamic loads, gust loads, nonlinear analysis, tails, Dimarco (R.J.), *3912*

Stapleford (W.R.), automobiles, design (optimum), drag, fuel economy, geometrical properties, *10606*

Starikov (A.F.), distributed parameters, regulator problem, resonance, *1146*

Stark (U.), aerodynamic performance, axial compressors, cascades, geometrical properties, three dimensional flow, Hoheisel (H.), *11741*

Starke (J.), aerodynamic coefficients, axial compressors, cascades, three dimensional flow, velocity profiles, *11739*

Starobin (I.M.), blood flow, reynolds number (small), spherical bodies, trajectories, *571*

Starostenko (V.I.), see Oganesyan (S.M.), *5881*

Stassinakis (C.A.), see Theocaris (P.S.), *474*

- see Theocaris (P.S.), *5292*

state space techniques, digital simulation, dynamic behavior, magnetically suspended structures, railroads, vibration, Sommerer (J.), *73*

- laplace transform, matrix methods, pole zero structure, Verghese (G.), *101*
- computer aided manufacturing, nonlinear systems, Vasileva (L.G.), Lagunov (V.N.), *102*
- distributed parameters, dynamic analysis, matrix methods, Prepelita (V.), *110*
- design, feedback, state feedback, Preuss (H.-P.), *125*
- jump conditions, optimal control, Utkin (V.I.), Yang (K.D.), *133*
- algorithms, estimation, identification, Ginsberg (K.S.), *140*
- automatic control, stability theory, Shubladze (A.M.), *166*
- digital control, frequency domain techniques, multivariable systems, process control, Seborg (D.E.), Fisher (D.G.), *205*
- dynamic analysis, mathematical models, Mcclamroch (N.H.), *1140, book*
- flight control, landing devices, vtol, Guy (C.R.), *1627*
- estimation, least squares, statistical control, stochastic processes, Kailath (T.), *2025*
- design, feedback, regulator problem, sensitivity, Howze (J.W.), Cavin (R.K.) III, *2083*

- layered media, thermoelasticity, Bahar (L.Y.), Hetnarski (R.B.), *2979*
- controllability, faithful property, linear systems, observability, Boretskii (I.V.), Pavlov (V.G.), *3149*
- algorithms, continued fraction method, linear systems, model reduction, Khatwani (K.J.), Tiwari (R.K.), (et al.), *3155*
- mathematical models, time varying systems, Milov (L.T.), Solodovnikov (V.V.), *3157*
- algorithms, digital simulation, linear systems, matrix methods, numerical methods, simulation, transition matrices, Litz (L.), *4206*
- decoupling, feedback, Descusse (J.), *4232*
- controllability, optimization, Vincent (T.L.), Skowronski (J.M.), *4241*
- matrix methods, stability theory, structural analysis, Babak (S.F.), Ilyasov (B.G.), (et al.), *4244*
- control, feedback, matrix methods, Potter (J.M.), Anderson (B.D.O.), (et al.), *6128*
- observers, synthesis, Schumacher (J.M.), *6133*
- spectral density, stochastic systems, Putyatin (V.V.), *6134*
- adaptive systems, algorithms, discrete systems, linear systems, multivariable systems, Goodwin (G.C.), Ramadge (P.J.), (et al.), *7233*
- discontinuities, stability theory, Kovalskii (I.P.), Kudin (G.I.), *7238*
- linear systems, linear theory, topological techniques, Petrov (B.N.), Babak (S.F.), (et al.), *8160*
- control, feedback, multivariable systems, Preuss (H.-P.), *9159*
- design, feedback, frequency domain techniques, multivariable systems, process control, Bar (W.), *9163*
- frequency domain techniques, pole placement, stability margin, stability theory, Noisser (R.), *9177*
- control, design, frequency domain techniques, Hippe (P.), Wurmthaler (C.), *9181*
- control, design, position control, servomechanisms, Wierschem (T.), *9190*
- control, design, hydraulic machinery, position control, Wierschem (T.), *9191*
- computing techniques, kinematics, mathematical methods, optimization, Sohoni (V.), Haug (E.J.), *10006*
- linear systems, lyapunov's functions, matrix methods, Bialas (S.), *10075*
- linear systems, linear theory, matrix methods, multivariable systems, Field (A.D.), Owens (D.H.), *10079*
- automatic control, design, Hippe (P.), Wurmthaler (C.), *10089*
- design, feedback, Willems (J.C.), *11040*

Stathopoulos (T.), probability, wind loads, wind pressure, *11326*

statically indeterminate structures, frames, modeling, reinforced concrete, Ford (J.S.), Chang (D.C.), (et al.), *509*
- kinematics, mechanisms, synthesis, Kozhevnikov (S.N.), *1466, book*
- cyclic loading, elastoplasticity, nonlinear materials, structural analysis, Erofeev (V.I.), Kondeikin (P.I.), *2242*
- analytical methods, mathematical models, reliability analysis, Karavai (M.F.), Sogomonyan (E.S.), *3177*
- dynamic loads, railroad cars, substructuring, trains (railroad), vehicles, Belogh (V.), *6499*
- design (optimum), plasticity, Mazzarella (C.), Panzeca (T.), *6514*

statics, framed structures, variational methods, Goldshtein (Yu.B.), Solomeshch (M.A.), *1422, book*
- dynamic analysis, offshore structures, wave loads, Sarpkaya (T.), Isaacson (M.), *2543, book*
- beams (curved), Panayotounakos (D.E.), Theocaris (P.S.), *5153*
- biomechanics, center of volume, human body, Gagnon (M.), Montpetit (R.), *7128*
- cement stabilized soils, compression, concrete, dynamic testing, elastic constants, soils, tension, Kolias (S.), Williams (R.I.T.), *9427*

statistical continuum mechanics, navier stokes equation, rheology, turbulence (structure), viscous flow, Enz (C.P.), *4126*
- creep, viscoelasticity (dynamic), Day (W.A.), *6173*
- approximation theory, nonhomogeneous media, Babkin (G.I.), Klyatskin (V.I.), (et al.), *6345*
- elastic waves, nonhomogeneous media, Babkin (G.I.), Klyatskin (V.I.), (et al.), *6346*
- polar fluids, rheology, Lomberdero (M.), Lago (S.), *6681*
- polar fluids, rheology, thermodynamic properties, Lago (S.), Lomberdero (M.), *6682*
- deformation, granular media, micromechanics, spherical bodies, Vaisman (A.M.), Goldshtik (M.A.), *7270*
- dielectrics, electro fluid dynamics, Gur (Y.), Ravina (I.), (et al.), *7643*
- relaxing media, viscoelastic fluids, Skvortsov (G.E.), *8489*

statistical control, estimation, least squares, state space techniques, stochastic processes, Kailath (T.), *2025*

statistical design, derailment, dynamic analysis, railroads, wheels, Cherchas (D.B.), *1062*
- airplane structures, fatigue, life expectancy, Jost (G.S.), Costolloe (S.P.), *1408*
- design (optimum), experimental design, linear programming, Sedunov (E.V.), Trofimov (A.I.), (et al.), *4290*
- excavation, soils, Matsuo (M.), Kawamura (K.), *6394*
- probability theory, statistical theory, Bereanu (B.) eds., Grigorescu (S.), (et al.), *7226, book*
- beams, buckling (experimental), lateral stability, welded joints, Fukumoto (Y.), Itoh (Y.), *9285*
- crossflow, tube bundles, vibration (flow induced), viscous flow, Katinas (V.I.), Lukoseviclus (K.K.), (et al.), *10767*
- dynamic response, vibration (forced), Tanaka (K.), Onishi (H.), (et al.), *11151*

statistical mechanics, composite materials, fracture mechanics, kinetic theory, three dimensional formulation, Tamuzh (V.P.), *1369*
- boltzmann equation, neutrons, nuclear fusion, scattering, transport, Inonu (E.), Tezcan (C.), *2778*
- brownian motion, equilibrium, fluids, Tokuyama (M.), Oppenheim (I.), *2942*
- thermodynamic processes, thermodynamics (statistical), Zaripov (R.G.), *3769*
- hydrodynamics, multicomponent flow, thermodynamics (nonequilibrium), transport phenomena, Bashkirov (A.G.), *6747*
- thermodynamic properties, thermodynamics (nonequilibrium), Zurek (W.H.), Schieve (W.C.), *6748*
- couette flow, thermodynamics (nonequilibrium), viscosity, Naitoh (T.), Ono (S.), *6749*
- thermodynamic functions, thermodynamic processes, Kalmykov (G.I.), *6751*
- chemical thermodynamics, dilute solutions, thermodynamics (statistical), Dudowicz (J.), *6756*
- chemical kinetics, combustors, flames (turbulent), velocity profiles, Moreau (P.), *6838*
- boltzmann equation, diffusion, evolution equations, kinetic theory, Brunnachweiler (A.), *7164*
- acoustics (architectural), energy methods, Maidanik (G.), *10792*

statistical theory, dynamic analysis, nonlinear systems, Potseluyev (A.V.), Topilskiy (S.V.), *122*
- mathematical models, navier stokes equation, turbulence, Foias (C.), Temam (R.), *641*
- spectra, stratified flow, turbulence, Sazontov (A.G.), *651*
- identification, order statistics, probability theory, Efimov (A.N.), Kutsev (V.M.), *1098*
- modeling, nonhomogeneous soils, Hewitt (J.S.), Dexter (A.R.), *1323*
- diffusion, particle dynamics, turbulence, turbulence model, Lamb (R.G.), *1586*
- estimation, interval estimation, reliability, Pavlov (I.V.), *2020*
- probability theory, reliability analysis, Roizman (V.P.), Vaingortin (L.D.), *2021*
- error, inverse problems, linear systems, Tarantola (A.), *2043*
- computer programming, data analysis, dynamic response, fortran program, Maine (R.E.), *2055*
- algorithms, randomly moving object, search, tracking, Mangel (M.), *2177*
- autocorrelation function, diffraction, fourier transform, lasers, yarn, Tobe (E.), *2256*
- analytical methods, magneto fluid dynamics, Taktarov (N.G.), *3389*
- closure, reynolds stresses, turbulence, Yoshizawa (A.), *4644*
- absorption, damping, noise abatement, Maidanik (G.), *4807*
- probability theory, statistical design, Bereanu (B.) eds., Grigorescu (S.), (et al.), *7226, book*
- mechanical properties, prediction, soils, Tabbe (M.M.), Yong (R.N.), *7441*
- joints, rocks, stereological interpretation, Warburton (P.M.), *7451*
- joints, rocks, stereological interpretation, Warburton (P.M.), *7452*
- failure, inertial guidance, isolation, Daly (K.C.), Gai (E.), (et al.), *7827*
- computing techniques, stochastics, Cacko (J.), *8123*
- closure, dispersion, turbulence, Larcheveque (M.), Lesieur (M.), *8614*
- granular media, packed beds, Shahinpoor (M.), *8918*
- crack growth, probability, Schultrich (B.), Posselt (M.), *10306*
- data analysis, estimation, fatigue, strength, Nishijima (S.), *10323*
- existence theorems, plasma, rarefied gases, vlasov equation, Kherchenko (A.P.), *11835*

Staub (F.W.), transport, two phase flow, unsteady flow, *9875*

Stavitsky (D.), laminar flow, poiseuille flow, unsteady flow, Macagno (E.), *2642*
- biharmonic equation, boundary conditions, matrix inversion, mesh generation, stiffness matrix, Macagno (E.), (et al.), *3131*
- biomechanics, finite element techniques, fluid mechanics, peristaltic flow, Macagno (E.O.), (et al.), *7219*

Stavsky (Y.), see Greenberg (J.B.), *3374*
- see Durban (D.), *4395*

steam, steam tables, thermodynamic properties, Burnside (B.M.), *718*
- thermal properties, thermodynamic properties, transport properties, water, Straub (J.) eds., Scheffler (K.), *723, book*
- acoustic waves, sound speed, Droben (N.V.), Zaytsev (V.P.), (et al.), *899*
- bubbly flow, impulse, water hammer, Gruel (R.L.), Huber (P.W.), (et al.), *1596*
- polytropic processes, thermodynamic processes, two phase flow, Bayer (Z.), *1651*
- boiling, pressure vessels, two phase flow, Pitts (J.H.), *1856*
- gas turbines, injection, power generation, Brown (D.H.), Cohn (A.), *2749*
- equations of state, phase changes, steam turbines, Hedbeck (A.J.W.), *2776*
- boilers, design, nonuniform flow, superheater, Chebulaev (V.V.), Lokshin (V.A.), *3981*
- critical region, transport properties, viscosity, Basu (R.S.), Sengers (J.V.), *5529*
- filtration, Ganzha (V.L.), Zhuravskii (G.I.), *5817*
- boundary integral methods, condensation, dynamic response, pressure vessels, reactor structures, shells (spherical), Krieg (R.), Goller (B.), (et al.), *6549*
- choked flow, nonequilibrium flow, Konorski (A.), Nahlik (S.), *6984*
- drops, experimental methods, particle size, Georgiev (K.G.), Savostyanov (V.A.), (et al.), *7000*

- generators, mathematical models, nuclear power, steam power plants, transient effects, Van Tuyle (G.J.), Lee (J.C.), *8759*
- combustion, mathematical models, steam zone, Voll (L.), Smohai (F.), (et al.), *9766*
- condensation (dropwise), condensation (filmwise), erosion, steam turbines, Hammitt (F.G.), Krzeczkowski (S.), (et al.), *9780*
- condensation, nucleation, two dimensional flow, Bakhtar (F.), Mohammadi Tochai (M.T.), *9781*
- condensation, condensation (dropwise), gold, surface effect, Woodruff (D.W.), Westwater (J.W.), *10576*
- ionic flow, magneto fluid dynamics, power generation, unsteady flow, Pozwolski (A.E.), *10751*
- discharges, modeling, valves, Sonin (A.A.), *11366*

steam engines, energy conversion, heat engines, organic fluid, Arques (P.), Gublin (F.), (et al.), *3887*

steam gas power plants, circulation, convection, thermal instability, thermal waves, tubes, Unal (H.C.), *9705*

steam power plants, boilers, cogeneration, design (optimum), energy conversion, gas turbines, Clifford (D.), Coates (R.), (et al.), *1766*

- isotopes, nuclear power, space vehicles, Raab (B.), *6854*
- generators, mathematical models, nuclear power, steam, transient effects, Van Tuyle (G.J.), Lee (J.C.), *8759*

steam tables, steam, thermodynamic properties, Burnside (B.M.), *718*

steam turbines, condensation (dropwise), electric effects, wet steam, Ryley (D.J.), Loftus (F.P.), *2752*

- equations of state, phase changes, steam, Hedback (A.J.W.), *2776*
- blades, measurements (dynamic), vibration, Donato (V.), Bannister (R.L.), (et al.), *3370*
- annular flow, geometrical properties, Zaryankin (A.E.), *3880*
- bending, blades, eigenvalues, frequencies, vibration (torsional), Belohradsky (H.J.), *4430*
- friction (sliding), lubrication (boundary), lubrication (hydrodynamic), roughness, Rohde (S.M.) eds., Cheng (H.S.), *4895, book*
- design, design criteria, heating, regenerators, Sergeeva (V.B.), Ivashchenko (S.S.), (et al.), *6816*
- adhesives, blades, bonding, dynamic loads, strain gages, Petrie (E.M.), *8427*
- condensation (dropwise), condensation (filmwise), erosion, steam, Hammitt (F.G.), Krzeczkowski (S.), (et al.), *9780*
- blades, heat transfer, Breitkopf (G.E.), *9782*
- bending (viscoplastic), blades, dynamic response, dynamic testing, matrix methods, Nahlik (A.), Pastia (A.), *10209*
- axial flow, design, leaks, seals, stresses, Abramov (Yu.I.), Smirnov (S.A.), *11746*

Stecco (S.S.), beams (flexural), dynamic response, pumps, vibration (forced), Janigro (A.), *2358*

Stecher (F.P.), blast effects, boreholes, brittle materials, crack propagation, numerical analysis, Fourney (W.L.), *424*

Stecki (J.S.), bond graphs, mechanisms, torque, transmissions, *2560*

steel, anisotropy, elastic constants, rolling, Kitagawa (H.), *256*

- crack growth, fatigue, fractographic tests, Kunio (T.), Shimizu (M.), (et al.), *442*
- aluminum alloys, crack propagation, high cycle fatigue, Hoffelner (W.), *447*
- beams, fatigue, textiles, welded structures, Bardell (G.R.), Kulak (G.L.), *495*
- fatigue, pressurized pipes, Hale (D.A.), Wilson (S.A.), (et al.), *535*
- machinability, metallurgy, particles, surface effect, Kalay (N.), Matijevic (E.), *552*
- plane strain, plastic flow, plasticity, shear, shear bands, Anand (L.), Spitzig (W.A.), *1196*
- crack growth, experimental results, fatigue, Glinka (G.), Molski (K.), *1354*
- crack growth, ductile fracture, j-integral, path integrals, Zahoor (A.), Abou-Sayed (I.S.), *1375*
- fracture toughness, surface effect, Ivanova (V.S.), Terentyev (V.F.), (et al.), *1416*
- design (minimum weight), shape factors, trusses, Spillers (W.R.), Kountouris (G.E.), *1429*
- fractographic tests, high temperature, low cycle fatigue, notch tests, triaxial loading, Marloff (R.H.), Johnson (R.L.), *2411*
- fatigue, materials properties, offshore structures, toughness, Wilson (A.D.), *2413*
- crack growth, environmental tests, fatigue, pressure vessels, Ritchie (R.O.), Suresh (S.), (et al.), *2414*
- cyclic loading, fracture mechanics, fracture toughness, Troshchenko (V.T.), Prokopenko (A.V.), (et al.), *2421*
- crack growth, high temperature, material testing, Saxena (A.), *2427*
- failure, notch tests, plastic behavior, Margetson (J.), *2444*
- dynamic behavior, shells (outer), strain rate, thermal effects, torsion, Eleiche (A.-S.M.), *2487*
- disks, gas turbines, high speed, strength, Shikida (M.), Kanayama (Y.), (et al.), *2501*
- friction (rolling), friction (sliding), lubrication (boundary), wear, Aksenov (A.F.), Belyanskii (V.P.), (et al.), *3042*
- beams (composite), concrete, slabs, Pyle (J.C.), *3315*
- extrusion, material testing, simulation, Soos (E.), Teodosiu (C.), (et al.), *3423*
- alloys, crack arrest, crack growth, microcracks, Varga (T.), Allertshammer (W.), (et al.), *3432*
- low cycle fatigue, notch sensitivity, Maruyama (T.), Maruyama (S.), (et al.), *3446*
- crack growth, environmental tests, fatigue, material testing, stress intensity factor, Stewart (A.T.), *3448*
- dynamic loads, tensile strength, tests, Kalner (D.A.), Basin (F.I.), *3497*
- creep, fractography, tests, Toth (L.), Szabados (E.), (et al.), *3499*
- crack opening displacement, fracture mechanics, j-integral, toughness, Dahl (W.), *3503*
- erosion, heat treatment, particles, wear, Salik (J.), Buckley (D.H.), *3504*
- boilers, thermal fatigue, Ginsztler (J.), *3999*
- deformation (plastic), low temperature, work hardening, Gurev (A.V.), Alkhimenkov (T.B.), *4352*
- high temperature, low cycle fatigue, vacuum, Maiya (P.S.), *4480*
- creep, high temperature, materials properties, Brovman (M.Ya.), *4488*
- crack initiation, fracture toughness, material testing, Chizhik (A.A.), *4495*
- crack opening displacement, j-integral, De Castro (P.M.S.T.), Spurrier (J.), (et al.), *4505*
- ductility, hardness, wear, Sorokin (G.M.), Oleinikov (N.E.), (et al.), *4516*
- elasticity, energy methods, fracture, fracture mechanics, pressure vessels, Rosenfield (A.R.), Shetty (D.K.), *4518*
- charpy tests, crack resistance, dynamic loads, fracture toughness, strain energy, Basko (E.M.), Makhutov (N.A.), *4519*
- fretting, hardness, oxidation, wear, Kayaba (T.), Iwabuchi (A.), *4894*
- experimental results, plastic behavior, shells (cylindrical), Ohashi (Y.), Tanaka (E.), *5113*
- experimental results, low temperature, work hardening, Novikov (N.V.), Gorodyskii (N.I.), *5118*
- deformation (plastic), dislocations, hot working, microstructures, viscoplasticity, Teodosiu (C.), Soos (E.), (et al.), *5273*
- crack growth, fatigue, grain size, microstructures, Kitsunai (Y.), *5284*
- charpy tests, crack growth, electrical analysis, Okumura (N.), Venkatasubramanian (T.V.), (et al.), *5293*
- fracture mechanics, j-integral, Joyce (J.A.), Ernst (H.), (et al.), *5302*
- crack opening displacement, photoelasticity, plastic flow, stress intensity factor, Bandyopadhyay (S.N.), Singh (N.), (et al.), *5304*
- ductile fracture, triaxial loading, Beremin (F.M.), *5306*
- strength, stress strain relationships, surfaces, yield condition, Sasaki (H.), Sato (Y.), *5327*
- bending, defects, fracture toughness, plane strain, Boichenko (Yu.A.), Sosnin (A.V.), (et al.), *5333*
- abrasion, hardness, heat treatment, mechanical properties, wear, Sorokin (G.M.), Milancheva (N.V.), *5334*
- buckling (local), cold working, cold-formed steel, collapse, failure, multistory frames, Zamecnik (F.J.), *5349*
- generators, machine design, retaining rings, rotors, Viswanathan (R.), *5372*
- copper alloys, disks, machine design, springs, Curti (G.), Orlando (M.), (et al.), *5374*
- gruneisen parameter, thermal diffusion, thermophysical properties, Beghi (M.), Bottani (C.E.), *5807*
- ductility, lubricants, lubricants (liquid), upset forging, Doraivelu (S.M.), Gopinathan (V.), *5991*
- aging, creep, plasticity, Cho (U.W.), Findley (W.N.), *6174*
- brittle fracture, cold working, failure, Rybin (V.V.), Morozov (A.M.), (et al.), *6424*
- brittle fracture, grain boundaries, Baranov (S.M.), Sarrak (V.I.), (et al.), *6425*
- absorption, hydrogen, hydrogen embrittlement, Ekilik (V.V.), Grigorev (V.P.), (et al.), *6427*
- corrosion fatigue, crack growth, environmental tests, welded joints, Davis (D.A.), Czyryca (E.J.), *6428*
- ductile fracture, high temperature, prestrain, Mutoh (Y.), Toyoda (M.), (et al.), *6450*
- bending, cyclic loading, fatigue, Gavrilov (D.A.), *6470*
- carbides, creep, dislocations, electron microscopy, high temperature, precipitation, Orlova (A.), Milicka (K.), (et al.), *6472*
- copper alloys, creep, maraging steel, stress relaxation, titanium, Pollock (J.T.A.), Barton (S.G.), (et al.), *6473*
- dynamic testing, mechanical properties, plasticity, strain, tension, Novikov (N.V.), Ulyanenko (A.P.), (et al.), *6475*
- cast steel, charpy tests, ductility, fracture control, microstructures, Fortner (E.) eds., Praeger (M.), *6476, book*
- crack tip geometry, fracture toughness, plastic flow, pressure vessels, Kotilainen (H.), *6479*
- friction (solid solid), hot working, oxidation, Luong (L.H.S.), Heijkoop (T.), *7079*
- forging, friction, wear, Felder (E.), Montagut (J.L.), *7086*
- experimental methods, friction (sliding), wear, Play (D.), *7090*
- thermal effects, yield condition, Kovalchuk (B.I.), Lebedev (A.A.), (et al.), *7287*
- fracture, residual stresses, surface effect, Iwai (Y.), Arima (J.), *7292*
- computing techniques, high temperature, plastic flow, rolling, stochastics, Murthy (A.), Lenard (J.G.), *7456*
- crack growth, crack initiation, failure, Reuter (W.G.), Brown (H.L.), (et al.), *7471*
- crack growth, fracture mechanics, fracture toughness, Radon (J.C.), De Castro (P.M.S.T.), (et al.), *7472*
- crack propagation, fatigue, low temperature, rocks, Mubeen (A.), *7480*

- damage, fatigue, hardening, interaction, Chaboche (J.-L.), Kaczmarek (H.), (et al.), *7482*
- corrosion fatigue, crack growth, heat treatment, Romaniv (O.N.), Voldemarov (A.V.), (et al.), *7493*
- corrosion fatigue, crack growth, microcracks, Romaniv (O.N.), *7494*
- aluminum alloys, damage, electric resistance, material testing, Cailletaud (G.), Policella (H.), (et al.), *7504*
- ductile fracture, fracture mechanics, fracture toughness, Cox (E.P.), Lawrence (F.V.) Jr., *7527*
- nuclear radiation, strain, tension, Kiselevskii (V.N.), Kharitonov (D.F.), (et al.), *7563*
- cracking, flaw detection, hydrogen embrittlement, Szilard (J.), Haynes (R.), *7561*
- creep, cyclic loading, Pokluda (Ya.), Stanek (P.), *8197*
- cavities, crack propagation, creep rupture, numerical analysis, Michel (D.J.), *8374*
- creep, dislocations, Ostrom (P.), Lagneborg (R.), *8385*
- creep, dislocations, grain boundaries, microstructures, Williams (K.R.), *8430*
- strain, stresses, tension, yield criteria, Bascoul (A.), Maso (J.C.), *8431*
- inclusions, micromechanisms, phase changes, thermoelasticity, Ling (H.C.), Owen (W.S.), *8884*
- high temperature, materials properties, strain rate, Krabiel (A.), Dahl (W.), *8886*
- friction (sliding), loads, vacuum, Gamulya (G.M.), Dobrovolskaya (G.V.), (et al.), *9021*
- cutting, tool wear, tools, turning, Sewailem (M.R.), Mobarak (I.M.), *9376*
- alloys, ausforming, fatigue, forming, rolling, Ohmori (M.), Yokokawa (S.), (et al.), *9378*
- crack growth, cyclic testing, fracture toughness, Troshchenko (V.T.), Pokrovskii (V.V.), (et al.), *9431*
- bending, crack growth, fracture toughness, Mubeen (A.), *9433*
- crack resistance, material testing, Takahashi (H.), Khan (M.A.), (et al.), *10281*
- acoustic emission, cyclic loading, high cycle fatigue, Hamel (F.), Bailon (J.P.), (et al.), *10318*
- cyclic testing, high temperature, low cycle fatigue, strain softening, Gardiner (T.), *10329*
- aluminum alloys, correlation, endurance limit, fatigue, flexure, ultimate strength, Stepnov (M.N.), Evstratova (S.P.), (et al.), *10330*
- aluminum alloys, plasticity, servomechanisms, strain measurement, stress relaxation, Meguid (S.A.), *10334*
- connections, design (optimum), joints, mathematical programming, Douty (R.), *10354*
- creep, deformation, embrittlement, fracture mechanics, microstructures, Carlson (R.L.), Lo (H.C.), *11316*
- biaxial loading, fracture mechanics, fracture toughness, microstructures, Ziebs (J.), Aurich (D.), (et al.), *11317*
- composite materials, gas turbines, materials processing, titanium, Meetham (G.W.) ed., *11337, book*

Steele (C.R.), asymptotic methods, shells (of revolution), *309*

Steely (S.L.) Jr., buildings, turbulence (geophysical), wakes, Frost (W.), *3707*

steering, automobiles, dynamic behavior, maneuverability, vehicles, Panik (F.), Drosdol (J.), (et al.), *1459*
- controllability, maneuverability, rudders, ship maneuvers, Van Amerongen (J.), De Goeij (W.F.), (et al.), *4102*
- dynamic response, kinematics, railroads, Bell (C.E.), Hedrick (J.K.), *4940*
- automobiles, dynamic response, dynamic stability, maneuverability, El-Gindy (M.), Ilosvai (L.), *7616*
- guidance optimization, optimal control, rockets, Dvornychenko (V.N.), *7928*
- maneuverability, response, vehicles, El-Gindy (M.), Ilosvai (L.), *8463*

stefan problem, casting, cooling, freezing, rupture, shells, Oki (S.), *440*
- cracks, integro differential equations, mathematical methods, orthotropic materials, survey, Panasyuk (V.V.), Andrejkiv (A.E.), (et al.), *1362*
- latent heat, melting, solidification, Solomon (A.), *2814*
- finite element methods, melting, phase changes, vaporization, Bonnerot (R.), Jamet (P.), *3820*
- salt dissolution, soils, transport mechanisms, Klykov (V.E.), Kulagin (V.L.), (et al.), *4466*
- fire spread, flame propagation, forest fires, mathematical models, Fujii (N.), Hasegawa (J.), (et al.), *6847*
- cylindrical bodies, heat transfer, phase changes, pipes, underground, variable thermal properties, Lunardini (V.J.), *7854*
- error, mathematical methods, melting, Epperson (J.F.), *8108*
- mathematical models, numerical methods, Lozano (C.J.), Reemtsen (R.), *8740*
- existence theorems, uniqueness, Tabisz (K.), *9096*
- boundary layer, latent heat, phase boundaries, Langerholc (J.), *10658*

Stefanick (M.), atmospheric circulation, ocean air interaction, *5943*

Stefanou (G.D.), finite element techniques, mesh generation, plates, Symmakezis (K.), *78*

Steger (J.L.), compressible flow, finite difference methods, inviscid fluid, unsteady flow, Warming (R.F.), *2621*

Steimle (F.), energy conversion, heat engines, thermodynamic processes, *4690*
- see Von Cube (H.L.), *10614, book*

Stein (G.), see Doyle (J.C.), *108*

Stein (P.D.), see Walburn (F.J.), *1956*
- see Walburn (F.J.), *4915*

Stein (R.B.), see Oguztoreli (M.N.), *9063*

Steinberg (A.M.), airplanes, evasion, missiles, pursuit, suboptimal control, Forte (I.), *6146*

Steinberg (J.), computing techniques, elliptic equations, singularities, stability (numerical), *5003*

Steinberg (S.), group theory, helmholtz equation, klein-gordon equation, mathematical methods, similarity methods, Wolf (K.B.), *8113*

Steinchen (A.), hydrodynamic stability, liquid solid interface, membranes, viscoelasticity, Gallez (D.), (et al.), *8275*

Steinhardt (O.), axial loading, bearing capacity, buckling (nonlinear), shells (cylindrical), shells (orthotropic), Pfeiffer (M.), *318*

Steketee (J.A.), compressible flow, one dimensional flow, waves, *7779*

Steklov (V.K.), see Zaytsev (G.G.), *4302*

Stelling (G.S.), finite difference methods, one dimensional flow, shallow water, tides, *3612*

Stematiu (D.), see Priscu (R.), *972*

Stemerding (S.), see Gerritsen (A.H.), *7464*

Stengel (B.F.), digital control, flight control, helicopters, Broussard (J.R.), (et al.), *2195*

Stengel (K.C.), circulation, currents, oceanography, *4882*

Stengel (R.F.), see Binnie (W.B.), *2160*
- airplanes, flight control, lateral stability, space shuttle, stochastics, *4672*

Stenker (H.), design (optimum), roofs, space frames, Michael (A.), (et al.), *4543*

stenoses, arteries, pulsatile flow, Padmanabhan (N.), *1955*
- arteries, diagnostics, Fox (B.), Seed (W.A.), *4118*
- arteries, blood flow, navier stokes equation, Wille (S.O.), *4918*
- blood flow, experimental results, laser doppler velocimeters, Khalifa (A.M.A.), Giddens (D.P.), *9062*
- blood flow, numerical analysis, three dimensional flow, Liou (R.J.), Clark (M.E.), (et al.), *9063*

Stepan (G.), differential equations (ordinary), routh-hurwitz criterion, stability theory, time delay systems, tools, vibration, *6070*

Stepanenko (M.V.), see Kornev (V.M.), *11643*

Stepanenko (V.A.), fatigue, fractography, fracture, fracture toughness, micromechanisms, *7512*

Stepanishen (P.R.), acoustic waves, layered media, reflection, transmission, viscoelasticity, waveguides, Strozeski (B.), *11966*
- impulse, sound fields, transient, ultrasonics, Fisher (G.), *12010*

Stepanov (G.N.), boundary layer, hypersonic flow, laminar flow, oscillating bodies, *1535*

Stepanov (G.V.), plastic waves, plates, rate sensitivity, rods, strain rate, Serbin (A.A.), *6326*

Stepanov (G.Yu.), airfoils, hydrofoils, lifting surfaces, mathematical models, *4669*

Stepanov (S.V.), absorption, conduction (heat), heat transfer (combined modes), radiant interchange, radiation properties, reflection, Bityukov (V.K.), *10602*

Stepanov (V.V.), flexure, measurements, plates, sensitivity, strain measurement, Lanin (A.G.), (et al.), *1413*

Stepanov (W.A.), brittle fracture, kinetics, plasticity, Shpeizman (V.V.), *6442*

Stepashko (V.S.), see Ivakhnenko (A.G.), *2102*

Stephan (G.), stability theory, tools, vibration (forced), *5230*

Stephan (K.), see Mitrovic (J.), *1866*
- convection (forced), emissivity, heat transfer, nucleate boiling, Auracher (H.), *4700*

Stephanishen (P.R.), impulse, sound fields, transducers, vibrators, *4762*

Stephenson (C.J.), binary search trees, coding, computer programming, data analysis, *67*

Stephenson (D.), drainage, embankments, phreatic surface, *4462*
- design, hydraulics, pipe flow, pipelines, soil structure interaction, *10369*

Stephenson (J.), computer programming, computing techniques, simulation, surveys, *1125, book*

Stephenson (R.C.), anisotropy, composite materials, effective elastic moduli, thermoplasticity, Turner (S.), (et al.), *1834*

Stepnov (M.N.), aluminum alloys, correlation, endurance limit, fatigue, flexure, steel, ultimate strength, Evstratova (S.P.), (et al.), *10330*

steps, flow measurement, fluid mechanics, recirculation, turbulent flow, Moss (W.D.), Baker (S.), *5434*
- mixing layers, reattachment, turbulence, turbulence (structure), Chandrsuda (C.), Bradshaw (P.), *5464*
- contraction, laminar flow, noncircular pipes, numerical analysis, separation, Dennis (S.C.R.), Smith (F.T.), *6649*
- boundary layer, finite element techniques, galerkin method, mesh generation, viscous flow, Leone (J.M.) Jr., Gresho (P.M.), *7713*
- laminar flow, separated flow, Tobak (M.), Peake (D.J.), *10433*

Stere (C.), see Maruta (A.), *1894*

Sterling (M.J.H.), see Rahal (C.M.), *2596*

Stern (M.E.), mathematical models, turbulence, turbulence model, turbulent flow, variational methods, *6687*
- bores, breakers, coasts, density currents, oceanography, *8976*

Stern (R.), see Amram (M.), *11969*

Stetson (K.A.), displacement, metrology, optical techniques, strain, stress analysis, surfaces, *5319*

Stettler (J.C.), bifurcation, blood flow, modeling, pulsatile flow, Niederer (P.), (et al.), *4913*
- bifurcation, blood flow, experimental results, modeling, pulsatile flow, Niederer (P.), (et al.), *4914*

Stevens (D.E.), see Bridger (A.F.C.), *8969*
Stevens (L.K.), see Pavlovic (M.N.), *3329*
Stevens (W.W.), see Bucknall (C.B.), *1202*
Stevenson (D.G.), operations research, railroads, Georgiades (G.), *2170*
Stewart (A.T.), crack growth, environmental tests, fatigue, material testing, steel, stress intensity factor, *3448*
Stewart (H.B.), finite difference methods, reactors, thermal effects, *7967*
Stewart (I.), biomathematics, catastrophe theory, mathematical models, nervous system, zeeman's equations, Woodcock (A.E.R.), *2206*
- bifurcation, catastrophe theory, fluid mechanics, singularities, topological techniques, *7172*

Stewart (J.L.), attenuation, reflection, sonar, underwater acoustics, Westerfield (E.C.), (et al.), *3954*
Stewart (M.B.), drag, drops, fluctuating flow, oscillations, reynolds number (small), *3623*
- bubble dynamics, creeping flow, drops, frequency response, unsteady flow, Morrison (F.A.) Jr., *11362*

Stewart (R.W.), see Fessler (H.), *2565*
Stewart (T.J.), algorithms, distribution systems, optimization, transport, two-stage optimization, Ittmann (H.W.), *3212*
Stewart (W.E.) Jr., convection (free), cylindrical bodies, inclined cylinders, *9698*
Stewartson (K.), see Cebeci (T.), *632*
- see Brown (S.N.), *2682*

Stiassnie (M.), breakwater, floating bodies, gravity waves, transmission, *11673*
Stich (B.), see Lechner (E.), *10721*
Sticher (F.), closure, kinematics, linkages, mechanisms (spatial), robotics, *4559*
Stickler (D.C.), impedance, ocean, ocean bed, refraction, sound propagation, underwater acoustics, Ahluwalia (D.S.), *893*
- sound propagation, spectra, underwater acoustics, wave equations, Ammicht (E.), *6909*
- acoustics, caustics, wave equations, Ahluwalia (D.S.), (et al.), *12003*

stick slip, elastic bodies, large displacement, perturbation methods, rings, Benson (R.C.), *9260*
stiffened structures, buckling, cold working, shells (cylindrical), shells (stiffened), welding, Bushnell (D.), *6262*
- beams, experimental results, fatigue, Korashy (M.), Varga (J.), *6471*
- beams (curved), finite element techniques, isoparametric elements, plates (stiffened), shells (thick), Jirousek (J.), *7212*
- composite materials, design (optimum), shells (cylindrical), Pochtman (Yu.M.), Tugai (O.V.), *11324*
- numerical methods, optimization, reinforced bodies, Kartvelishvili (V.M.), Mironov (A.A.), (et al.), *11325*

stiffness, composite materials, constitutive relations, fibers, vibration, Aboudi (J.), *1207*
- approximations, dynamic properties, foundations, Kitamura (Y.), Sakurai (S.), *1284*
- concrete, shear, Ferdis (M.N.), Buyukozturk (O.), *1441*
- containment, reinforced concrete, seismic loading, slabs, strength, White (R.N.), Perdikaris (P.C.), (et al.), *1462*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), reynolds equation, Kamala (V.), *1943*
- elastoviscoplasticity, laminates, work hardening, Aboudi (J.), *2250*
- slabs, Wong (Y.C.), Coull (A.), *2267*
- boron, composite materials, damage, fatigue, laminates, O'Brien (T.K.), Reifsnider (K.L.), *2493*
- crack growth, deformation (plastic), impact, runge kutta method, testing equipment, Zhitenev (V.V.), Markochev (V.M.), *2495*
- beams, bonded joints, laminates, strength, wood structures, Marx (C.M.), Moody (R.C.), *3528*
- bending, floors, shear walls, slabs, Coull (A.), Wong (Y.C.), *3553*
- beams, deflections, floors, wood structures, Mccutcheon (W.J.), Vanderbilt (M.D.), (et al.), *3554*
- bearings (ball), bearings (roller), damping, Walford (T.L.H.), Stone (B.J.), *4114*
- bearings, machine design, spindles, Shuzi (Y.), *4561*
- friction (sliding), sliding, vibration, Budanov (B.V.), Kudinov (V.A.), (et al.), *4892*
- bearings (gas lubricated), bearings (liquid lubricated), bearings (thrust), lubrication (hydrostatic), Nakahara (T.), Kurisu (T.), (et al.), *4896*
- runge kutta method, stability (numerical), stiffness matrix, Eitelberg (E.), *5016*
- beams, dynamic behavior, reinforced concrete, Johns (K.C.), Belanger (M.D.), *5351*
- strength, structural analysis, torsion, Shermer (C.L.), *5355*
- earthquake resistant structures, frames, multiple degree of freedom, Capecchi (D.), Rega (G.), (et al.), *7040*
- biomechanics, bones, kinematics, spine, stress strain relationships, Laborde (J.M.), Burstein (A.H.), (et al.), *7104*
- damping, design, dynamic loads, gears (spur), runge kutta method, Kasuba (R.), Evans (J.W.), *8471*
- bearings (ball), design, springs, vibration, Tamura (H.), Tsuda (Y.), *8474*
- adhesives, bonded joints, finite element methods, interlaminar stresses, time dependence, Gali (S.), Ishai (O.), *8483*
- bearings (journal), damping, lubrication (hydrodynamic), rotors, vibration (self excited), Michalopoulos (D.), Dimarogonas (A.), *9020*
- deflections, tires, Koutny (F.), *9461*
- buckling, divergence, flutter, follower forces, frames, Kounadis (A.N.), Avraam (T.P.), *9804*
- bearings (thrust), damping, film thickness, inertia, lubrication (hydrostatic), Prabhu (T.J.), Ganesan (N.), *9956*
- bearings (thrust), damping, experimental methods, vibration (forced), Schwanecke (H.), *10219*
- bearings (thrust), damping, design, ship design, vibration, Vassilopoulos (L.), *10375*
- bearings (gas lubricated), bearings (porous metal), bearings (thrust), lubrication (hydrostatic), Singh (K.C.), Rao (N.S.), *10887*
- bearings (conical), bearings (hydrodynamic), friction (solid fluid), lubrication (hydrodynamic), oil films, Murthy (T.S.R.), *12094*
- bearings (hydrostatic), laminar flow, lubrication (hydrostatic), optimization, Debailleux (C.), Flamme (J.M.), *12095*

stiffness matrix, geometric nonlinearities, stability, stability (numerical), subsonic flow, Hangai (Y.), *330*
- finite element techniques, geometric nonlinearities, material nonlinearities, structural analysis, Cook (R.D.), *1127, book*
- finite element techniques, membrane theory, mesh generation, Robinson (J.), *1133*
- finite element techniques, finite element techniques, mathematical programming, parabolic equations, Franke (R.), Salinas (D.), *2045*
- convergence, finite element methods, Bergan (P.G.), *2068*
- eigenvalues, matrix methods, transcendental equations, Hopper (C.T.), Simpson (A.), (et al.), *3093*
- biharmonic equation, boundary conditions, matrix inversion, mesh generation, Stavitsky (D.), Macagno (E.), (et al.), *3131*
- restraint systems, structures, Mohr (G.A.), *3139*
- runge kutta method, stability (numerical), stiffness, Eitelberg (E.), *5016*
- computer programming, finite element techniques, mesh generation, vibration, Hoa (S.V.), Sankar (S.), *5019*
- beams (variable cross section), eigenvalues, rotary inertia, vibration, To (C.W.S.), *5033*
- elastica, finite element techniques, mathematical methods, nonlinear characteristics, stability theory, Fried (I.), *5034*
- computing techniques, contact problems, elastic behavior, friction (solid solid), Sachdeva (T.D.), Ramakrishnan (C.V.), *6115*
- automobiles, computer programming, finite element techniques, structural analysis, Tang (S.C.), Yeung (K.S.), (et al.), *7208*
- creep, finite element techniques, nonlinear analysis, shear, Nguyen Dang Hung, *7218*
- finite element techniques, shells (thin), Mohr (G.A.), *7349*
- beams, wood structures, Kiener (G.), *8228*
- finite element techniques, matrices (sparse), solid mechanics, Sloan (S.W.), *9131*
- finite element techniques, plates, vibration, Pedersen (P.), Cederkvist (J.), *9136*
- finite element techniques, nonlinear materials, Traven (F.), *9145*
- dynamic testing, vibration, Baruch (M.), *9329*
- dynamic response, flexible bodies, rigid bodies, Huston (R.L.), *10012*
- elbows, penalty function, pipes, shells, Bathe (K.J.), Almeida (C.A.), *10063*
- computing techniques, dynamic response, Bahar (L.Y.), Law (G.E.), *10223*

stilling basins, baffles, drag, Ranga Raju (K.G.), Kitaal (M.K.), (et al.), *558*
Stimpson (B.), boreholes, fracture, rocks, strength, *1337*
- friction, rocks, strength, *2391*

Stinebring (D.R.), bubble dynamics, cavitation flow, damage, leading edge, modeling, propellers (marine), Holl (J.W.), (et al.), *708*
Stinton (H.C.), see Cuthbertson (R.D.), *1763*
Stipho (A.S.), see Banerjee (P.K.), *6375*
stirling cycles, design, lubrication (elastohydrodynamic), seals, Etsion (I.), *2570*
- heat engines, mathematical models, thermodynamic processes, Beans (E.W.), *10548*

Stivers (L.S.) Jr., see Spaid (F.W.), *3764*
stochastic control, design, gauss-poisson processes, jump conditions, linear systems, Segall (A.), *1154*
- estimation, trajectories, Rubinovich (E.Ya.), *1156*
- minimax techniques, regulator problem, Nakonechnyi (A.G.), *2101*
- design, markov processes, Bukhalev (V.A.), *2125*
- algorithms, lyapunov's functions, tracking, trajectories, wiener-hopf technique, Afanasev (V.N.), Danilina (A.N.), *2137*
- adaptive systems, discrete systems, linear systems, stochastic systems, Yoshimura (T.), Kiyota (M.), (et al.), *3204*
- adaptive systems, algorithms, mathematical models, statistical modelling, stochastic systems, Minyaeva (L.N.), Sabinin (O.Y.), *4267*
- linear systems, optimal control, Kuznetsov (N.A.), Liptser (L.Sh.), (et al.), *4294*
- filters, linear systems, optimal control, Uryupin (M.A.), *4295*
- monte carlo analysis, optimal control, Gorodetskiy (V.I.), Yusupov (R.M.), *4316*
- probability theory, synthesis, Andreev (N.I.), *5051*
- algorithms, large scale systems, optimal control, Chernitser (A.V.), *5056*
- algorithms, dynamic programming, suboptimal control, synthesis, Batkov (A.M.), Grinchenko (S.T.), *6145*

- optimal control, stochastic systems, time optimal systems, Kolmanovskii (V.B.), Maizenberg (T.L.), *9173*
- stochastic systems, volterra series, Adomian (G.), Sibul (L.H.), *10074*
- optimal control, stochastic systems, Kumar (P.R.), Van Schuppen (J.H.), *11072*

stochastic processes, linear systems, random excitation, stochastic systems, Klega (V.), *111*

- biomathematics, detection, encephalographic data, kalman filters, Ishii (N.), Iwata (A.), (et al.), *129*
- correlation, mathematical models, Akimov (P.P.), *141*
- adaptive systems, algorithms, prediction, Tanttu (J.T.), *146*
- earthquakes, simulation, time domain techniques, Hoshiya (M.), Chiba (T.), *147*
- estimation, obsolete data, prediction, Popovskii (V.I.), Chizhenkov (Yu.Ya.), *164*
- discrete systems, maximum principle, optimal control, sampled data systems, De Koning (W.L.), *175*
- decision theory, markov processes, optimization, Demin (N.S.), *182*
- ocean, sound propagation, underwater acoustics, Watson (J.G.), Siegmann (W.L.), (et al.), *895*
- interaction, mathematical models, series, Chan (W.-Y.T.), Wallis (K.F.), *1100*
- loads, random loading, Chalk (P.L.), Corotis (R.B.), *1432*
- bubble dynamics, ducts, dust, two phase flow, De Socio (L.M.), Gaffuri (G.), (et al.), *1840*
- hydrology, Busalaev (I.V.), *1896*
- estimation, least squares, state space techniques, statistical control, Kailath (T.), *2025*
- functional equations, noise (random), volterra series, Kenefic (R.), Nuttall (A.), (et al.), *2026*
- estimation, kalman filters, nonlinear systems, quasilinearization, Wagdi (M.N.), *2098*
- algorithms, estimation, mathematical programming, optimization, Katkovnik (V.Ya.), Kheisin (V.E.), *2138*
- ocean waves, probability, simulation, Flower (J.O.), *3108*
- panels, plasticity, Vasarhelyine Szabo (A.), *3270*
- crack propagation, sheet metal, Borodachev (N.M.), *3440*
- mechanical systems, probability theory, Friedrich (H.), Hennig (K.), *3526*
- probability, weibull statistics, wind loads, Simiu (E.), Filliben (J.J.), *4171*
- ergodic process, probability, Attia (F.A.-S.), *4172*
- algorithms, discrete systems, identification, multivariable systems, stochastic approximation, El-Sherief (H.), Sinha (N.K.), *4238*
- estimation, tracking, Bar-Shalom (Y.), Marcus (G.D.), *4264*
- estimation, identification, stochastic systems, Kazakov (I.E.), *4266*
- estimation, faults, reliability analysis, Nikiforov (I.V.), *4269*
- adaptive systems, algorithms, estimation, Rudenko (O.G.), Bodyanskii (E.V.), (et al.), *4270*
- markov processes, optimization, stochastic systems, Neymark (Yu.I.), Preobrazhenskaya (A.M.), *4277*
- algorithms, bayesian approach, decision theory, markov processes, Sato (M.), Abe (K.), (et al.), *4317*
- damage (cumulative), locomotives, spectral analysis, suspension systems, Garivaltis (D.S.), Garg (V.K.), (et al.), *4485*
- fatigue, fracture, material testing, Bolotin (V.V.), *4504*
- digital simulation, oscillators, van der pol oscillator, Spanos (P.-T.D.), *4956*
- probability theory, reynolds number (high), turbulence, Barndorff-Nielsen (O.), *4968*
- markov processes, mathematical models, probability theory, Yushkevic (A.A.), Fainberg (E.A.), *5063*
- filters, interpolation, observers, Grigorev (F.N.), Kurdoya (E.A.), *5057*
- biaxial loading, brittle fracture, fracture, weibull statistics, Matsuo (Y.), *5295*
- bridges, dynamic analysis, floating structures, wave loads, Langen (I.), Sigbjornesson (R.), *5356*
- algorithms, geometric programming, mathematical programming, stochastic systems, Scott (C.H.), Jefferson (T.R.), *6136*
- computing techniques, data analysis, flight control, Maine (R.E.), Iliff (K.W.), *6885*
- junctions, slabs, sound propagation, transmission, vibration, Wohle (W.), Beckmann (T.), (et al.), *6894*
- data analysis, ocean waves, spectra, surface waves, Long (R.B.), *7068*
- approximations, convolution processes, mathematical methods, Splettstosser (W.), *7174*
- dynamic response, frequency domain techniques, gravity platforms, offshore structures, vibration (random), wave loads, Sigbjornsson (R.), Smith (E.K.), *7614*
- brittle materials, failure, material testing, Aoki (S.), Sakata (M.), *8422*
- probabilistic design, reliability, risk, vibration (random), Shinozuka (M.) eds., Yao (J.T.P.), *8447, book*
- offshore structures, spectral loading, structural response, wave loads, Spidsoe (N.), Sigbjornsson (R.), *8460*
- crack propagation, damage (cumulative), fatigue, Ihara (C.), Igarashi (A.), *9394*
- creep, deformation, earthquakes, faults, Andrews (D.J.), *9917*
- contamination, diffusion, rivers, Molyneux (J.E.), Witten (A.J.), *10674*
- optimal control, pursuit, Yavin (Y.), Jordaan (A.M.), *11075*
- fatigue, offshore structures, vibration (forced), wave loads, Sigbjornsson (R.), *11334*

stochastic systems, life expectancy, reliability analysis, weibull statistics, Ishikawa (H.), Tanimoto (T.), (et al.), *47*

- linear systems, random excitation, stochastic processes, Klega (V.), *111*
- green function, linear systems, Szepe (J.), *142*
- cracks, mathematical methods, nonlinear analysis, random excitation, Wedig (W.), *360*
- difference equations, stability theory, Ma (F.), Caughey (T.K.), *1097*
- difference equations, stability theory, Ma (F.), Caughey (T.K.), *2018*
- identification, observability, Distefano (J.J.) III, Cobelli (C.), *2091*
- filters, nonlinear analysis, probability, Hempel (P.R.), *3106*
- adaptive systems, filters, identification, Kushner (H.J.), *3147*
- algorithms, multivariable systems, nonlinear systems, stability theory, Shibata (H.), Mayeda (H.), (et al.), *3171*
- algorithms, digital simulation, mathematical models, multivariable systems, Razevig (V.D.), *3179*
- algorithms, optimal control, suboptimal control, Kolmanovskii (V.B.), *3195*
- markov processes, mathematical models, Zakharin (A.M.), *3196*
- adaptive systems, discrete systems, linear systems, stochastic control, Yoshimura (T.), Kiyota (M.), (et al.), *3204*
- computer aided manufacturing, mathematical models, process control, queue theory, Hitomi (K.), Nakajima (M.), (et al.), *3214*
- asymptotic methods, nonlinear mechanics, surveys, Vladimirov (V.S.), Mitropolsky (Yu.A.), (et al.), *4158*
- algorithms, discrete systems, identification, kalman filters, linear systems, Konishi (K.), Inouchi (K.), (et al.), *4219*
- design, stability theory, Riashko (L.B.), *4248*
- estimation, identification, stochastic processes, Kazakov (I.E.), *4266*
- adaptive systems, algorithms, mathematical models, statistical modelling, stochastic control, Minyaeva (L.N.), Sabinin (O.Y.), *4267*
- markov processes, optimization, stochastic processes, Neymark (Yu.I.), Preobrazhenskaya (A.M.), *4277*
- estimation, linear systems, nonlinear systems, Siluyanova (I.D.), *4306*
- dynamics, hamiltonian equations, lyapunov's functions, Benettin (G.), Galgani (L.), (et al.), *4954*
- finite element techniques, first passage, galerkin method, particle dynamics, random excitation, Bergman (L.A.), Heinrich (J.C.), *4985*
- finite element techniques, reliability, structural analysis, Contreras (H.), *5030*
- mathematical models, process control, wastewater treatment, water pollution, Tanthapanichakoon (W.), Himmelblau (D.M.), *5046*
- algorithms, maximum principle, Bodner (V.A.), Rodnishchev (N.E.), (et al.), *5052*
- equilibrium, fibers, structure, textiles, thermodynamics, Lindenmeyer (P.H.), *5133*
- spectral density, state space techniques, Putyatin (V.V.), *6134*
- algorithms, geometric programming, mathematical programming, stochastic processes, Scott (C.H.), Jefferson (T.R.), *6136*
- composite structures, elastic behavior, missiles, random loading, viscoelasticity, Weeks (G.E.), Cost (T.L.), *7301*
- random excitation, vibration (parametric), Ibrahim (R.A.), *7372*
- ceramics, crack initiation, defects, nondestructive tests, Evans (A.G.), Meyer (M.E.), (et al.), *7470*
- biaxial loading, fatigue, fracture, Troshchenko (V.T.), Sosnovskii (L.A.), *7485*
- continuous systems, discrete systems, identification, iterative methods, least squares, Vorobeychikov (S.E.), Konev (V.V.), *8163*
- man machine systems, mathematical models, process control, simulation, Hajnal (M.), Revesz (G.), *8172*
- buckling, random error, structural stability, Scheurkogel (A.J.), Elishakoff (I.), (et al.), *8260*
- cracking, failure, griffith cracks, random loading, Smolskii (V.M.), *8411*
- optimal control, stochastic control, time optimal systems, Kolmanovskii (V.B.), Maizenberg (T.L.), *9173*
- damping, design (optimum), frequency domain techniques, Reznikov (L.M.), Fishman (G.M.), *9179*
- random excitation, vibration (random), Kropac (O.), *10032*
- stochastic control, volterra series, Adomian (G.), Sibul (L.H.), *10074*
- linear systems, linear theory, noise (random), stability theory, Prussing (J.E.), *11057*
- approximation methods, control, relay systems, Fuller (A.T.), *11063*
- optimal control, stochastic control, Kumar (P.R.), Van Schuppen (J.H.), *11072*
- algorithms, estimation, identification, modeling, nonlinear systems, nonlinear theory, volterra series, Fakhouri (S.Y.), *11080*
- adaptive systems, distributed parameters, filters, Watanabe (K.), Yoshimura (T.), (et al.), *11084*
- differential games, evasion, pursuit, Pachter (M.), Yavin (Y.), *11087*
- adaptive systems, control, distributed parameters, Tzafestas (S.G.), *11092*
- random media, waves, Liu (K.C.), *11168*

stochastics, fuzzy control, grinding, optimization, Sakai (Y.), Tanaka (Y.), (et al.), *439*

- algorithms, empirical methods, graphical methods, probability theory, Borodkin (L.I.), *1099*
- algorithms, computer programming, Zak (Yu.A.), Yakhno (V.N.), *1107*
- cratering, cutting, data analysis, electric spark discharge, geometrical properties, Pandit (S.M.), Rajurkar (K.P.), *1348*
- cracking, cracks, fatigue, Ford (D.G.), *2422*
- laminar flow, two dimensional flow, Bellomo (N.), Riganti (R.), (et al.), *3107*

- failure, fibers, glass fibers, hybrid construction, micromechanisms, Manders (P.W.), Bader (M.G.), *3277*
- materials properties, metallic composites, strength, Hughes (J.D.H.), Morley (H.), (et al.), *3282*
- models, particle fluid flow, suspensions, Bechteler (W.), *3856*
- aerodynamics, bridges (suspension), gust loads, wind loads, Sigbjornsson (R.), Hjorth-Hansen (E.), *3911*
- dissipation, friction (solid solid), moon, planetary satellites, tides, Cappallo (R.J.), Counselman (C.C.) III, (et al.), *3913*
- aquifers, mixing, particles, stratification, Gelhar (L.W.), Gutjahr (A.L.), (et al.), *4025*
- airplanes, flight control, lateral stability, space shuttle, Stengel (R.F.), *4672*
- chaotic modulation, modulated systems, oscillators, Loginov (V.M.), Shapiro (V.E.), *4955*
- convergence, mathematical methods, noise (random), Korostelev (A.P.), *6091*
- mesh generation, optimization, random search, Sheela (B.V.), *6099*
- convergence, mesh generation, Hoffman (R.E.), Guerra (F.M.), (et al.), *6111*
- composite materials, fatigue, life expectancy, programmed loading, Yang (J.N.), Jones (D.L.), *6197*
- crack initiation, cyclic loading, fatigue, fracture, Arone (R.), *6416*
- particle size, particles, sediment transport, streams, Troutman (B.M.), *6965*
- computing techniques, high temperature, plastic flow, rolling, steel, Murthy (A.), Lenard (J.G.), *7456*
- crack initiation, crack propagation, decomposition, fracture, Ichikawa (M.), Tanaka (S.), *7509*
- correlation, fracture, transition, Puttick (K.E.), *7525*
- crack initiation, crack propagation, fatigue, micromechanics, Ghonem (H.), *7533*
- cyclic loading, fracture, Troshchenko (V.T.), Sosnovskii (L.A.), *7537*
- analysis, crack opening displacement, error, stress intensity factor, Rossmanith (H.P.), *7540*
- capsizing, ocean waves, resonance, rolling motion, ship motion, Blocki (W.), *8041*
- computing techniques, statistical theory, Cacko (J.), *8123*
- cements, copper, interface cracks, weibull statistics, Kittl (P.), Galleguillos (E.), *8225*
- grinding, tools, Matsui (S.), *8366*
- dust, orbit stability, perturbation theory, solar pressure, Bakshian (B.T.), Nazirov (R.R.), (et al.), *8843*
- condensation, particles, pulsatile flow, two phase flow, Butov (V.G.), Vasenin (I.M.), (et al.), *8898*
- difference equations, lyapunov's functions, stability theory, Bitmead (R.R.), Anderson (B.D.O.), *9119*
- correlation, crack growth, stress intensity factor, Dotsenko (A.M.), Denisova (G.B.), *9388*
- computer aided design, design (optimum), optimization, Ruppert (M.), *9440*
- lyapunov's functions, restricted three body problem, Gonczi (R.), Froeschle (C.), *9810*
- gust loads, rockets, Smith (O.E.), Adelfang (S.I.), *9819*
- differential equations (partial), dynamic programming, Bensoussan (A.), Lions (J.-L.), *10022*
- dynamic programming, perturbation theory, variational methods, Hopkins (W.E.) Jr., Blankenship (G.L.), *10027*
- estimation, nonlinear methods, Ivanov (A.V.), Kozlov (O.M.), *10055*
- fracture, granular media, Shimbo (M.), *10307*
- dispersion, groundwater, mass transportation, models, Smith (L.), Schwartz (F.W.), *10571*
- combustion (unsteady), diesel engines, flames (diffusion), Ikegami (M.), Shioji (M.), *10710*

Stock (H.W.), boundary layer, elliptical bodies, laminar flow, three dimensional flow, *1544*

- boundary layer, cylindrical bodies, laminar flow, similarity methods, *2626*

Stoev (P.I.), see Papirov (I.I.), *3472*

Stognii (A.A.), see Kondratev (A.I.), *3202*

Stojanow (B.), see Silwoff (F.), *4327*

Stokes (R.H.), see Lynch (J.F.), *12000*

Stokes (V.K.), functional analyis, plasticity, stress invariants, vector methods, yield criteria, *4927*

stokes flow, cylindrical bodies, two dimensional flow, walls, Jeffrey (D.J.), Onishi (Y.), *572*

- drag, plates, two dimensional flow, viscous flow, Moon-Uhn Kim, Chang-Ho Son, *573*
- buoyant flow, convection (free), laminar flow, transient effects, Pop (I.), Soundalgekar (V.M.), *752*
- axisymmetric flow, drops, spherical bodies, viscous flow, Zinchenko (A.Z.), *1509*
- boundary conditions, drops, interface phenomena, Haber (S.), Hetsroni (G.), *1890*
- capillary flow, filters, Gusinskii (G.M.), Kramer (E.B.), (et al.), *1868*
- pressure distribution, roughness, slots, Phan-Thien (N.), *2549*
- half space, plane surfaces, viscous flow, Mukherjee (S.), Bhattacharyya (P.), *3619*
- rotating bodies, toroids, Majumder (S.R.), O'Neill (M.E.), *3624*
- creeping flow, rarefied gases, spherical bodies, Obayashi (T.), Tougou (H.), *3645*
- boundary roughness, channel flow, plates (parallel), Phan-Thien (N.), *4583*
- initial value problems, internal flow, spherical bodies, Bykov (V.M.), *5403*
- moment coefficient, rotating bodies, toroids, viscous flow, Bhattacharyya (T.K.), *5406*
- combustion (turbulent), lasers, thermal measurements, turbulence, Eckbreth (A.C.), *5632*
- convection (free), laplace transform, magneto fluid dynamics, plates (vertical), Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *5675*
- boundary integral methods, channel flow, fredholm equations, two dimensional flow, Bezine (G.), Bonneau (D.), *6620*
- blood flow, ducts, nonaxisymmetric flow, Strigberger (J.), Plotkin (A.), *6647*
- film flow, spherical bodies, surface tension, Johnson (R.E.), *7668*
- axisymmetric flow, connected bodies, drag, spherical bodies, Wakiya (S.), *7669*
- lubrication (hydrodynamic), poiseuille flow, reynolds number, roughness, surfaces, Phan-Thien (N.), *8063*
- perturbation methods, rotating bodies, toroids, viscous flow, Murray (J.C.), *8530*
- film flow, lubrication (hydrodynamic), perturbation methods, rotating disks, Phan-Thien (N.), Antonia (R.A.), (et al.), *8533*
- boundary conditions, navier stokes equation, numerical methods, stability (numerical), vorticity, Quartapelle (L.), Valz-Gris (F.), *9527*
- axisymmetric flow, plates (holed), Hasimoto (H.), *9529*
- force, spherical bodies, torque, viscous flow, Brenner (H.), *9531*
- plates, singularities, two dimensional flow, velocity profiles, viscous flow, Hasegawa (E.), *9532*
- asymptotic methods, boundary layer, buoyant flow, convection (free), wells, De Socio (L.M.), Gaffuri (G.), (et al.), *10568*
- diffusion, kinetics, particles, Polyanin (A.D.), Sergeev (Yu.A.), *10680*
- convection (free), magneto fluid dynamics, oscillating bodies, plates (vertical), Soundalgekar (V.M.), Patil (M.R.), (et al.), *10740*
- spherical bodies, unsteady flow, variational methods, viscous flow, Utkina (S.N.), *11364*
- eccentric rotating cylinders, navier stokes equation, rotating cylinders, two dimensional flow, Suematsu (Y.), Ito (T.), (et al.), *11374*
- magneto fluid dynamics, spherical bodies, transport phenomena, two phase flow, Miroshnikov (V.A.), *11825*

Stokic (D.), see Vukobratovic (M.), *4242*

Stokic (D.M.), see Vukobratovic (M.K.), *11049*

stol, adaptive systems, control, flight control, Nikiforuk (P.N.), Ohta (H.), (et al.), *2157*

- control, flight tests, Hindson (W.S.), Hardy (G.H.), (et al.), *3735*
- aerodynamic interference, aerodynamic performance, airplanes, boundary layer (control), longitudinal stability, thrust, Paulson (J.W.) Jr., *10511*
- airplane performance, design, propulsion, turbofan engines, vtol, Glasgow (E.R.), Skarshaug (R.E.), *11742*

Stolarski (H.), beams (curved), curved elements, digital simulation, forming, shells (shallow), Belytschko (T.), *8142*

Stolarski (T.), see Lisowski (Z.), *5091*

Stoll (R.D.), ocean bed, sedimentation, sound propagation, underwater acoustics, *6905*

- acoustic waves, ocean bed, reflection, sedimentation, underwater acoustics, Kan (T.-K.), *11907*

Stollery (J.L.), see Richards (B.E.), *5561*

- see Mattick (A.A.), *10498*

Stolyarov (N.N.), elastoplasticity, large displacement, panels (curved), structural stability, Pestrovskii (G.M.), *2307*

Stolyarova (N.N.), combustion, filtration, reactors, Sukhov (G.S.), (et al.), *9773*

Stommel (H.), see Regier (L.), *4880*

Stone (A.M.), geothermal energy, *5885*

Stone (B.J.), see Walford (T.L.H.), *4114*

Stone (C.R.), see Cooper (M.G.), *12035*

Stone (L.W.), eyes, man machine systems, night vision, ocular system, Sanders (M.G.), (et al.), *4329*

Stone (R.), algorithms, identification, modeling, process control, Ivakhnenko (A.G.), (et al.), *149*

stonely waves, energy density, surface waves, Maleshko (V.V.), *1296*

- attenuation, interface waves, reflection, solid-fluid interaction, Hawker (K.E.), *4788*
- elastic waves, residual stresses, Guz (A.N.), Zhuk (A.P.), *6329*

storage, aquifers, mixing layers, Singh (S.P.), *2996*

- rocks, transport phenomena, water pollution, Hohlfelder (J.J.), Hadley (G.R.), *4030*
- hydrogen, metal-hydrogen systems, safety, Veziroglu (T.N.) ed., *4121, book*
- energy storage, stratified flow, tanks, thermal effects, thermosyphons, Young (M.F.), Baughn (J.W.), *4714*
- discharges, drainage, finite difference methods, hydrographs, mathematical models, Khan (S.I.), Takagi (F.), (et al.), *6599*
- containers (partially filled), finite element techniques, fluid-structure interaction, seismic loading, Liu (W.K.), *7768*
- geothermal reservoirs, wells, Miller (C.W.), *7996*

- deaerators, dynamic stability, liquid gas mixture, power plants, tanks, Cranfield (R.R.), Wilkinson (D.H.), *9625*
- aquifers, mathematical models, underground storage, Dussaud (M.), Carriere (J.-F.), *9902*
- convection, energy storage, heat transfer (combined modes), hydrocarbons, reservoirs, transient effects, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*

Storck (A.), see Barthole-Delaunay (C.), *834*
- electrochemical mass transfer, reaction rates, turbulence (transport), Hutin (D.), *5621*

Stouffer (D.C.), continuum mechanics, damage, life expectancy, materials processing, materials properties, mathematical models, surveys, Krempl (E.), (et al.), *2405, book*

Stough (H.P.) III, see Dicarlo (D.J.), *10512*

Stoyan (Yu.G.), frequency response, slabs, vibration (free), Makarovskii (E.L.), *2336*
- algorithms, computer aided design, optimization, Sokolovskii (V.Z.), *3199*

Strada (M.), see Del Giudice (S.), *3669*
- composite materials, finite element techniques, heat transfer, mass transfer, porous media, Lewis (R.W.), *7224*

Strahle (W.C.), see Hubbartt (J.E.), *1751*

strain, anelasticity, concrete, constitutive relations, Bazant (Z.P.), Tsubaki (T.), *1334*
- plates (orthotropic), structural stability, Begin (M.V.), *2302*
- experimental mechanics, photoelasticity, tires, Chow (C.L.), Woo (C.W.), *3560*
- adina, algorithms, computing techniques, Toridis (T.G.), Judy (J.), (et al.), *4188*
- anisotropic media, dilatancy, rocks, Lerau (J.), Saint-Leu (C.), (et al.), *5263*
- displacement, metrology, optical techniques, stress analysis, surfaces, Stetson (K.A.), *5319*
- creep, cyclic loading, hardening, stress ratio, stresses, Yoshida (F.), Ohta (I.), (et al.), *5329*
- acoustic emission, dislocations, iron, nondestructive tests, Bassim (M.N.), Veillette (M.), *6463*
- copper, elastic constants, lattices, polycrystalline materials, shear, Gairola (B.K.D.), Kroner (E.), *6468*
- dynamic testing, mechanical properties, plasticity, steel, tension, Novikov (N.V.), Ulyanenko (A.P.), (et al.), *6475*
- nuclear radiation, steel, tension, Kiselevskii (V.N.), Kharitonov (D.F.), (et al.), *7553*
- damping, experimental methods, friction (internal), metals, Hooker (R.J.), Mead (D.J.), *7587*
- bending, plates, Reissner (E.), *8238*
- steel, stresses, tension, yield criteria, Bascoul (A.), Maso (J.C.), *8431*
- beams, reinforced concrete, repeated loading, shear reinforcement, Farghaly (S.A.), *8449*
- buckling, deformation, pressure vessels, thin walled structures, Stanley (P.), Campbell (T.D.), *8468*
- deposition, self weight effects, soil consolidation, Lee (K.), Sills (G.C.), *9357*
- high temperature, lattices, oxidation, semiconductors, stress analysis, Franz (G.), Hartmann (W.), *9421*

strain analysis, drilling, experimental results, finite element methods, residual stresses, Schajer (G.S.), *490*
- biomechanics, heart, kinematics, Meier (G.D.), Ziskin (M.C.), (et al.), *1037*
- automation, deformation, moire methods, Sokolov (B.B.), *2473*
- composite materials, moire methods, optical techniques, Chiang (F.P.), Parker (B.), (et al.), *2475*
- deformation (plastic), kinematics, plasticity, Lubarda (V.A.), Lee (E.H.), *3258*
- deformation (finite), deformation (plastic), plasticity, Lee (E.H.), *3259*
- deformation, plasticity, thermoplasticity, viscoplasticity, Lehmann (T.), *6034*
- deformation (finite), elastoplasticity, Zhong-Heng (G.), *6181*
- deformation, granular media, Roj (J.), *7134*
- anisotropy, plasticity, work hardening, Besdo (D.), *7282*
- constitutive equations, plasticity, Yoder (P.J.), Iwan (W.D.), *8204*
- curved surfaces, membranes, Benati (M.), *8244*
- forming, necking, Chu (C.-C.), *10259*

strain energy, boundary value problems, elasticity (linear), saint venant principle, Biolley (Y.), *237*
- elasticity (nonlinear), energy methods, variational methods, Washizu (K.), *243*
- anisotropic media, stability theory, Parry (G.P.), *331*
- crack propagation, crack tip geometry, fatigue, Bailon (J.-P.), Dickson (J.I.), (et al.), *448*
- concentrated load, crack opening displacement, fracture angle, singularities, stress intensity factor, Gdoutos (E.E.), *458*
- crack propagation, cracks, fracture criteria, Chang (K.J.), *1363*
- deformation, elasticity (linear), energy methods, Ecsedi (I.), *2218*
- deformation, elasticity (linear), energy methods, Ecsedi (I.), *2219*
- large displacement, shells (nonlinear), Libai (A.), Simmonds (J.G.), *2271*
- alloys, crack growth, fatigue, mixed mode fracture, Badaliance (R.), *3469*
- charpy tests, crack resistance, dynamic loads, fracture toughness, steel, Besko (E.M.), Makhutov (N.A.), *4519*
- energy methods, solid mechanics, structures, Germain (P.), *6035*
- entropy, thermodynamics, wear, Klamecki (B.E.), *8054*
- anisotropic media, nonhomogeneous media, phase changes, Tsakalakos (T.), *8091*

strain gages, dynamic testing, strain measurement, thermal effects, Bagaria (W.J.), Sharpe (W.N.) Jr., *2479*
- beams (cantilever), beams (composite), strain measurement, Lakin (D.F.), *2483*
- rocks, strain measurement, stress strain relationships, Duncan Fama (M.E.), Pender (M.J.), *3487*
- deformation, error, impact, strain measurement, Malgun (M.M.), Loginov (P.M.), *3488*
- hopkinson bar, impact, microprocessors, strain measurement, testing equipment, Signoret (C.), Pouyet (J.M.), (et al.), *4507*
- error, sensitivity, Gu (W.-M.), *4509*
- bolts, rocks, roof bolts, triaxial tests, Haas (C.J.), *6405*
- deformation (plastic), holes, residual stresses, rings, Misra (A.), Peterson (H.A.), *6466*
- adhesives, blades, bonding, dynamic loads, steam turbines, Petrie (E.M.), *8427*
- balance system, flight, flying platforms, gliders, models, wing body combinations, Ramachandra (S.M.), *8851*
- axial compressors, blades, pressure distribution, surge, velocity measurement, Shatalov (I.K.), *8857*
- axial loading, beams, bending, columns, strain measurement, Tuttle (M.E.), *9425*
- experimental methods, piles, reinforced concrete, Gatti (G.), Collotta (T.), (et al.), *10260*
- beams (cantilever), measurements (dynamic), tension, transducers (load), Haggstrom (R.P.), *10314*
- experimental methods, fatigue, finite element methods, fracture mechanics, power plants, stress analysis, Takhar (J.S.), Fryzel (R.A.), *10320*

strain measurement, flexure, measurements, plates, sensitivity, Stepanov (V.V.), Lanin (A.G.), (et al.), *1413*
- dynamic testing, strain gages, thermal effects, Bagaria (W.J.), Sharpe (W.N.) Jr., *2479*
- beams (cantilever), beams (composite), strain gages, Lakin (D.F.), *2483*
- concrete, strength, stress analysis, triaxial loading, Gerstle (K.H.), Ashchi (H.), (et al.), *2486*
- friction (solid solid), photoplasticity, plasticity, Gomide (H.A.), Burger (C.P.), *3483*
- holography, interferometry, Zhilkin (V.A.), *3485*
- rocks, strain gages, stress strain relationships, Duncan Fama (M.E.), Pender (M.J.), *3487*
- deformation, error, impact, strain gages, Malgun (M.M.), Loginov (P.M.), *3488*
- hopkinson bar, impact, microprocessors, strain gages, testing equipment, Signoret (C.), Pouyet (J.M.), (et al.), *4507*
- beams, bending, cyclic loading, residual stresses, Troshchenko (V.T.), Zhabko (N.I.), *4512*
- creep, high temperature, microscopy, Kornienko (V.T.), Rekov (A.M.), (et al.), *5320*
- machining (electrochemical), residual stresses, surfaces, Chadwick (F.J.), *5321*
- drilling, holes, residual stresses, Eggeman (G.W.), *5322*
- bones, demineralization, gravity, zero g phenomena, Hinsenkamp (M.), Burny (F.), (et al.), *6002*
- bones, fracture, prosthetic devices, Carter (D.R.), Vasu (R.), (et al.), *6006*
- holes, photoelasticity, plane strain, plates (holed), stress concentration, Erickson (M.), Durelli (A.J.), *6461*
- photoelasticity, stresses (normal), Vologzhaninov (Yu.I.), *7545*
- crack tip geometry, j-integral, nondestructive tests, stresses, ultrasonics, King (R.B.), Herrmann (G.), (et al.), *8425*
- axial loading, beams, bending, columns, strain gages, Tuttle (M.E.), *9425*
- aluminum alloys, plasticity, servomechanisms, steel, stress relaxation, Meguid (S.A.), *10334*
- measurements, nondestructive tests, structures, surfaces, Chekin (O.N.), *10340*
- holography, interferometry, sensitivity, speckle interferometry, Dandliker (R.), *11314*

strain rate, anisotropic media, necking, rate sensitivity, sheet metal, Neale (K.W.), Chater (E.), *274*
- constitutive equations, deformation (finite), elastoplasticity, Mandel (J.), *1051*
- alloys, constitutive equations, elastoviscoplasticity, Suliciu (I.), *1052*
- materials properties, polymers, viscoelasticity (dynamic), Kokoshvili (S.M.), Kalnin (P.P.), *1193*
- cylindrical bodies, plane strain, work hardening, Lee (Y.S.), Patel (M.R.), (et al.), *1200*
- dynamic properties, metals, shock waves (normal), Meyers (M.A.) eds., Murr (L.E.), *1299, book*
- crack resistance, impact, material testing, Bondarovich (L.A.), Zlochevskii (A.B.), (et al.), *1409*
- crystals, dynamic plasticity. shear loading, Chiem (C.Y.), Duffy (J.), *2236*
- dynamic behavior, shells (outer), steel, thermal effects, torsion, Eleiche (A.-S.M.), *2487*
- hopkinson bar, materials properties, radioactivity, reactor structures, temperature, tension, welding, Albertini (C.), Montagnani (M.), (et al.), *2488*
- adhesion, fibers, high speed, hopkinson bar, matrices, testing equipment, Rybin (A.A.), *2496*
- constitutive equations, cyclic loading, geophysics, Hueckel (T.), *6180*
- plastic waves, plates, rate sensitivity, rods, Stepanov (G.V.), Serbin (A.A.), *6326*
- inelasticity, large displacement, plastic behavior, structural analysis, Symonds (P.S.), *8347*

- fracture mechanics, microfracture, rocks, strength, Lankford (J.), *8351*
- fracture mechanics, oil shale, Chong (K.P.), *8356*
- fluctuations, laminar flow, polymers, two dimensional flow, Abernathy (F.H.), Bertschy (J.R.), (et al.), *8508*
- high temperature, materials properties, steel, Krabiel (A.), Dahl (W.), *8886*
- dynamic properties, impact, materials properties, Zukas (J.A.), Nicholas (T.), (et al.), *9350*
- modeling, rocks, strength, Nishimatsu (Y.), Yamaguchi (T.), (et al.), *9367*
- crack initiation, fracture, fracture mechanics, Kipp (M.E.), Grady (D.E.), (et al.), *9382*
- dynamic properties, experimental results, impact, rods, Sengupta (A.K.), Wigglesworth (C.J.), (et al.), *10241*
- blades, impact, turbines, Gordon (J.T.) Jr., Reaugh (J.E.), *10244*
- deformation, rocks, tectonics, Pfiffner (O.A.), Ramsay (J.G.), *10261*
- reynolds stresses, turbulence (isotropic), turbulence model, vorticity, Siggia (E.D.), *11541*

strain softening, finite element techniques, stability (numerical), Pietruszczak (S.), Mroz (Z.), *94*
- concrete, endochronic theory, fracture, Bazant (Z.P.), Shieh (C.L.), *430*
- cylindrical bodies, elastoplasticity, expansion, finite strain, Berest (P.), Nguyen (M.D.), *3262*
- cyclic testing, high temperature, low cycle fatigue, steel, Gardiner (T.), *10329*
- elastoplasticity, rock mechanics, structural support, tunnels, Tanimoto (C.), Hata (S.), *10366*
- constitutive relations, cyclic loading, liquefaction, sand, Tatsuoka (F.), Silver (M.L.), *11177*

strakes, cylindrical bodies, suppression, vortex shedding, Zdravkovich (M.M.), *868*
- aerodynamic interference, smoke stacks, vibration (flow induced), wind loads, wind tunnels, Ruscheweyh (H.), *2910*

Strakhov (V.N.), earth, gravity, magnetic field, *5878*
- approximation methods, earth, gravimetrics, *8009*

Stramigioli (C.), absorption, integral methods, radiant interchange, reflection, scattering, slabs, Santarelli (F.), (et al.), *11766*

Strand (L.D.), combustion, doppler effect, pressure measurement, solid propellants, Meglewala (K.R.), (et al.), *5638*
- exhaust gases, particles, plumes, rockets, solid propellants, Bowyer (J.M.), (et al.), *5809*

Strang (G.), see Engelman (M.S.), *1128*
- see Temam (R.), *8210*

Strashko (V.T.), see Bakan (G.M.), *2124*
- see Bakan (G.M.), *2154*
- see Bakan (G.M.), *4280*

stratification, channel flow, reservoirs, supercritical flow, variational methods, Benjamin (T.B.), *1495*
- airfoil characteristics, finite difference methods, reynolds equation, trailing vortices, turbulent flow, vortices, wakes, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- atmospheric circulation, hydrodynamic stability, oscillations, Kadyshnikov (V.M.), *3029*
- acoustics, atmosphere, sound propagation, Mitsumura (Y.), Makino (M.), *3929*
- aquifers, mixing, particles, stochastics, Gelhar (L.W.), Gutjahr (A.L.), (et al.), *4025*
- bottom irregularities, ocean air interaction, oceanography, stratified flow, Flierl (G.R.), *4867*
- diffusion, oceanography, stratified flow, Turner (J.S.), *4870*
- inverse method, ocean, sound speed, underwater acoustics, Gray (S.H.), *5721*
- entrainment, mixing layers, shear stress, wind, Kranenburg (C.), *7652*
- mass transfer, rotating fluids, vortex lines, vorticity, Gill (A.E.), Smith (J.M.), (et al.), *8020*
- baroclinic instability, oceanography, sloping bottom, Wright (D.G.), *8023*
- oceanography, Marchuk (G.I.), Bubnov (M.A.), *8025*
- dispersion, porous media, taylor instability, Lake (L.W.), Hirasaki (G.J.), *8919*
- bottom irregularities, oceanography, rotating fluids, vorticity, Eliassen (A.), *8973*
- bottom irregularities, internal waves, roughness, surface waves, tsunami, Yermakov (S.A.), Pelinovskiy (Ye.N.), *8982*
- atmospheric circulation, meteorology (physical), rotating fluids, Held (I.M.), Hou (A.Y.), *8988*
- eddies, ocean air interaction, oceanography, rotating fluids, Muller (P.), Frankignoul (C.), *8996*
- solid-fluid interaction, stability, tornados, vortices, Nikulin (V.V.), *9528*
- dynamic properties, elastic waves, porous media, waves, Barzam (V.A.), *9697*
- heat transfer, ocean air interaction, oceanography, radiation, Holloway (P.E.), *9925*
- ice, melting, Huppert (H.E.), Josberger (E.G.), *9926*
- atmospheric circulation, Akhmedzhanov (Kh.), *9937*
- diffusion, jets, turbulent flow, Hofer (K.), Hutter (K.), *10457*
- convection (free), heat transfer, laminar flow, Venkatachala (B.J.), Nath (G.), *11371*
- buoyancy, ocean, turbulence (geophysical), turbulent mixing, Gibson (C.H.), *11548*
- buoyancy, ocean, turbulence (geophysical), turbulence model, Fu (L.-L.), Flierl (G.R.), *11549*

stratified flow, convection (free), cylindrical bodies, heat, Chashechkin (Yu.D.), Popov (V.A.), *577*
- hydraulic jump, visualization, Hunt (J.C.R.), Snyder (W.H.), *582*
- spectra, statistical theory, turbulence, Sazontov (A.G.), *651*
- turbulence, turbulence (geophysical), turbulent flow, Mellor (G.), Strub (P.T.), *652*
- diffusion, finite difference methods, gases, navier stokes equation, Ukeguchi (N.), Okamoto (H.), (et al.), *825*
- eddies, vortices, Johnson (E.R.), *978*
- mixing layers, Nof (D.), *979*
- convection, Alautdinov (M.), *980*
- flow obstructions, numerical methods, two dimensional flow, Granberg (I.G.), *1519*
- plane waves, pressure distribution, wave generation, Dotsenko (S.F.), *1600*
- channels, gravity waves (internal), shear flow, wave interactions, Grimshaw (R.), *1601*
- oscillating bodies, spherical bodies, virtual mass, Lai (R.Y.S.), Lee (C.-M.), *1602*
- buoyant flow, convection (free), heat transfer, thermal instability, Chashechkin (Yu.D.), Tupitsyn (V.S.), *1684*
- channel flow, free boundary, one dimensional flow, Gardner (G.C.), *2581*
- mixing layers, shear flow, Popov (V.A.), Chashechkin (Yu.D.), *2667*
- geostrophic flow, hydrodynamic stability, Weber (J.E.), *2694*
- diffusion, jets, turbulence, Hofer (K.), Hutter (K.), *2696*
- laser doppler velocimeters, liquids, refraction, turbulence, Mcdougall (T.J.), *2767*
- fluid mechanics, hydraulic transport, sand, Smith (L.), *3004*
- annular flow, convection (free), grashof number, spherical bodies, Singh (S.N.), Elliott (J.M.), *3801*
- solar collectors, solar ponds, thermal loading, Hawlader (M.N.A.), Brinkworth (B.J.), *3943*
- bounded media, linearization, magneto fluid dynamics, rotating fluids, Prasada Rao (D.R.V.), Krishna (D.V.), *3991*
- hamilton principle, internal waves, Voronovich (A.G.), *4049*
- air pollution, boundary layer (atmospheric), dispersion, Tangermann (G.), *4080*
- rotational flow, shear flow, solitary waves, Gibbon (J.D.), James (I.N.), (et al.), *4653*
- approximations (higher order), gravity waves (solitary), Grimshaw (R.), *4654*
- energy storage, storage, tanks, thermal effects, thermosyphons, Young (M.F.), Baughn (J.W.), *4714*
- condensers, heat exchanger (foldedtube), heat exchangers, tube bundles, Pandolfini (P.P.), Dugger (G.L.), (et al.), *4716*
- bottom irregularities, ocean air interaction, oceanography, stratification, Flierl (G.R.), *4867*
- diffusion, oceanography, stratification, Turner (J.S.), *4870*
- estuaries, wedges, Grubert (J.P.), *5392*
- spectral analysis, two dimensional flow, vortex flow, Myers (R.B.), Taylor (T.D.), (et al.), *5396*
- baroclinic instability, hydrodynamic stability, oceanography, rotating fluids, Killworth (P.D.), *5919*
- mixing layers, oceanography, turbulence (geophysical), Kundu (P.K.), *5926*
- baroclinic waves, Johnson (E.R.), *5937*
- heat transfer, interface phenomena, two component flow, velocity profiles, Takahashi (M.), Inoue (A.), (et al.), *6600*
- estuaries, galerkin method, two dimensional flow, Rasmussen (H.), *6807*
- boundary layer (atmospheric), boundary layer (thermal), environmental tests, roughness, Ogawa (Y.), Diosey (P.G.), *6846*
- boundary layer (turbulent), buoyancy, entrainment, Kitaigorodskii (S.A.), *7066*
- inviscid fluid, similarity methods, vorticity, Yih (C.-S.), *7655*
- inviscid fluid, vortex breakdown, vortex flow, Shivamoggi (B.K.), Uberoi (M.S.), *7672*
- containers, flow irregularities, rotating fluids, spin-up, vortices, Greenspan (H.P.), *7674*
- channel flow, flow obstructions, free boundary, two dimensional flow, Janowitz (G.S.), *8532*
- critical phenomena, diffusion, inclined layer, rayleigh number, thermal instability, Paliwal (R.C.), Chen (C.F.), *8712*
- energy conversion, energy storage, heat transfer, packed beds, solar collectors, Phillips (W.F.), *8766*
- roughness, sound propagation, surface waves, Tolstoy (I.), *8859*
- channels (closed), diffusers, ducts (variable area), turbulence, Mehta (P.R.), *9502*
- finite difference methods, mass transfer, oxygen, thermocline, Naito (K.), Nakamura (Y.), (et al.), *9509*
- atmosphere, shear flow, spectra, turbulence (geophysical), Weinstock (J.), *9607*
- channel flow, liquid liquid interface, liquid metals, turbulent flow, Takahashi (M.), Inoue (A.), (et al.), *9691*
- internal waves, ocean air interaction, rotating fluids, Klinck (J.M.), Pietrafesa (L.J.), (et al.), *9938*
- froude number, plumes, rivers, surface tension, Mcclimans (T.A.), Saegrov (S.), *10399*
- axisymmetric flow, differential equations (partial), existence theorems, Yih (C.-S.), *10407*

- entrainment, similarity methods, stresses, turbulent mixing, Kundu (P.K.), *10408*
- energy conversion, ocean, rotating fluids, singularities, sinks, Whitehead (J.A.) Jr., Gershenfeld (N.), *10411*
- gravity waves (internal), hydrodynamic stability, wave interactions, Koop (C.G.), Redekopp (L.G.), *10483*
- navier stokes equation, thermal instability, viscous effects, Makarenko (I.P.), Simuni (L.M.), *10569*
- euler equations, variational methods, vorticity, Saltanov (N.V.), *11372*
- rossby waves, rotating fluids, two component flow, viscous flow, Boyer (D.L.), *11376*
- atmosphere, blunt bodies, froude number, stagnation point, Kitabayashi (K.), *11386*
- convection (free), heat sources, Tupitsyn (V.S.), Chashechkin (Yu.D.), *11514*
- buoyancy, hydrodynamic stability, richardson number, shear flow, turbulent flow, Kranenburg (C.), *11535*
- buoyancy, spectra, turbulence, Ogino (F.), Komori (S.), (et al.), *11550*
- gravity waves, nonlinear analysis, shear flow, wave trains, Liu (A.K.), *11562*
- gravity waves (internal), ocean waves, rotational flow, Friedlander (S.), Siegmann (W.L.), *11619*
- eigenvalue problems, frequencies, gravity waves (internal), Tam (K.K.), *11623*

stratified waves, nonlinear waves, ocean waves, wave interactions, Petrov (V.V.), *663*

Straub (F.K.), aeroelasticity, blades, finite element techniques, helicopters, rotors, Friedmann (P.P.), *9806*

Straub (J.), see Bauer (K.), *2787*

Straub (J.) eds., steam, thermal properties, thermodynamic properties, transport properties, water, Scheffler (K.), *723, book*

Straubel (H.), aerosols, electric effects, measurements, optical techniques, properties, *8914*

Straughan (B.), continuum theory, liquid crystals (nematic), micropolar media, stability theory, *1056*

- hydrodynamic stability, mixtures, polar fluids, waves, *7141*

Straus (J.M.), convection, heat addition, hydrodynamic stability, porous media, rayleigh number, saturation, Schubert (G.), *11367*

Strauss (W.A.), see Costa (D.G.), *4165*

- see Menzala (G.P.), *7171*

Strawderman (W.A.), fluid-structure interaction, plates, resonance, vibration (flow induced), Ko (S.-H.), (et al.), *4767*

Strazisar (A.J.), axial compressors, rotors, shock waves, transonic flow, visualization, Powell (J.A.), *6742*

- see Powell (J.A.), *10537*

stream function, finite difference methods, viscous flow, vorticity, Cooke (C.H.), *583*

- finite element techniques, iterative methods, navier stokes equation, Dhatt (G.), Fomo (B.K.), (et al.), *3143*
- forming, plane strain, plasticity, Tomita (Y.), Seguchi (Y.), (et al.), *3274*
- navier stokes equation, stagnation point, unsteady flow, vorticity, Da Cunha (D.M.), Nee (V.W.), *3625*
- finite difference methods, navier stokes equation, reynolds number (small), vorticity, Rubin (S.G.), Khosla (P.K.), *4588*
- galerkin method, navier stokes equation, rotating disks, vorticity, Adams (M.L.), Szeri (A.Z.), *7665*
- convection (free), enclosure flow, finite element techniques, mathematical models, vorticity, Reddy (J.N.), Satake (A.), *8726*
- compressible flow, magneto fluid dynamics, plates (skew), theory, Chandna (O.P.), Barron (R.M.), *8814*
- fluid injection, magneto fluid dynamics, non newtonian flow, pressure gradient, Cobble (M.H.), *8820*

streamlines, compressible flow, plane flow, rotational flow, subsonic flow, vortex flow, Nikolskiy (A.A.), *568*

- boundary layer (three dimensional), boundary layer (turbulent), Bam-Zelikovich (G.M.), *596*
- airplanes, lift, potential flow, sprays, trajectories, vortices, Wickens (R.H.), *1620*
- magneto fluid dynamics, rotational flow, theory, two dimensional flow, Chandna (O.P.), Toews (H.), (et al.), *2875*
- half space, reservoirs, singularities, viscous flow, Hasegawa (E.), Fukuda (H.), *3516*
- high speed flow, reynolds number (high), Riley (N.), *3694*
- air, irrotational flow, siphons, Ali (K.H.M.), Pateman (D.), *6613*
- conformal mapping, free jets, incompleteness, plates, potential flow, Van Der Zanden (J.), *7663*
- compressible flow, hypersonic flow, numerical methods, three dimensional flow, viscous effects, Kim (M.D.), Thareja (R.R.), (et al.), *7691*
- finite element techniques, fluid mechanics, porous media, Christian (J.T.), *7981*
- helical flow, magneto fluid dynamics, modes, two dimensional flow, Rakhimov (A.A.), *9788*
- centrifugal compressors, compressible flow, inviscid fluid, three dimensional flow, Bosman (C.), *11750*

streams, flow measurement, rivers, Biritskii (M.I.), *1900*

- discharges, hydrology, rivers, Zheleznyakov (G.V.), Danilevich (B.B.), *4045*
- particle size, particles, sediment transport, stochastics, Troutman (B.M.), *6965*
- kelvin-helmholtz instability, magneto fluid dynamics, porous media, Sharma (R.C.), Singh (H.), (et al.), *7901*
- barriers, impact, magneto fluid dynamics, waves, Berkovskii (B.M.), Bashtovoi (V.G.), (et al.), *9798*
- finite difference methods, navier stokes equation, oscillating bodies, spherical bodies, Urakawa (T.), Takahashi (K.), *11365*

Stredulinsky (D.C.), see Jones (H.W.), *1822*

Street (R.L.), see Wang (C.S.), *986*

Streeter (V.L.), see Wylie (E.B.), *11598*

Strehmel (K.), matrix methods, runge kutta method, stability (numerical), *7189*

Streichenko (I.G.), see Khoroshun (L.P.), *7341*

Strelkov (S.P.), continuum mechanics, mechanics, solid mechanics, waves, *3074, book*

strength, composite structures, laminates, Rabotnov (Yu.N.), *290*

- clay, modeling, Mayne (P.W.), *413*
- clay, modeling, plane strain, saturation, Mitachi (T.), Kitago (S.), *414*
- failure, granular media, Davis (R.O.), Mullenger (G.), *417*
- compressible flow, ice mechanics, material testing, rate sensitivity, Sinha (N.K.), *493*
- cables, ropes, wires, Matanzo (F.) Jr., Metcalf (J.T.) Jr., *536*
- exercise, experimental results, materials properties, tendons, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *1032*
- beams (sandwich), laminates, Foschi (R.O.), Barrett (J.D.), *1224*
- cyclic testing, sand, shear strength, Tatsuoka (F.), Silver (M.L.), (et al.), *1316*
- cyclic testing, sand, shear strength, stress strain relationships, Tatsuoka (F.), Silver (M.L.), (et al.), *1317*
- boreholes, fracture, rocks, Stimpson (B.), *1337*
- aging, concrete, Naik (T.R.), *1440*
- concrete, fatigue, Tepfers (R.), *1443*
- containment, reinforced concrete, seismic loading, slabs, stiffness, White (R.N.), Perdikaris (P.C.), (et al.), *1462*
- flexure, gears, hardness, Bazhenov (V.G.), Kravchenko (A.A.), (et al.), *1471*
- fibers, filamentary structures, paper, yarn, Dent (R.W.), *2253*
- anisotropy, layered media, soils, Krishna Murthy (M.), Nagaraj (T.S.), (et al.), *2379*
- rocks, Yoshinaka (R.), Yamabe (T.), *2389*
- friction, rocks, Stimpson (B.), *2391*
- concrete, strain measurement, stress analysis, triaxial loading, Gerstle (K.H.), Ashchi (H.), (et al.), *2486*
- disks, gas turbines, high speed, steel, Shikida (M.), Kanayama (Y.), (et al.), *2501*
- fibers, reinforced concrete, Stages (A.H.), Minor (J.), *2516*
- cyclic loading, fatigue, life expectancy, random loading, Kruk (B.Z.), Kuzmenko (V.A.), (et al.), *2527*
- bending, fatigue, gear teeth, Oda (S.), Shimatomi (Y.), (et al.), *2565*
- materials properties, metallic composites, stochastics, Hughes (J.D.H.), Morley (H.), (et al.), *3282*
- flexible bodies, shafts, shells (cylindrical), Mizoguchi (K.), Shirakawa (K.), (et al.), *3285*
- elastic constants, sand, saturation, triaxial tests, Ricceri (G.), Soranzo (M.), *3399*
- armor, impact, rocks, Lutton (R.J.), Houston (B.J.), (et al.), *3414*
- bending, powder metallurgy, scale effects, Fridman (V.M.), Shcherban (N.I.), *3480*
- beams, bonded joints, laminates, stiffness, wood structures, Marx (C.M.), Moody (R.C.), *3528*
- columns, flexure, punch problems, reinforced concrete, slabs, Gesund (H.), Goli (H.B.), *3532*
- containers, paper, stress strain relationships, Urbanik (T.J.), *3555*
- dynamic fracture, fracture, plastics, plates, polymethyl-methacrylate, Tsai (Y.M.), Chen (Y.T.), *4499*
- anchors, bolts, concrete, pull-out tests, Bungey (J.H.), *4506*
- cements, compression, Granju (J.L.), Maso (J.C.), *4532*
- material testing, textiles, Barker (R.L.), Poole (H.W.), (et al.), *5139*
- composite materials, fracture mechanics, J-integral, laminates, stress intensity factor, three dimensional formulation, Altus (E.), Rotem (A.), *5312*
- material testing, materials properties, mechanical properties, testing equipment, Voloshchenko (A.P.), Kuzema (Yu.A.), (et al.), *5326*
- steel, stress strain relationships, surfaces, yield condition, Sasaki (H.), Sato (Y.), *5327*
- stiffness, structural analysis, torsion, Shermer (C.L.), *5355*
- adhesion, composite materials, compression, fibers, Martinez (G.M.), Piggott (M.R.), (et al.), *6190*
- composite materials, compression, fibers, mechanical analysis, Piggott (M.R.), *6191*
- quicksand, stability, Hanzawa (H.), *6378*
- models, rocks, time dependence, Kaiser (P.K.), Morgenstern (N.R.), *6402*
- anisotropy, fatigue, heat treatment, life expectancy, rolling, Nisitani (H.), Kage (M.), *6422*
- composite materials, failure, plane stress, Tennyson (R.C.), Nanyaro (A.P.), (et al.), *6435*
- probability theory, reliability analysis, Ditlevsen (O.), *6515*
- beams, grooves, reinforced concrete, torsion, Pandit (G.S.), Gupta (S.P.), *6519*
- cements, compression, Granju (J.L.), Maso (J.C.), *6520*

- composite materials, cyclic loading, thermal loading, Mukherjee (M.K.), *7300*
- composite materials, fracture, glass, glass fibers, Roginskii (S.L.), Kanovich (M.Z.), *7307*
- ceramics, crystals, flaws, grinding, polycrystalline materials, Rice (R.W.), Mecholsky (J.J.), (et al.), *7469*
- aging, beryllium, deformation (plastic), hydrogen embrittlement, Lashuk (N.K.), Tkachenko (V.G.), (et al.), *7502*
- bending, flexure, ice, Timco (G.W.), *7565*
- compression, concrete, saturation, tension, Karapetian (K.S.), Kotikian (R.A.), (et al.), *7566*
- compression, mechanical properties, Azarov (A.D.), *7567*
- adhesion, composite materials, shear, Rybin (A.A.), *7569*
- bimetallic materials, coatings, machine elements, probability theory, reliability, Kalmutskii (V.S.), *7600*
- composite materials, cylindrical bodies, elastic constants, polymers, textiles, Dumont (J.P.), *8220*
- composite materials, fibers, fracture, materials properties, Chou (T.-W.), Kelly (A.), *8227*
- fracture mechanics, microfracture, rocks, strain rate, Lankford (J.), *8351*
- crack growth, fracture mechanics, rocks, time dependence, Wilkins (B.J.S.), *8352*
- bending, fracture, rocks, Swan (G.), *8357*
- brittle materials, cracking, fracture criteria, Bascoul (A.), Maso (J.C.), *8399*
- anisotropic media, composite materials, Margolin (G.G.), *9253*
- modeling, rocks, strain rate, Nishimatsu (Y.), Yamaguchi (T.), (et al.), *9367*
- correlation, fatigue, life expectancy, Romashov (R.V.), Fedorov (V.V.), (et al.), *9385*
- ductility, reinforced concrete, slabs, Mirza (S.A.), Macgregor (J.G.), *9445*
- concrete, Popovics (S.), *9448*
- rocks, tensile strength, Wijk (G.), *10263*
- deformation (plastic), fatigue, plastic behavior, Glikman (L.A.), Gurevich (B.G.), *10274*
- data analysis, estimation, fatigue, statistical theory, Nishijima (S.), *10323*
- design (ultimate strength), numerical methods, plates, shells (axisymmetric), Dzygadlo (Z.), Olejnik (A.), *10350*
- deformation, plastics, pressure vessels, reinforced bodies, shells (torispherical), Barton (D.C.), Soden (P.D.), (et al.), *10367*
- adhesives, bonded joints, fatigue, finite element methods, Sawyer (J.W.), Cooper (P.A.), *10383*
- bonded joints, Zabela (K.A.), Znachkov (Yu.K.), *10384*
- axial loading, caissons, foundations, piers, Gruodis (R.I.), *11329*

Strepko (I.T.), see Lutskiv (N.M.), *4221*

stress analysis, finite element techniques, free boundary, Allison (I.M.), Soh (A.K.), *87*
- holes, pressure vessels, shells (axisymmetric), Reuss (P.), *241*
- filament winding, reinforced openings, shells (nonlinear), Lykyanenko (P.D.), Makarenkov (A.G.), *251*
- inclusions, viscoelastic materials, viscoelasticity, Laws (N.), *260*
- elastoplasticity, forming, plasticity, Lee (E.H.), *273*
- elasticity (nonhomogeneous), plates (anisotropic), Suzuki (S.), *317*
- conical bodies, penetration, soils, Forrestal (M.J.), Norwood (F.R.), (et al.), *406*
- bones, damage, stress concentration, Brown (T.D.), Way (M.E.), (et al.), *1035*
- elasticity, finite element techniques, isoparametric formulation, three dimensional formulation, Surana (K.S.), *1134*
- excavation, mining, numerical methods, tunnels, Diering (J.A.C.), *1335*
- computer aided design, plates, rolling, Lahoti (G.D.), Akgerman (N.), (et al.), *1342*
- cavities, integro differential equations, oblateness, penny shaped crack, stress intensity factor, Hirai (H.), Satake (M.), *1365*
- holography, lasers, moire methods, optical techniques, Chiang (F.P.), *1393*
- finite element methods, scale effects, Nath (B.), Nath (P.), *2069*
- finite element methods (hybrid), interpolation, plates (thick), Spilker (R.L.), Munir (N.I.), *2072*
- cylindrical bodies, finite element techniques, singularities, Solecki (J.S.), Swedlow (J.L.), *2073*
- cavities, cylindrical bodies, Kawakami (T.), Nakahara (I.), (et al.), *2212*
- beams, bonded joints, wood, Marchand (G.E.), *2251*
- plates (anisotropic), plates (circular), Zastrow (U.), *2276*
- fracture mechanics, microcracks, stress intensity factor, Wilkinson (D.S.), Vitek (V.), *2435*
- airplane structures, fracture mechanics, survey, Liebowitz (H.), Subramonian (N.), (et al.), *2437*
- composite materials, finite element techniques, notch sensitivity, shear loading, Herakovich (C.T.), Bergner (H.W.) Jr., *2455*
- concrete, strain measurement, strength, triaxial loading, Gerstle (K.H.), Ashchi (H.), (et al.), *2496*
- shear strength, slabs, ultimate strength, Gerss (F.K.), Waine (B.R.), (et al.), *2517*
- rails, thermal effects, welded joints, Edel (K.-O.), *2526*
- cooling towers, curvature, imperfection sensitivity, Elinas (C.P.), Croll (J.G.A.), (et al.), *2540*
- duhamel's integral, dynamic loads, floors, Becker (R.), *2541*
- dynamic analysis, offshore structures, towers, Bolotin (V.V.), Chirkov (V.P.), (et al.), *2544*
- design (optimum), pressure vessels, shells (ellipsoidal), shells (toroidal), Smith (C.O.), *2547*
- elastoplasticity, incremental analysis, loads, Cheng (S.Y.), Hsu (T.R.), (et al.), *3271*
- beams (composite), beams (variable cross section), concrete, fracture mechanics, web openings, Swartz (S.E.), Eliufoo (K.S.), *3294*
- elastic bodies, optimization, shape factors, Oda (J.), Yamazaki (K.), *3519*
- cooling towers, imperfections, reinforced concrete, shells, Kato (S.), Yokoo (Y.), *3562*
- finite element methods, pressure vessels, shells, Aggarwal (S.K.), Nayak (G.C.), (et al.), *3566*
- beams, bolted joints, experimental mechanics, structural elements, Krishnamurthy (N.), *3581*
- elasticity (linear), fracture, solid mechanics, Faupel (J.H.), Fisher (F.E.), *4330, book*
- finite element methods, turbines, wheels, Golovin (O.A.), Matveev (A.P.), (et al.), *4384*
- cracks, reinforced concrete, Bazant (Z.P.), Tsubaki (T.), *4533*
- anisotropic media, coordinate systems, tensor methods, Ting (T.C.T.), *5094*
- coatings, piston rings, residual stresses, thermoelasticity (steady), Kulik (A.Ya.), Shapiro (M.I.), *5099*
- adhesives, bonding, textiles, Hearle (J.W.S.), Ozsanlav (V.), *5135*
- anisotropy, composite materials, photoelasticity, Jacob (K.A.), *5141*
- flywheels, plates (thick), rotating disks, Pardoen (G.C.), Nudenberg (R.D.), (et al.), *5168*
- drops, impact, Perelman (R.G.), Freishist (N.A.), *5251*
- experimental methods, friction (solid solid), interference fits, photoelasticity, Ghosh (S.P.), Dattaguru (B.), (et al.), *5316*
- displacement, metrology, optical techniques, strain, surfaces, Stetson (K.A.), *5319*
- creep, dislocations, grain boundaries, hardening, stainless steels, Harris (M.), Davies (T.J.), *5332*
- crack control, crack initiation, cracking, ductile fracture, Georgiev (M.N.), Morozov (E.M.), *5341*
- buildings, cushioning materials, foundations, structural support, thermoplasticity, Klepikov (S.N.), Khorunzhii (V.I.), *5361*
- deformation, earth, faults, Dravinski (M.), Trifunac (M.D.), *5984*
- biological joints, biomechanics, hips, Brinckmann (P.), Frobin (W.), (et al.), *6004*
- bones, fracture, prosthetic devices, Carter (D.R.), Vasu (R.), *6005*
- beams, bending, haar functions, plates, Vasarhelyi (A.), *6092*
- contact problems, irregular elements, machine design, rotating bodies, Bagci (C.), Wong (J.C.), (et al.), *6117*
- boundary elements, elasticity (linear), plates, Sirtori (S.), *6172*
- plates, shells, stability theory, vibration, Galimov (K.Z.) eds., Sachenkov (A.V.), *6215, book*
- cavities, clay, pore pressure, Carter (J.P.), Randolph (M.F.), (et al.), *6383*
- cavities, rocks, rupture, Dunin (S.Z.), Sirotkin (V.K.), (et al.), *6400*
- elastic foundations, ocean bed, pipelines, soil mechanics, underwater structures, winkler foundation, Hobbs (R.E.), *6551*
- rotors, thermal stresses, turbines, Strunkin (V.A.), Segadeev (R.G.), (et al.), *6950*
- boundary value problems, conduction (unsteady), differential equations (ordinary), lanczos-chebyshev, Chen (P.Y.P.), *7192*
- displacement, plasticity, semi infinite media, Parvulescu (N.S.), *7260*
- gravity, half space, holes, tunnels, Spencer (S.E.), Sinclair (G.B.), *7264*
- dynamic analysis, towing cables, Matuk (C.), *7315*
- edge cracks, plates, semi infinite media, Hasebe (N.), Inohara (S.), *7331*
- beams (elastic), beams (thin section), stability, Shirmanov (V.S.), *7356*
- stress strain relationships, upset forging, Dadras (P.), *7454*
- displacement, integral methods, numerical analysis, Ballangadi (M.), Chiang (F.P.), *7548*
- fracture mechanics, inelasticity, pipes, thermal stresses, Severud (L.K.), *7619*
- mine shafts, mines, pipes, reinforced bodies, thin walled structures, Tsoi (N.G.), Kolesnikov (A.V.), (et al.), *7621*
- bolts, screws, stress concentration, threaded joints, Schnack (E.), *7636*
- aerodynamic interference, aerodynamic loads, airplane structures, airplanes, external stores, Ronen (T.), Hanin (M.), *7789*
- aerodynamic loads, axial compressors, inviscid fluid, unsteady flow, wind tunnels, Lambertz (J.), Wallmann (T.), (et al.), *7808*
- half space, inclusions, seismic waves, sh waves, Gamer (U.), *8004*
- density boundaries, earth, elastic behavior, Trubitsyn (A.P.), Karasev (A.A.), *8007*
- boundary integral methods, finite element methods (hybrid), Brady (B.H.G.), Wassyng (A.), *8150*
- computing techniques, finite element techniques, plates (parallel), Zollinger (M.), *8154*
- edge dislocations, multiphase media, orthotropic materials, Wu (R.S.), Chou (Y.T.), *8191*
- anisotropic media, rotating disks, Genta (G.), Gola (M.), (et al.), *8255*
- computing techniques, cracks, stress intensity factor, Kumar (M.), *8418*
- earth, in situ stress distribution, Nemirovsky (Yu.V.), Tyrymov (A.A.), *8956*
- aneurysms, biomechanics, heart, shells (spherical), Radhakrishnan (S.), Ghista (D.N.), (et al.), *9064*

- elasticity, finite element methods (hybrid), transformation, Nath (B.), *9139*
- shells (cylindrical), shells (long), Jezso (K.), *9268*
- inserts, junctions, shells (shallow), shells (spherical), Varga (K.), *9269*
- deformation, holography, moire methods, Rastogi (P.K.), Spajer (M.), (et al.), *9419*
- high temperature, lattices, oxidation, semiconductors, strain, Franz (G.), Hartmann (W.), *9421*
- pressure vessels, shells (anisotropic), shells (of revolution), tanks, wirewound vessels, Timonin (A.M.), *9464*
- adhesives, bending, composite materials, joints, shear stress, Yuceoglu (U.), Updike (D.P.), *9488*
- bonded joints, finite element methods, interface phenomena, lap joints, Carpenter (W.C.), *9489*
- magneto fluid dynamics, relaxation, stability theory, tensor methods, Simkhovich (S.L.), *9795*
- mathematical models, nonlinear programming, optimization, shells (cylindrical), stresses, Michael (W.), Siddall (J.N.), *10090*
- plates (annular), plates (nonhomogeneous), rotating disks, Bhaduri (S.), *10162*
- impact, lasers, photoelasticity (dynamic), Greiller (J.P.), Lagarde (A.), *10311*
- experimental methods, fatigue, finite element methods, fracture mechanics, power plants, strain gages, Takhar (J.S.), Fryzel (R.A.), *10320*
- photoelasticity, photoelasticity (three dimensional), scattered light, Ascough (J.), *11313*

stress concentration, elasticity (linear), singularities, stresses, wedges, Dempsey (J.P.), *238*

- finite element techniques, plane stress, structural optimization, Schnack (E.), *239*
- elasticity (nonhomogeneous), half space, winkler foundation, Calladine (C.R.), Greenwood (J.A.), *257*
- bones, damage, stress analysis, Brown (T.D.), Way (M.E.), (et al.), *1035*
- elasticity (nonhomogeneous), half space, inhomogeneities, Fujita (T.), Tsuchida (E.), *1177*
- holes, plates (perforated), Sinclair (G.B.), *1179*
- composite materials, orthotropic materials, plates (anisotropic), stretching, Polekh (B.L.), Makhnitskii (R.N.), *1180*
- contact problems, shells (cylindrical), structural support, Kanaun (S.K.), Elkovskaya (T.M.), *1237*
- cavities, dynamic response, sh waves, Wall (D.J.N.), Varadan (V.V.), (et al.), *1306*
- elliptical holes, holes, photoelasticity, Hanus (J.B.), Burger (C.P.), *1389*
- dislocations, elastic constants, orthotropic materials, strips, Krenk (S.), *2213*
- reinforced openings, shells (spherical), Polekh (B.L.), Galasi (A.A.), (et al.), *2268*
- approximations, green function, stress intensity factor, strips, Rooke (D.P.), Baratta (F.I.), (et al.), *2431*
- combined loading, fatigue, material testing, notch sensitivity, Kurajian (G.M.), Na (T.Y.), *2433*
- couple stresses, crack branching, crack propagation, stress intensity factor, Itou (S.), *2447*
- cracking, elastoplasticity, finite element techniques, welding, Karppi (R.A.J.), Toyoda (M.), (et al.), *2461*
- cylindrical bodies, holes, photoelasticity (three dimensional), Stanley (P.), Day (B.V.), *2468*
- plates (perforated), strips, Hamada (M.), Mizushima (I.), (et al.), *3234*
- elasticity (three dimensional), indentation, semi infinite media, Fujita (T.), Tsuchida (E.), (et al.), *3235*
- aluminum alloys, deformation (plastic), welded joints, Demina (N.I.), Zastolskaya (Z.K.), (et al.), *3584*
- cracks, elastic bodies, inclusions, thermal stresses, Rokne (J.), Dhaliwal (R.S.), (et al.), *3990*
- earth, earth's crust, faults, sliding, viscoelasticity, Mukherji (P.), Pal (B.P.), (et al.), *4031*
- beams, holes, Mazilu (P.), Ieremia (M.), (et al.), *4201*
- composite structures, wedges, Dempsey (J.P.), Sinclair (G.B.), *4335*
- fatigue, shafts, turbines, Jackson (M.C.), Umans (S.D.), *4483*
- beams, prestressed concrete, Ficker (M.), *4535*
- plates (holed), plates (orthotropic), rotating disks, Genta (G.), Gola (M.), *5167*
- elastoplasticity, notch sensitivity, Molski (K.), Glinka (G.), *5300*
- boundary integral methods, elastodynamics, laplace transform, Manolis (G.D.), Beskos (D.E.), *6160*
- cylindrical bodies, elasticity (linear), green function, Hasegawa (H.), *6162*
- elastic behavior, inclusions, infinite medium, nonhomogeneous media, Andreikiv (A.E.), Stadnik (M.M.), (et al.), *6164*
- elasticity (nonhomogeneous), laminates, nonhomogeneous media, Plevako (V.P.), *6170*
- defects, glass fibers, Ermak (A.A.), Mikhailov (A.M.), *6182*
- holes, photoelasticity, plane strain, plates (holed), strain measurement, Erickson (M.), Durelli (A.J.), *6461*
- finite element techniques, thermoelasticity, Gibert (P.), Gorge (Y.), *7213*
- anisotropic media, composite materials, edge effects, wedges, Ting (T.C.T.), Chou (S.C.), *7269*
- bars, photoelasticity, Fessler (H.), Woods (P.J.), *7284*
- holes, shells (spherical), Reissner (J.E.), *7333*
- plates (anisotropic), plates (holed), plates (thick), Shakiyrvan (V.A.), *7339*
- plates (anisotropic), plates (holed), Hoff (N.J.), *7340*
- photoelasticity, stress intensity factor, Richard (H.A.), *7541*
- bolts, screws, stress analysis, threaded joints, Schnack (E.), *7636*
- corners, elasticity (linear), inclusions, Gomez (C.), Dundurs (J.), *8186*
- cracks, fredholm equations, Stadnik (M.M.), Gorbachevskii (I.Ya.), *8187*
- cavities, infinite medium, Wheeler (L.T.), Kunin (I.A.), *8188*
- boundary elements, plasticity, pressurized pipes, Oliveira Faria (L.M.), Mota Soares (C.A.), (et al.), *8215*
- bending, composite structures, deformation, fibers, layered media, Isupov (L.P.), *8223*
- crystals, deformation (plastic), dislocations, micromechanics, Kulagina (V.V.), Dudarev (E.F.), (et al.), *8416*
- cylindrical bodies, rolling, thermal stresses, thermoelasticity (transient), Takeuti (Y.), Ishida (R.), *8876*
- damage, laminates, thermography, vibration, Henneke (E.G.) II, *10135*
- collapse, cylindrical bodies, holes, Montague (P.), Horne (M.R.), *10168*
- elasticity, friction, Dundurs (J.), Comninou (M.), *10288*
- creep, lead, models, ratchetting, thermal shock, Hyde (T.H.), Fessler (H.), (et al.), *10333*

stress corrosion, corrosion, electrochemical noise, Hladky (K.), Dawson (J.L.), *5335*

- alloys, cracking, metals, Koval (V.P.), Karvatskii (L.M.), (et al.), *6423*
- crack propagation, dynamic analysis, kinetic theory, Krausz (A.S.), Mshana (J.), (et al.), *6453*
- cracking, hydrogen embrittlement, Poppering (R.), Schwenk (W.), *7490*
- cracks, fracture mechanics, spectroscopy, torsion, Briggs (A.), Airey (R.), (et al.), *9391*
- alloys, crack propagation, metallurgy, nucleation, Chu (W.-Y.), Hsiao (C.-M.), (et al.), *9394*

stress intensity factor, combined loading, cracks, finite element techniques, fracture, Ishikawa (H.), *85*

- crack opening displacement, finite element techniques, three dimensional formulation, Tseng (A.A.), *90*
- elasticity (linear), shells (spherical), stamping, torsion, Aleksandrov (V.M.), Karpenko (V.A.), *244*
- crack growth, creep rupture, fractographic tests, Gladshtein (V.I.), Semenova (T.N.), *441*
- copper, crack growth, fatigue, fracture, microstructures, Mullner (H.), Weiss (B.), *444*
- concentrated load, crack opening displacement, fracture angle, singularities, strain energy, Gdoutos (E.E.), *458*
- anisotropic media, penny shaped crack, shear stress, Dahan (M.), *459*
- crack growth, griffith cracks, interaction, thermoelasticity (transient), Hata (T.), *460*
- biaxial loading, crack opening displacement, elasticity (linear), Gross (B.), *461*
- cracks, finite element techniques, Blackburn (W.S.), Hellen (T.K.), *463*
- crack propagation, elasticity (three dimensional), Kassir (M.K.), *465*
- dynamic behavior, impact, Kishimoto (K.), Aoki (S.), (et al.), *471*
- caustics, crack arrest, photography, Theocaris (P.S.), Milios (J.), *472*
- bimodulus materials, caustics, composite materials, crack opening displacement, interface cracks, Theocaris (P.S.), Stassinakis (C.A.), *474*
- composite materials, crack arrest, dynamic loads, interface cracks, Theocaris (P.S.), Milios (J.), *475*
- composite materials, crack propagation, inclusions, Averbukh (A.Z.), *476*
- crack opening displacement, finite element techniques, testing equipment, Papaspyropoulos (V.), Ahmad (J.), *477*
- corners, elastic behavior, numerical methods, singular integral equations, Theocaris (P.S.), Ioakimidis (N.I.), *478*
- asymptotic behavior, crack propagation, finite element techniques, Bazant (Z.P.), Cedolin (L.), *479*
- corners, fasteners, finite element methods, holes, Grandt (A.F.) Jr., Kullgren (T.E.), *480*
- crack tip geometry, experimental results, photoelasticity, Bakshi (O.A.), Zaitsev (N.L.), (et al.), *482*
- crack growth, holes, radial loading, Brussat (T.R.), *1364*
- cavities, integro differential equations, oblateness, penny shaped crack, stress analysis, Hirai (H.), Satake (M.), *1365*
- crack growth, crack opening displacement, elastoplasticity, yield criteria, De Koning (A.U.), *1378*
- boundary elements, cracks, Blandford (G.E.), Ingraffea (A.R.), (et al.), *1396*
- design (optimum), fillets, penalty function, Queau (J.P.), Trompette (P.), *1425*
- crack initiation, fatigue, fracture mechanics, notch sensitivity, Livesey (V.B.), Knott (J.F.), *2408*
- crack propagation, photoelasticity, wienerhopf technique, Bandyopadhyay (S.N.), Deysarker (H.K.), *2430*
- approximations, green function, stress concentration, strips, Rooke (D.P.), Baratta (F.I.), (et al.), *2431*
- cracks, elastic behavior, finite difference methods, j-integral, Vaikovskii (S.N.), Kurguzov (V.D.), *2432*
- fracture mechanics, microcracks, stress analysis, Wilkinson (D.S.), Vitek (V.), *2435*
- couple stresses, crack branching, crack propagation, stress concentration, Itou (S.), *2447*

- cracks, shear loading, twinning, Kuliev (V.D.), *2457*
- crack tip geometry, photoelasticity, Rossmanith (H.P.), *2467*
- conduction (steady), penny shaped crack, thermal stresses, Barber (J.R.), *2967*
- corners, elasticity (linear), plates, re-entrant corners, Theocaris (P.S.), Prassianakis (J.), *3233*
- crack growth, environmental tests, fatigue, material testing, steel, Stewart (A.T.), *3448*
- crack opening displacement, crack propagation, photoelasticity (dynamic), Rossmanith (H.P.), *3453*
- multiple cracks, shells (cylindrical), three dimensional formulation, torsion, Shibuya (T.), Koizumi (T.), (et al.), *3457*
- crack propagation, strips, viscoelasticity (dynamic), wiener-hopf technique, Popelar (C.H.), Atkinson (C.), *3468*
- impact, interface cracks, Abou-Sayed (I.S.), Burgers (P.), (et al.), *3470*
- composite materials, crack growth, crazing, penny shaped crack, Mahapatra (R.B.), Satapathy (P.K.), (et al.), *3473*
- computing techniques, dynamic fracture, finite element techniques, viscoelastic materials, Aoki (S.), Kishimoto (K.), (et al.), *3476*
- finite element techniques, fracture mechanics, three dimensional formulation, torsion, wedges, Tseng (A.A.), Berry (J.T.), *3477*
- crack opening displacement, fracture toughness, material testing, surface flaws, weight function, Bar-Tikva (D.), Grandt (A.F.) Jr., (et al.), *3478*
- crack propagation, mixed mode fracture, photoelasticity, surface flaws, Smith (C.W.), Peters (W.H.), (et al.), *3479*
- crack growth, creep, fatigue, fracture mechanics, high temperature, Yokobori (T.), Sakata (H.), *3494*
- crack growth, creep, fatigue, fracture mechanics, high temperature, Yokobori (T.), Sakata (H.), (et al.), *3495*
- complex variables, plates (weakened), Kuliev (V.D.), *4334*
- crack growth, disks, Yarema (S.Ya.), Ivanitskaya (G.S.), *4475*
- crack propagation, endurance limit, fatigue, Davenport (R.T.), Brook (R.), *4484*
- crack growth, creep rupture, diffusion, void growth, Wilkinson (D.S.), *4487*
- crack penetration, edge cracks, infinite medium, Malti (M.), Paramguru (R.), *4482*
- crack growth, finite element techniques, Nikishkov (G.P.), Vainshtok (V.A.), *4494*
- blades, crack propagation, thermal fatigue, Getsov (L.B.), Kabelevskii (M.G.), *4917*
- bonded joints, composite materials, edge cracks, fracture, singular integral equations, Bakioglu (M.), *5127*
- grain size, microstructures, thresholds, yield condition, Mutoh (Y.), Radhakrishnan (V.M.), *5288*
- bending, caustics, edge cracks, Farahmand (B.), Raftopoulos (D.D.), *5297*
- computing techniques, elasticity, multiple cracks, Vialaton (G.), Brunet (M.), (et al.), *5298*
- beams, bending, cracks, Panko (I.N.), Yakovchik (V.A.), *5299*
- crack opening displacement, photoelasticity, plastic flow, steel, Bandyopadhyay (S.N.), Singh (N.), (et al.), *5304*
- composite materials, fracture mechanics, j-integral, laminates, strength, three dimensional formulation, Aitus (E.), Rotem (A.), *5312*
- finite element techniques, fracture mechanics, multiple cracks, singularities, Staab (G.H.), Sun (C.T.), *5313*
- crack tip geometry, error, fracture mechanics, photoelasticity, Doyle (J.F.), Kamle (S.), (et al.), *5317*
- boundary integral methods, elliptic equations, singularities, Xanthis (L.S.), Bernal (M.J.M.), (et al.), *6085*
- computing techniques, continuum mechanics, crack propagation, fracture, geomechanics, hydraulic fracturing, Hanson (M.E.), Shaffer (R.J.), *6434*
- boundary integral methods, crack opening displacement, edge cracks, elastic behavior, variable properties (material), Atkinson (C.), Xanthis (L.S.), (et al.), *6441*
- elliptical cracks, finite element techniques, plates (holed), Grandt (A.F.) Jr., *6445*
- cracks, elastoplasticity, finite element methods (hybrid), Kuna (M.), Bilek (Z.), (et al.), *6447*
- bimodulus materials, elastodynamics, interface cracks, waves, Hanzawa (H.), Kishida (M.), (et al.), *6451*
- biaxial loading, crack propagation, stability theory, Alpa (G.), Bozzo (E.), (et al.), *6454*
- boundary elements, quarter-point elements, three dimensional formulation, Ingraffea (A.R.), Manu (C.), *6459*
- caustics, cracks, fracture mechanics, Rossmanith (H.P.), *6462*
- aluminum alloys, crack growth, low cycle fatigue, material testing, vacuum, Kirby (B.R.), Beevers (C.J.), *7494*
- corrosion fatigue, crack growth, hydrogen embrittlement, low cycle fatigue, Endo (K.), Komai (K.), (et al.), *7496*
- elliptical cracks, finite element techniques, flaws, Newman (J.C.) Jr., Raju (I.S.), *7518*
- brittle materials, failure, fracture toughness, notch tests, Shih (T.T.), *7519*
- analysis, crack opening displacement, error, stochastics, Rossmanith (H.P.), *7540*
- photoelasticity, stress concentration, Richard (H.A.), *7541*
- crack tip geometry, fracture mechanics, photoelasticity, white light, Chiang (F.P.), Asundi (A.), *7565*
- brittle materials, crack propagation, fracture toughness, notch tests, Munz (D.), Bubsey (R.T.), (et al.), *7571*
- acoustic measurements, flaw detection, j-integral, microstructures, nondestructive tests, residual stresses, Kino (G.S.), Barnett (D.M.), (et al.), *7586*
- crack propagation, singularities, Psano (A.), Pasini (A.), *8143*
- cylindrical bodies, edge cracks, interface cracks, penny shaped crack, Fan (Y.-X.), Fan (T.-Y.), (et al.), *8386*
- elasticity, energy release rate, fourier transform, griffith cracks, strips, Dhaliwal (R.S.), Singh (B.M.), *8390*
- edge cracks, elasticity, Bowie (O.L.), Freese (C.E.), *8391*
- caustics, notch sensitivity, Prassianakis (J.N.), Theocaris (P.S.), *8393*
- green function, infinite medium, plates (holed), Shivakumar (V.), Forman (R.G.), *8397*
- crack branching, interface cracks, transforms, wiener-hopf technique, Kuliev (V.D.), *8417*
- computing techniques, cracks, stress analysis, Kumar (M.), *8418*
- computing techniques, corners, fracture mechanics, singular integral equations, Ioakimidis (N.I.), Theocaris (P.S.), *8419*
- correlation, crack growth, stochastics, Dotsenko (A.M.), Denisova (G.B.), *9388*
- biaxial loading, crack opening displacement, fracture criteria, Chou (C.-T.), Kuo (C.-P.), *9397*
- crack opening displacement, griffith cracks, transforms, Tang (R.J.), Wang (K.), *9398*
- crack opening displacement, microcracks, Mccartney (L.N.), *9399*
- interaction, multiple cracks, transforms, Gecit (M.R.), *9401*
- complex variables, corners, crack initiation, holes, Hasebe (N.), Ueda (M.), *9403*
- edge cracks, infinite medium, shear loading, Hara (T.), *9404*
- crack opening displacement, crack propagation, creep rupture, fracture mechanics, Riedel (H.), Rice (J.R.), *9406*
- computing techniques, crack opening displacement, infinite medium, penny shaped crack, Mohapatra (R.B.), Parhi (H.), *9415*
- caustics, crack growth, crack propagation, elastodynamics, Theocaris (P.S.), Papadopoulos (G.A.), *9416*
- calibration, fracture toughness, notch tests, specimen design, Bubsey (R.T.), Munz (D.), (et al.), *9430*
- aluminum alloys, brittle fracture, crack growth, fracture toughness, sheet metal, Yablonskii (I.S.), *9432*
- conformal mapping, gear teeth, numerical methods, Cardou (A.), Tordion (G.V.), *9472*
- shells (anisotropic), shells (cylindrical), Kostenko (I.S.), *10157*
- computer programming, cracks, finite element techniques, pipes, three dimensional formulation, Miyazaki (N.), Watanabe (T.), (et al.), *10284*
- boundary integral methods, elliptical cracks, fracture mechanics, surface flaws, Athanassiadis (A.), Boissenot (J.M.), (et al.), *10287*
- crack tip geometry, elastodynamics, surface flaws, Achenbach (J.D.), Brind (R.J.), *10290*
- brittle fracture, cracks, holes, plates (weakened), singular integral equations, Mirsalimov (V.M.), *10291*
- cylindrical bodies, interface cracks, multiple cracks, torsion, Shibuya (T.), Koizumi (T.), (et al.), *10293*
- cracks, fredholm equations, plates (thick), Sladek (J.), Sumec (J.), *10294*
- biaxial loading, finite element techniques, holes, multiple cracks, Olodimeji (M.K.), *10295*
- elliptical cracks, infinite medium, Borodachev (A.N.), *10297*
- crack opening displacement, dynamic response, finite element techniques, yield criteria, Betser (A.A.), Kobayashi (A.S.), (et al.), *10302*
- cracks, dynamic fracture, singular integral equations, twisting, Shindo (Y.), *10305*
- material testing, nondestructive tests, vibrators, Pye (C.J.), Adams (R.D.), *10310*
- cracks, photoelasticity (dynamic), plane stress, scattered light, Ross (E.L.), Kaminski (G.), (et al.), *10312*
- crack growth, cracking, design, holes, plates (holed), pressure vessels, Rooke (D.P.), *10332*
- calibration, crack growth, finite element methods, fracture toughness, specimen design, Beech (J.F.), Ingraffea (A.R.), *10337*
- fracture mechanics, friction (solid solid), models, wear, Rosenfield (A.R.), *12090*

stress relaxation, creep, material testing, semiconductors, testing equipment, Kalaidzhan (S.E.), Krivoruchko (S.P.), (et al.), *496*

- alloys, data analysis, relaxing media, viscoelastic materials, Povolo (F.), *2230*
- relaxing media, stresses (normal), viscoelastic fluids, viscometry, Pedersen (S.), Chapoy (L.L.), *2577*
- creep, cylindrical bodies, thermoelasticity (transient), Ishikawa (H.), *2974*
- copper alloys, residual stresses, x ray techniques, Amin (K.E.), Ganesh (S.), *4510*
- copper alloys, creep, maraging steel, steel, titanium, Pollock (J.T.A.), Barton (S.G.), (et al.), *6473*
- dislocations, relaxing media, rods, yield criteria, Merzhievskii (L.A.), Shamonin (S.A.), *8200*
- aluminum alloys, plasticity, servomechanisms, steel, strain measurement, Meguid (S.A.), *10334*

- creep, dislocations, friction (internal), models, Mclean (M.), *12093*

stress relieving, holes, residual stresses, shafts, welding, Bush (A.F.), Kromer (F.J.), *6467*
- elastoplasticity, explosives, welded joints, Petushkov (V.G.), Fadeenko (Yu.I.), *10382*

stress rupture, deformation (finite), elasticity (nonlinear), penny shaped crack, Selvadurai (A.P.S.), *234*
- crack opening displacement, environmental tests, failure, life expectancy, plastics, Shanahan (M.E.R.), Schultz (J.), *4486*
- fibers, stress strain relationships, textiles, Horikawa (A.), Yaida (O.), *5132*

stress strain relationships, composite materials, laminates, nonlinear materials, numerical methods, Ditcher (A.K.), Rhodes (F.E.), (et al.), *280*
- higher order theories, plates (orthotropic), plates laminated, plates orthotropic, shear, Ulyashina (A.N.), *319*
- clay, micromechanics, Desai (C.S.), Siriwardane (H.J.), *415*
- creep, dynamic viscoelasticity, polymers, Bruller (O.S.), Kleinemeier (B.), *1191*
- constitutive equations, metals, nonlinear materials, Margetson (J.), *1199*
- cyclic testing, sand, shear strength, strength, Tatsuoka (F.), Silver (M.L.), (et al.), *1317*
- deformation, dies, drawing, Hanaki (K.), Kato (K.), *1344*
- alloys, crystals, cyclic loading, fatigue, Wilhelm (M.), *2241*
- defects, shells (cylindrical), Pobedrya (B.E.), Lovin (V.D.), *2272*
- plates (anisotropic), sheet metal, yield criteria, Ilahi (M.F.), *2275*
- clay, cyclic testing, shear strength, Matsui (T.), Ohara (H.), (et al.), *2378*
- foundations, sand, Gudehus (G.), *2383*
- aorta, blood vessels, Manak (J.J.), *3059*
- plates (weakened), theory, Berezhnitskii (L.T.), Mazurak (L.P.), (et al.), *3299*
- shells (of revolution), shells (stiffened), Isakhanov (G.V.), Gulyar (A.I.), (et al.), *3312*
- anisotropic media, soils, Yoshida (S.), *3400*
- field tests, piles, saturation, soils, Bartolomei (A.A.), Yushkov (B.S.), (et al.), *3408*
- cold working, deformation (plastic), sheet metal, Reif (T.), *3422*
- rocks, strain gages, strain measurement, Duncan Fama (M.E.), Pender (M.J.), *3487*
- containers, paper, strength, Urbanik (T.J.), *3555*
- boundary integral methods, finite element techniques, internal combustion engines, Kvitka (A.L.), Voroshko (P.P.), (et al.), *4199*
- biomechanics, material testing, spine, Hung (T.-K.), Chang (G.-L.), *4906*
- experimental methods, hopkinson bar, relaxing media, viscoelasticity, Tormala (P.), Paakkonen (E.), (et al.), *5108*
- cyclic loading, plasticity, work hardening, Esin (A.), *5119*
- fibers, stress rupture, textiles, Horikawa (A.), Yaida (O.), *5132*
- abrasion, textiles, trials, wear, Raheel (M.), *5136*
- inclusions, iron, triaxial loading, yield condition, Igaki (H.), Ikeda (K.), (et al.), *5325*
- steel, strength, surfaces, yield condition, Sasaki (H.), Sato (Y.), *5327*
- deformation, elastoplasticity, micromechanics, Getman (A.F.), *6189*
- biomechanics, bones, kinematics, spine, stiffness, Laborde (J.M.), Burstein (A.H.), (et al.), *7104*
- experimental methods, nervous system, spine, tissues, Hung (T.-K.), Chang (G.-L.), (et al.), *7105*
- collagen, composite materials, tendons, Kastelic (J.), Palley (I.), (et al.), *7106*
- creep, dynamic behavior, muscles, Phillips (C.A.), Petrofsky (J.S.), *7108*
- cyclic loading, membranes, tissues, Vito (R.P.), Macmanus (R.K.), (et al.), *7112*
- arteries, tissues, Vito (R.P.), Hickey (J.), *7113*
- anisotropy, bauschinger effect, plasticity, work hardening, Rees (D.W.A.), *7285*
- elastoplasticity, soils, Ohmaki (S.), *7436*
- stress analysis, upset forging, Dadras (P.), *7454*
- algorithms, computer programming, mechanical properties, testing equipment, Kharchenko (V.K.), Gnuchii (Yu.B.), (et al.), *7562*
- heart, muscles, tissues, Capelo (A.), Comincioli (V.), (et al.), *8070*
- constitutive equations, cyclic loading, pressure vessels, Drucker (D.C.), Palgen (L.), *8212*
- experimental methods, tendons, tissues, viscoelastic materials, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *9046*
- bones, spine, viscoelastic materials, Burns (M.L.), Kaleps (I.), *9049*
- data analysis, lasers, velocimeters, Duffey (T.A.), Karpp (R.R.), (et al.), *9422*
- axisymmetric loading, compression, plastic flow, upset forging, Gelin (J.C.), Oudin (J.), (et al.), *10326*
- reynolds stresses, shear flow, turbulence model, turbulent flow, So (R.M.C.), Peskin (R.L.), *11559*

stresses, elasticity (linear), singularities, stress concentration, wedges, Dempsey (J.P.), *238*
- membranes, shells, stress functions, Simmonds (J.G.), *308*
- anisotropic media, microstresses, polycrystalline materials, pressure, Livshits (L.D.), Prishchepov (V.F.), *1877*
- creep, deformation, springs, Sritharan (T.), Jones (J.), *3498*
- creep, cyclic loading, hardening, strain, stress ratio, Yoshida (F.), Ohta (I.), (et al.), *5329*
- gas turbines, high temperature, radial turbines, Arnold (D.J.), Balje (O.E.), *5858*
- surface flow, tensor methods, viscous flow, Moreau (J.J.), *6819*
- energy density, functional analyis, traction, Day (W.A.), *7132*
- crack tip geometry, j-integral, nondestructive tests, strain measurement, ultrasonics, King (R.B.), Herrmann (G.), (et al.), *8425*
- nondestructive tests, surfaces, transducers, ultrasonics, Thompson (R.B.), *8426*
- steel, strain, tension, yield criteria, Bascoul (A.), Maso (J.C.), *8431*
- deformable bodies, hydroelasticity, viscous flow, Guz (A.N.), *9010*
- mathematical models, nonlinear programming, optimization, shells (cylindrical), stress analysis, Michael (W.), Siddall (J.N.), *10090*
- piles, soils, Chickanagappa (L.S.), Ramiah (B.K.), (et al.), *10256*
- crack initiation, data analysis, gas turbines, low cycle fatigue, prediction, Doner (M.), Bain (K.R.), (et al.), *10328*
- entrainment, similarity methods, stratified flow, turbulent mixing, Kundu (P.K.), *10408*
- ice mechanics, Sackinger (W.M.), Nelson (R.D.), *10870*
- axial flow, design, leaks, seals, steam turbines, Abramov (Yu.I.), Smirnov (S.A.), *11746*
- granular media, shear flow, Savage (S.B.), Jeffrey (D.J.), *12062*

stresses (normal), relaxing media, stress relaxation, viscoelastic fluids, viscometry, Pedersen (S.), Chapoy (L.L.), *2577*
- flow measurement, polymers, viscoelastic fluids, Roger (D.V.), Denn (M.M.), *2579*
- bending, dissipation, rods, vibration (torsional), Khlchevskii (V.V.), Vasilevich (D.I.), *5208*
- non newtonian flow, thin films, Hariharan (S.), *6573*
- photoelasticity, strain measurement, Vologzhaninov (Yu.I.), *7545*
- constitutive equations, micromechanisms, viscoelastic fluids, Barrett (A.J.), De Kee (D.), *8504*
- asymptotic methods, conical bodies, moment coefficient, reservoirs, Layrangues (P.), *10395*

stretching, composite materials, orthotropic materials, plates (anisotropic), stress concentration, Pelekh (B.L.), Makhnitskii (R.N.), *1180*
- fibers, laminates, material testing, plastics, Polyakov (V.A.), Tanevskii (V.V.), *10133*

Stricker (J.), density, moire methods, optical techniques, supersonic flow, visualization, Kafri (O.), *5512*

Strife (J.R.), composite structures, fibers, material testing, resins, Prewo (K.M.), *8218*

Strigberger (J.), blood flow, ducts, nonaxisymmetric flow, stokes flow, Plotkin (A.), *6647*

Strikovich (M.A.), boiling, film boiling, porous surfaces, thermal effects, Malyshenko (S.P.), (et al.), *7835*

Strikwerda (J.C.), see Rudy (D.H.), *3642*
- see Gear (J.P.), *3686*

strings, dynamic analysis, mathematical methods, vibration, Synge (J.L.), *1270*
- dynamic properties, mathematical methods, vibration (nonlinear), Faulkner (M.G.), Mioduchowski (A.), (et al.), *1271*
- dynamic analysis, vibration, Cabannes (H.), *2326*
- impact, networks, Brody (H.), *2374*
- impact, networks, Brody (H.), *2375*
- distributed parameters, estimation, flexible bodies, Schaechter (D.B.), *7239*
- dynamic analysis, friction (sliding), vibration (forced), Cabannes (H.), *7379*
- membrane theory, rayleigh ritz method, vibration (free), Irie (T.), Yoda (K.), *7387*
- dynamic analysis, vibration (free), vibration (nonlinear), wave engines, Cabannes (H.), *8290*
- travelling waves, wave energy, Benumof (R.), *10136*
- optimization, pressure, Wang (C.-Y.), *10148*

strips, flexure, holes, inclusions, plates (perforated), Buryshkin (M.L.), *1182*
- boundary value problems, differential equations (partial), elastic foundations, Tsamasphyros (G.J.), Theocaris (P.S.), *1186*
- contact problems, elastica, folding, rolling, Wang (C.-Y.), *1221*
- composite materials, saint venant principle, sandwich construction, Rao (N.R.), Valsarajan (K.V.), *2210*
- dislocations, elastic constants, orthotropic materials, stress concentration, Krenk (S.), *2213*
- complex variables, holes, plates (holed), Hering (J.), Uj (J.), *2214*
- approximations, green function, stress concentration, stress intensity factor, Rooke (D.P.), Baratta (F.I.), (et al.), *2431*
- anisotropic media, thermal stresses, thermoelasticity (steady), Misra (J.C.), *2968*
- plates (perforated), stress concentration, Hamada (M.), Mizushima (I.), (et al.), *3234*
- aluminum alloys, plastic waves, Senda (T.), *3391*
- crack propagation, stress intensity factor, viscoelasticity (dynamic), wiener-hopf technique, Popelar (C.H.), Atkinson (C.), *3468*
- bingham number, drawing, dynamic analysis, reynolds number, Camenschi (G.), Sandru (N.), *5279*
- elasticity, existence theorems, functional analyis, uniqueness, Lebedev (L.P.), *6152*
- deformation (finite), springs, torsion, Mansfield (E.H.), *6218*
- postbuckling theory, thin walled structures, Sridharan (S.), Graves Smith (T.R.), *6271*
- elastic waves, layered media, Krasnushkin (P.E.), *6333*

- necking, plane strain, slip line methods, Del (G.D.), Oding (S.S.), *8203*
- cold working, interface phenomena, pressure peaks, rolling, Lenard (J.G.), *8361*
- elasticity, energy release rate, fourier transform, griffith cracks, stress intensity factor, Dhaliwal (R.S.), Singh (B.M.), *8390*
- acoustic properties, networks, noise abatement, refraction, Amram (M.), Stern (R.), *11969*
- acoustic waves, scattering, Van Den Berg (P.M.), *11977*

Strizhalo (V.A.), creep, deformation, fracture, low cycle fatigue, titanium, *9428*
Strizhkov (S.A.), acoustic waves, fracture, random media, *8959*
Strobel (F.A.), see Chen (T.S.), *8776*
Stroeven (P.), fibers, reinforced concrete, tensile strength, *1444*
Strogii (A.S.), see Sergeev (V.L.), *6762*
Strong (A.B.), see Alp (E.), *3706*
strouhal number, separated flow, simulation, vortex flow, Kiya (M.), Arie (M.), *4809*

- critical flow, cylindrical bodies, drag coefficient, roughness, vortex shedding, wakes, Achenback (E.), Heinecke (E.), *6621*
- blunt bodies, cylindrical bodies, vortex shedding, Awbi (H.B.), *8535*
- flexible bodies, fluid-structure interaction, membranes, two dimensional flow, Newman (B.G.), Low (H.T.), *11632*

Strozeski (B.), see Stepanishen (P.R.), *11966*
Strub (P.T.), see Mellor (G.), *652*
Strube (H.W.), diffusers, modes, plane waves, scattering, wave energy, *3949*
structural analysis, finite element techniques, plates, shells, survey, variational methods, Pian (T.H.H.), Tong (P.), *83*

- composite structures, laminates, reliability analysis, surveys, Lenoe (E.M.) eds., Oplinger (D.W.), (et al.), *286, book*
- elastodynamics, vibration, Magrab (E.B.), *364, book*
- dynamic response, seismic loading, vibration, Kana (D.D.), *393*
- design (optimum), optimization, series expansion, Kirsch (U.), *502*
- bolted joints, connections, joints, Richard (R.M.), Gillett (P.E.), (et al.), *525*
- eigenvalue problems, eigenvalues, mathematical methods, sensitivity, Haug (E.J.), Rousselet (B.), *1070*
- finite element techniques, geometric nonlinearities, material nonlinearities, stiffness matrix, Cook (R.D.), *1127, book*
- design, lyapunov's functions, structural design, Carmichael (D.G.), *1153*
- differential equations (ordinary), energy methods, integration, nonlinear structures, Kamat (M.P.), Hayduk (R.J.), *1181*
- cyclic loading, elastoplasticity, work hardening, Williams (D.P.), Topper (T.H.), *1201*
- high temperature, pressurized pipes, reactor structures, Kraus (H.), *1206*
- bars, frames, Abdul-Shafi (A.), *1226*
- nonlinear systems, vibration (forced), Plakhtienko (N.P.), Lysak (N.V.), *1261*
- beams, finite difference methods, Jay (B.), *1445*
- containment, dynamic loads, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *1466, book*
- controllability, large scale systems, observability, Sote (W.), *2086*
- aluminum alloys, control, structures, welded structures, welding, Papazoglou (V.J.), Masubuchi (K.), *2173*
- continuum mechanics, elasticity, solid mechanics, Ugural (A.C.), Fenster (S.K.), *2208, book*
- cyclic loading, elastoplasticity, nonlinear materials, statically indeterminate structures, Erofeev (V.I.), Kondeikin (P.I.), *2242*
- shape functions, substructuring, Meirovitch (L.), Hale (A.L.), *2528*
- matrix methods, mechanics, Darkov (A.) ed., *2529, book*
- bridges (box girder), simply supported structures, Agrawal (S.B.), Tamhankar (M.G.), *2531*
- frames, multistory frames, shear walls, Basu (A.K.), Nagpal (A.K.), *2536*
- damage, dynamic analysis, fatigue, random excitation, Kenny (R.A.), Chandra (S.), *3445*
- elastoplasticity, shear walls, Pekau (O.A.), Gocevski (V.), *3513*
- bridges, modeling, Dean (D.L.), Ramsay (R.T.), *3543*
- cable stayed bridges, nonlinear analysis, Morabito (G.), Labini (F.S.), *3546*
- eccentric loading, matrix methods, second order analysis, space frames, Subramanian (N.), Chettiar (C.G.), *3548*
- collapse, trusses, ultimate strength, Schmidt (L.C.), Morgan (P.R.), (et al.), *3550*
- gas turbines, shells (thin), Elkelish (M.S.), Elsawaf (A.), (et al.), *3883*
- computer aided design, linear systems, multivariable systems, Van Der Weiden (A.J.J.), Bosgra (O.H.), *4235*
- matrix methods, stability theory, state space techniques, Babak (S.F.), Ilyasov (B.G.), (et al.), *4244*
- elasticity (nonlinear), nonlinear structures, Szuladzinski (G.), *4343*
- dynamic analysis, loads, seismic loading, thermal effects, wave loads, Brebbia (C.A.) eds., Gould (P.L.), (et al.), *4536, book*
- error, estimation, finite element techniques, mesh generation, Kleiber (M.), *5028*
- finite element techniques, reliability, stochastic systems, Contreras (H.), *5030*
- convergence, finite element methods (hybrid), Spilker (R.L.), Daugirda (D.M.), *5035*
- modeling, probabilistic design, reliability, Frangopol (D.), *5360*
- stiffness, strength, torsion, Shermer (C.L.), *5365*
- bridges, curved members, decking, orthotropic materials, Dey (S.S.), Samuel (A.T.), *5367*
- cladding, multistory frames, Williams (F.W.), *5360*
- computing techniques, continuation methods, finite element techniques, mesh generation, nonlinear mechanics, Rheinboldt (W.C.), *6089*
- finite element techniques, heat transfer, hydroelasticity, *6102*
- deformation (finite), large displacement, nonlinear structures, Giambanco (F.), *6159*
- contact problems, thin walled structures, Artyukhin (Yu.P.), Gerkina (V.S.), *6223*
- collapse, columns, failure, framed structures, welded structures, Kanba (T.), Kanatani (H.), (et al.), *6244*
- dynamic analysis, numerical methods, Brusa (L.), Nigro (L.), *6318*
- modal control, vibration (forced), Coupry (G.), *6319*
- shear walls, walls, Smith (B.S.), Abate (A.), *6527*
- buildings, dynamic analysis, three dimensional formulation, Humar (J.L.), Khandoker (J.U.), *6531*
- plates (folded), shells, Srinivasa Rao (P.), Sitapati Rao (P.), *6533*
- hulls, ship structures, Mcvee (J.D.), *6541*
- experimental mechanics, space shuttle, windows, Dote (H.), Theodore (K.T.), *6547*
- differential equations (ordinary), dynamic stability, Liubushin (E.A.), *7147*
- geometric nonlinearities, minimization, newton method, nonlinear analysis, Kamat (M.P.), Watson (L.T.), (et al.), *7188*
- dynamics, eigenvalue problems, finite element techniques, Papadrakakis (M.), *7194*
- geometric nonlinearities, iterative methods, nonlinear analysis, Webster (R.L.), *7198*
- differential equations (ordinary), mathematical methods, matrix methods, Hees (G.), *7200*
- finite element methods, finite element methods (hybrid), finite element techniques, mesh generation, Cheung (Y.K.), Yeo (M.F.), *7202*
- automobiles, computer programming, finite element techniques, stiffness matrix, Tang (S.C.), Yeung (K.S.), (et al.), *7208*
- analogies, deformable bodies, finite element techniques, rigid bodies, Grabski (J.), *7215*
- composite structures, fatigue, fracture, material testing, surveys, Marshall (I.H.) ed., *7296, book*
- composite materials, dynamic analysis, fibers, Moskvitin (V.V.), *7299*
- geometric nonlinearities, matrix methods, space frames, textiles, Stubbs (N.), Fluss (H.), *7311*
- beams (flexural), control, space vehicle structures, Schaechter (D.B.), *7413*
- beams (cantilever), influence matrix, modal control, simply supported structures, time domain techniques, Vilnay (O.), *7592*
- insulation, sensitivity, thermal effects, Haftka (R.T.), *7606*
- bracing, buildings (tall), matrix methods, multistory frames, Bozzo (E.), Gambarotta (L.), *7611*
- design, gravity platforms, offshore structures, Smits (F.P.), *7613*
- mechanics, modeling, reactor structures, Jaeger (T.A.) eds., Boley (B.A.), *7618, book*
- buildings, design, wind loads, Simiu (E.), Filliben (J.J.), *7795*
- computing techniques, iterative methods, nonlinear structures, relaxation methods, Wellford (L.C.), Sen (H.), *8131*
- computer programming, computing techniques, continuum mechanics, Ross (C.T.F.), *8139*
- computing techniques, finite element techniques, fourier series, matrix methods, Wang (L.), *8145*
- matrix methods, variational methods, Fuchs (M.B.), *8189*
- columns, plates (rectangular), slabs, waffle construction, Karasudhi (P.), Hovichitr (I.), (et al.), *8241*
- bending, cellular structures, grillages, nonlinear characteristics, ultimate strength, Shanmugam (N.E.), Evans (H.R.), *8263*
- beams (thin section), wind loads, Capurso (M.), *8264*
- elastic bodies, impact, resistance, Tagliacozzo (C.), *8344*
- inelasticity, large displacement, plastic behavior, strain rate, Symonds (P.S.), *8347*
- framed structures, inelasticity, reinforced concrete, Krishnamoorthy (C.S.), Mosi (D.R.), *8451*
- elastoplasticity, shear walls, torsion, Coull (A.), Tawfik (S.Y.), *8457*
- data analysis, design, offshore structures, substructuring, Hatlestad (B.), Mellingen (K.), *8461*
- aerodynamic heating, aerodynamic loads, delta wings, space shuttle, Maccochie (I.O.), Lemessurier (R.W.), (et al.), *8643*
- control, oscillations, pulse control, structural design, structural response, vibration, Udwadia (F.E.), Tabaie (S.), *9183*
- curved surfaces, fundament, shells (shallow), Tepavitcharov (A.), Ljutzkanov (D.), (et al.), *9271*
- moving loads, spectral analysis, time dependence, Padovan (J.), *9332*
- failure, fracture mechanics, toughness, Sih (G.C.), Hartranft (R.J.), *9381*
- cable stayed bridges, towers, Sofronie (R.), *9454*
- p-delta analysis, second order analysis, Rutenberg (A.), *9458*
- aerospace, composite materials, hybrid construction, Zweben (C.), *10131*
- numerical methods, postbuckling theory, structural stability, Papadrakakis (M.), *10166*
- buckling, cantilevered structures, vibration (free), Rosman (R.), *10224*

- dynamic response, shock, vibration, Wiss (J.F.), *10225*
- reliability analysis, safety, Baratta (A.), *10356*
- buckling, dynamic response, nonlinear analysis, snap-through, Kamat (M.P.), Hayduk (R.J.), *10362*
- coding, Soare (M.V.), *10363*
- bridges, slabs, Bakht (B.), Jaeger (L.G.), (et al.), *10364*
- elastic foundations, plates, rings, structural optimization, Makeev (E.M.), Semenenko (V.P.), *11111*
- computing techniques, dynamic analysis, Underwood (P.), Park (K.C.), *11154*
- combined loading, design (optimum), plasticity, space frames, Grierson (D.E.), Aly (A.A.), *11319*
- discrete systems, dynamic analysis, newmark's method, numerical methods, Wood (W.L.), Bossak (M.), (et al.), *11331*

structural design, buildings (tall), modal control, wind loads, Chang (J.C.H.), Soong (T.T.), *222*

- design, lyapunov's functions, structural analysis, Carmichael (D.G.), *1153*
- damping, optimization, vibration, Brotchie (J.F.), *1287*
- optimal control, Andreev (Yu.N.), Fedorenko (R.P.), (et al.), *2142*
- reliability design, seismic loading, Bolotin (V.V.), *4040*
- crack initiation, cracks, fatigue, Oleinik (N.V.), Medvedev (S.A.), (et al.), *5280*
- failure, plastic behavior, Marek (P.), Sejnoha (J.), *6185*
- creep, elastoplasticity, fatigue, life expectancy, Nikitenko (A.F.), Zaev (V.A.), *6431*
- probability theory, reliability analysis, safety, Baba (S.), Nakagawa (K.), (et al.), *6516*
- linear programming, loads, reliability analysis, Casciati (F.), Faravelli (L.), *6517*
- computer aided design, shape factors, shells (shallow), thin walled structures, Alpa (G.), Bozzo (E.), (et al.), *7336*
- limit analysis, probabilistic design, random loading, safety, Murzewski (J.), *7588*
- finite element techniques, mesh generation, shells (thick), thermal diffusion, Baldur (R.), *8156*
- anelasticity, high temperature, nuclear reactors, Corum (J.M.), *8196*
- constraints, design (optimum), Mroz (Z.), Mironov (A.), *8446*
- probabilistic design, reliability analysis, safety, Hohenbichler (M.), Rackwitz (R.), *8456*
- control, oscillations, pulse control, structural analysis, structural response, vibration, Udwadia (F.E.), Tabaie (S.), *9183*
- control, structural stability, structures, vibration, vibration isolation, Udwadia (F.E.), Tabaie (S.), *11097*

structural elements, thermal expansion, thermal loading, thermoelasticity (steady), Hofmeister (W.), *1830*

- beams, bolted joints, experimental mechanics, stress analysis, Krishnamurthy (N.), *3581*
- dynamic analysis, kinematics, spatial mechanisms, Nitescu (P.N.), *4937*
- dynamic analysis, finite element methods, kinematics, Van Der Werff (K.), *6060*
- acoustic waves, elastic waves, joints, transmission, Rosenhouse (G.), Ertel (H.), (et al.), *8857*
- modal control, optimal control, oscillations, structural response, structural stability, Masri (S.F.), Bekey (G.A.), (et al.), *9171*

structural materials, forming, materials properties, nuclear reactors, pressure vessels, welding, Nichols (R.W.) ed., *3564, book*

- fracture criteria, fracture toughness, metals, Volkov (G.S.), Naumenko (V.P.), *7521*

structural optimization, finite element techniques, plane stress, stress concentration, Schnack (E.), *239*

- design (optimum), Fleury (C.), Schmit (L.A.), *505*
- plates (annular), plates (orthotropic), Golovchan (V.T.), Petasyuk (G.A.), *2274*
- dissipation, hysteresis, linearization, random excitation, Grossmayer (R.L.), Iwan (W.D.), *2318*
- optimization, Prager (W.), *2509*
- constraints, surveys, Rangacharyulu (M.A.V.), Done (G.T.S.), *2512*
- beam columns, buckling (plastic), Amari (M.), Okumura (A.), *3325*
- anisotropy, composite materials, Banichuk (N.V.), *4342*
- constraints, Arora (J.S.), Haug (E.J.), (et al.), *4521*
- lattices, minimization, trusses, Bauer (J.), Gutkowski (W.), (et al.), *4522*
- nonlinear programming, Bhavikatti (S.S.), Ramakrishnan (C.V.), *4525*
- failure, safety, Blockley (D.I.), *4529*
- beam columns, rotating bodies, Adali (S.), *5173*
- elastoplasticity, plastic behavior, variational methods, Cinquini (C.), Sacchi (G.), *6270*
- design (optimum), modeling, Carmichael (D.G.), *6502*
- boundary value problems, design (optimum), distributed parameters, optimization, Haug (E.J.) eds., Cea (J.), *8440, book*
- computer aided design, constraints, design (optimum), Pappas (M.), *8453*
- beams, hinged bodies, optimization, Mikhailishchev (V.Ya.), *9438*
- elastic foundations, plates, rings, structural analysis, Makeev (E.M.), Semenenko (V.P.), *11111*
- design (optimum), shells (of revolution), torsion, Gura (N.M.), *11115*

structural response, dynamic analysis, hysteresis, nonlinear systems, sensitivity, structures, Ray (D.), Pister (K.S.), (et al.), *106*

- frequency response, vibration, Sengupta (G.), *1258*
- experimental mechanics, modal analysis, vibration (forced), Bonnecase (D.), *1290*
- shock waves (normal), spectra, Matsuzaki (Y.), *1309*
- buildings, inelasticity, nonlinear analysis, seismic loading, Cheng (F.Y.), *1449*
- artificial satellites, control, satellites, space vehicle structures, Lightner (E.B.), *2178*
- finite element methods, shear walls, vibration, Li (G.C.), Desai (C.S.), *2344*
- dynamic response, soil structure interaction, Harada (T.), Kubo (K.), (et al.), *2345*
- buildings (tall), dynamic analysis, frequency response, vibration (free), Ellis (B.R.), *2347*
- dynamic analysis, frequency response, Geering (H.P.), *2359*
- aeroelasticity, gust loads, pressure distribution, separated flow, Forsching (H.), *2912*
- dynamic properties, flexible bodies, vibration, Wodzicki (W.), *3349*
- dynamic response, vibration (torsional), wind loads, Foutch (D.A.), Safak (E.), *3378*
- dynamic response, masonry, vibration (forced), Benedetti (D.), Castellani (A.), *3379*
- digital control, optimal control, space vehicle structures, Gran (R.), Rossi (M.), (et al.), *4297*
- control, feedback, space vehicle structures, Balas (M.J.), *4298*
- aerospace vehicles, design, regulator problem, rotating bodies, Beloev (A.A.), *4307*
- aerospace vehicles, optimal control, structures, synthesis, Vatolin (V.V.), Degtyarev (G.L.), (et al.), *4308*
- relaxation methods, vibration (free), Flanagan (D.P.), Belytschko (T.), *5196*
- beams, damping, vibration (free), Narayanan (S.), Verma (J.P.), (et al.), *5203*
- seismic loading, Grigoriu (M.), *5893*
- damping, dynamic analysis, many body systems, Bremer (H.), *6278*
- dynamic response, frames, motorcycles, vehicles, Verma (M.K.), Scott (R.A.), (et al.), *6313*
- damping, vibration (forced), Wood (W.L.), *6316*
- numerical methods, vibration (free), Gupta (K.K.), *6317*
- measurements (dynamic), noise (random), transfer functions, Aubourg (M.), Guesdon (M.), *6321*
- cable stayed bridges, dynamic response, experimental mechanics, Augusti (G.), Chiarugi (A.), (et al.), *6524*
- approximation methods, multiple degree of freedom, seismic loading, Tansirikongkol (V.), Pecknold (D.A.), *7041*
- rayleigh waves, seismic loading, Gamer (U.), *7042*
- earthquakes, spectra, Yang (J.N.), Liu (S.C.), *7048*
- risk, seismic loading, Der Kiureghian (A.), *7049*
- dynamic analysis, elastic bodies, linear systems, structures, vibration isolation, Ryaboi (V.M.), Genkin (M.D.), (et al.), *7244*
- control, modal control, sensitivity, space vehicle structures, vibration, Hallauer (W.L.) Jr., Barthelemy (J.-F.M.), *7257*
- gyrodynamics, rings, rotating bodies, vibration (nonlinear), Maewal (A.), *7368*
- dynamic analysis, dynamic response, finite element methods, Nack (W.V.), *7417*
- bridges, foundations, matrix methods, piles, reinforced concrete, Onu (G.), *7607*
- displacement, dynamic analysis, transient loading, vibration, Popplewell (N.), Scarth (D.A.), (et al.), *8277*
- dynamic behavior, pinned joints, seismic loading, Ballio (G.), Gobetti (A.), (et al.), *8321*
- bearing capacity, deflections, falsework, scaffolding, ultimate strength, Holmes (M.), Hindson (D.), *8455*
- offshore structures, spectral loading, stochastic processes, wave loads, Spidsoe (N.), Sigbjornsson (R.), *8460*
- aerodynamic performance, airplanes, dynamic loads, flexible bodies, modeling, Perry (B.) III, Kroll (R.I.), (et al.), *8647*
- modal control, optimal control, oscillations, structural elements, structural stability, Masri (S.F.), Bekey (G.A.), (et al.), *9171*
- control, oscillations, pulse control, structural analysis, structural design, vibration, Udwadia (F.E.), Tabaie (S.), *9183*
- lattices, prestressed structures, vibration (free), Anderson (M.S.), *9326*
- bridges (railroad), bridges (truss), dynamic behavior, impact, Wiriyachai (A.), Chu (K.-H.), (et al.), *9452*
- offshore structures, wave loads, Dominguez (J.), Alarcon (E.), *9459*
- hull propeller interaction, hydroelasticity, vibration (flow induced), Wereldsma (R.), *9943*
- earthquake resistant structures, resonance, soils, Herzog (M.A.M.), *10853*
- controllability, dynamic properties, identification, linear systems, observability, Udwadia (F.E.), *11048*
- dynamic analysis, shells, transient effects, Malyshev (A.P.), *11139*

structural stability, space frames, Hoff (N.J.), Fernandez-Sintes (J.), *344*

- plates (anisotropic), plates (holed), plates (perforated), Preobrazhenskii (I.), *345*
- plates (annular), Tani (J.), Yamaki (N.), *346*
- connected bodies, plates, Pavlovic (M.), Mansell (D.S.), (et al.), *347*
- beam columns, viscoelastic materials, Madan (V.P.), *357*
- plates (annular), thermoelasticity (transient), Trombski (M.), Wojciech (S.), *930*
- beam columns, framed structures, Garcia (G.), *1247*
- buckling, framed structures, lattices, Anderson (M.S.), *1250*
- critical load, framed structures, multistory frames, Roberts (T.M.), *1251*

- buckling, shells (nonlinear), shells (spherical), Lange (C.G.), Kriegsmann (G.A.), *1252*
- shells (axisymmetric), shells (shallow), Srubshchik (L.S.), *1253*
- shells (long), shells (outer), shells (sandwich), Karimbaev (T.D.), Zhumabaev (M.Zh.), (et al.), *1254*
- composite materials, polymers, shells (anisotropic), Tomashevskii (V.T.), Yakovlev (V.S.), *1257*
- buckling, divergence, flutter, follower forces, Kounadis (A.N.), *1783*
- buckling, frames, sway, Kounadis (A.N.), Economou (A.P.), *2285*
- beam columns, beams (variable cross section), buckling, Komkov (V.), *2286*
- theory, Davini (C.), Guidugli (P.P.), *2287*
- beams (thin section), buckling (local), Studnicka (J.), *2290*
- finite element methods, interbraced beam systems, Medland (I.C.), *2294*
- beams, elastic foundations, Toscano (R.), Maceri (A.), *2295*
- beam columns, beams (variable cross section), Horne (M.R.), Shakir-Khalil (H.), (et al.), *2296*
- buckling, frames, Kounadis (A.N.), *2299*
- compression, plates (holed), plates (rectangular), Volmir (E.A.), Mameeva (E.N.), (et al.), *2301*
- plates (orthotropic), strain, Begin (M.V.), *2302*
- buckling, edge effects, plates, Cimetiere (A.), *2303*
- composite materials, fibers, shells (anisotropic), shells (stiffened), Ershov (N.P.), *2304*
- buckling, shells (orthotropic), shells (sandwich), Khoroshun (L.P.), Koshevoi (I.K.), *2306*
- elastoplasticity, large displacement, panels (curved), Stolyarov (N.N.), Pestrovskii (G.M.), *2307*
- buckling, prebuckling behavior, shells (cylindrical), Brush (D.O.), *2308*
- buckling (experimental), collapse, shells (ellipsoidal), shells (torispherical), Galletly (G.D.), *2309*
- panels (curved), shells (viscoelastic), Potapov (V.D.), *2313*
- portal frames, stability theory, Davini (C.), *3319*
- columns, stayed columns, Howson (W.P.), Williams (F.W.), *3327*
- beam columns, imperfections, prestrained structures, Pavlovic (M.N.), Stevens (L.K.), *3329*
- finite element methods (hybrid), frames, nonlinear analysis, Karamanlidis (D.), *3334*
- dynamic stability, nonlinear structures, vibration (torsional), Antonelli (R.G.), Meyer (K.J.), (et al.), *3377*
- buildings (tall), oscillations, vibration, vibration (flow induced), wind loads, Soong (T.T.), Skinner (G.T.), *4328*
- catastrophe theory, discrete systems, Niwa (Y.), Watanabe (E.), (et al.), *4388*
- beam columns, beams (variable cross section), Kruchoski (B.L.), Leonard (J.W.), *4393*
- plates (rectangular), plates (reinforced), plates (sandwich), Pomazi (L.), *4397*
- elliptical bodies, shells (cylindrical), torsion, Konopiev (Yu.G.), Kopp (A.V.), *4398*
- nonlinear analysis, plates (nonlinear), shells (nonlinear), Wada (H.), Taki (Y.), (et al.), *5162*
- finite element methods, shells (nonlinear), shells (thin), Carnoy (E.G.), *5169*
- beams (cantilever), beams (variable cross section), nonconservative systems, Kar (R.C.), *5176*
- beam columns, compression, second order analysis, Chattoraj (D.), Bose (S.K.), *5177*
- shells (cylindrical), shells (thin), wind loads, Brendel (B.), Ramm (E.), (et al.), *5183*
- buckling, time dependence, Amiro (I.Ya.), *5185*
- energy methods, finite element methods (hybrid), Murakawa (H.), Reed (K.W.), (et al.), *6236*
- nonlinear structures, postbuckling theory, viscous buckling, Kroplin (B.-H.), *6237*
- composite materials, damage (cumulative), delamination, flaws, Bolotin (V.V.), Zebelyan (Z.Kh.), (et al.), *6241*
- beams, columns, girders (plate), Bjorhovde (R.), *6245*
- beams (thin section), thin walled structures, Chai Hong Yoo, *6248*
- bending (elastic), shells (cylindrical), thin walled structures, Makeev (E.M.), *6256*
- beams (variable cross section), follower forces, viscoelastic materials, Kar (R.C.), *6267*
- clay, excavation, soil mechanics, tunnels, Davis (E.H.), Gunn (M.J.), (et al.), *6526*
- buckling, plates (folded), roofs, space frames, Subramanian (N.), Ganapathy Chettiar (C.), *6532*
- design, shells (stiffened), ship structures, submarine, Niessen (E.), *6542*
- cranes, trucks, Kato (Y.), Ito (H.), *6545*
- collapse, critical load, Dooley (J.F.), Galoussis (E.G.), *8259*
- buckling, random error, stochastic systems, Scheurkogel (A.J.), Elishakoff (I.), (et al.), *8260*
- modal control, optimal control, oscillations, structural elements, structural response, Masri (S.F.), Bekey (G.A.), (et al.), *9171*
- numerical methods, postbuckling theory, structural analysis, Papadrakakis (M.), *10166*
- arches, postbuckling theory, Schmidt (R.), *10172*
- buckling, frames, Williams (F.W.), *10173*
- shells (of revolution), shells (stiffened), Subbiah (J.), Natarajan (R.), *10179*
- beams, composite structures, design (minimum weight), design (optimum), reinforced bodies, vibration, Rikards (R.B.), *10348*
- control, structural design, structures, vibration, vibration isolation, Udwadia (F.E.), Tabaie (S.), *11097*
- dynamic stability, guyed structures, towers, Irvine (H.M.), O'Sullivan (M.J.), *11118*

structural support, contact problems, shells (cylindrical), stress concentration, Kanaun (S.K.), Elkovskaya (T.M.), *1237*
- kinematics, manipulators, robotics, Nitescu (P.N.), *4141*
- arches, design, tunnels, Matsumoto (Y.), Sakamoto (S.), (et al.), *4538*
- buildings, cushioning materials, foundations, stress analysis, thermoplasticity, Klepikov (S.N.), Khorunzhii (V.I.), *5361*
- beams, design (optimum), distributed parameters, impulsive loading, inelasticity, Lepik (U.), *6508*
- columns, design, finite element methods, mines, pillars, underground, Pariseau (W.G.), Sorensen (W.K.), *7610*
- elastoplasticity, rock mechanics, strain softening, tunnels, Tanimoto (C.), Hata (S.), *10366*

structure, continental slope, physical properties, soils, Mcgregor (B.A.), Bennett (R.H.), (et al.), *410*
- containment, nuclear reactors, reliability, testing equipment, vessels, Weymouth (L.J.), *488*
- mechanical properties, paper, Herdman (P.T.), *2252*
- equilibrium, fibers, stochastic systems, textiles, thermodynamics, Lindenmeyer (P.H.), *5133*
- additives, drag, polymers, spherical bodies, velocity profiles, Puris (B.I.), Polesskii (E.P.), (et al.), *5428*
- earth, earthquakes, seismic waves, Antonenko (A.N.), Dubrovin (G.K.), *7029*
- design, machine design, mechanisms (planes), Miller (S.), Gronowicz (A.), (et al.), *7625*
- contact points, granular media, particle dynamics, soils, Athanasiou-Grivas (D.), Harr (M.E.), *9359*
- boundary layer (turbulent), curvature, Ramaprian (B.R.), Shivaprasad (B.G.), *9561*
- cavities, turbulent flow, Curtet (R.), Normandin-Berne (M.), *10458*

structured continua, entropy, microstructures, thermodynamics (nonequilibrium), Michelet (G.), Darrozes (J.-S.), *7143*

structures, dynamic analysis, hysteresis, nonlinear systems, sensitivity, structural response, Ray (D.), Pister (K.S.), (et al.), *106*
- mechanics, solid mechanics, Pister (K.S.) ed., *1421, book*
- aluminum alloys, control, structural analysis, welded structures, welding, Papazoglou (V.J.), Masubuchi (K.), *2173*
- finite element techniques, fracture, fracture mechanics, prediction, Belie (R.G.), Reddy (J.N.), *2463*
- muller-breslau principle, virtual work methods, Charlton (T.M.), *2505*
- computing techniques, dynamic analysis, modal analysis, nonlinear analysis, Noor (A.K.), *3138*
- restraint systems, stiffness matrix, Mohr (G.A.), *3139*
- aerospace vehicles, optimal control, structural response, synthesis, Vatolin (V.V.), Degtyarev (G.L.), (et al.), *4308*
- boundary layer (atmospheric), wind, wind loads, wind turbines, Deaves (D.M.), *4604*
- cavities, flow irregularities, vibration, Milan (D.), *4772*
- box-shaped structures, walled structures, Lainoff (S.M.), *5354*
- aerodynamic loads, random excitation, Spanos (P.-T.D.), Chen (T.W.), *5697*
- energy methods, solid mechanics, strain energy, Germain (P.), *6035*
- forced systems, matrix methods, periodic structure, substructuring, vibration, Fricker (A.J.), Potter (S.), *7209*
- dynamic analysis, elastic bodies, linear systems, structural response, vibration isolation, Ryaboi (V.M.), Genkin (M.D.), (et al.), *7244*
- design, linkages, mobility, rigid bodies, Baker (J.E.), *7631*
- damping, modeling, seismic loading, Singh (M.P.), *8966*
- hysteresis, random excitation, seismic waves, vibration (random), Baber (T.T.), Wen (Y.-K.), *9106*
- anchors, buried structures, soil mechanics, underground, Smorodinov (M.), Smolin (B.S.), *10251*
- measurements, nondestructive tests, strain measurement, surfaces, Chekin (O.N.), *10340*
- control, structural design, structural stability, vibration, vibration isolation, Udwadia (F.E.), Tabaie (S.), *11097*

Struminskii (V.V.), hydrodynamic stability, nonlinear theory, poiseuille flow, stability curve, Skobelev (B.Yu.), *4642*

Strunin (V.A.), combustion, models, solid fuels, Manelis (G.B.), *9775*
- burning velocity, chemical reactions, combustion, heat transfer, particles, Dyakov (A.P.), (et al.), *10703*

Strunkin (V.A.), rotors, stress analysis, thermal stresses, turbines, Sagadeev (R.G.), (et al.), *6950*
- see Sagadeev (R.G.), *10355*

Struwe (M.), boundary value problems, differential equations (ordinary), mathematical methods, *3097*

Struyk (C.), see Lammens (R.F.), *7463*

Strzelecki (T.), see Auriault (J.L.), *949*
Stuart (J.T.), annuli, couette flow, cylindrical bodies, vortex flow, Diprima (R.C.), *3660*
- channel flow, hydrodynamic stability, pipe flow, stability theory, Meyer (R.E.), *4641*

Stubbs (N.), geometric nonlinearities, matrix methods, space frames, structural analysis, textiles, Fluss (H.), *7311*
Stubley (G.D.), approximation theory, error, finite difference methods, finite element techniques, heat transfer, Raithby (G.D.), (et al.), *7196*
Stuckey (W.C.), see Lord (P.R.), *7313*
Studnicka (J.), beams (thin section), buckling (local), structural stability, *2290*
Studnicki (A.), drag, ejectable containers, falling bodies, trajectories, Ronen (T.), *3733*
Stuhler (W.), dynamic behavior, mechanisms, rotating shafts, *1280*
Stumm (W.), bars, eddy currents, flaw detection, surface flaws, wires, *3508*
Stura (D.), see Solari (G.), *8963*
Sturges (L.D.), plates, plates (waving), swimming propulsion, viscoelastic fluids, *11630*
Sturgess (C.E.N.), see Hartley (P.), *2394*
- see Hartley (P.), *5275*
- see Hartley (P.), *6254*

Sturgess (G.J.), combustors, film cooling, film flow, gas turbines, *5622*
Sturm (T.W.), convection (free), cooling, currents, heat transfer, lakes, Kennedy (J.F.), *5924*
- convection (forced), currents, environmental control, gravity, heat transfer, *10406*

Stussi (U.W.), fluid-structure interaction, shells (coaxial), shells (fluid-filled), vibration, Jemelka (P.), *2710*
Styrikovich (M.A.), boiling, channel flow, critical heat flux, roughness, surface effect, Leontev (A.I.), (et al.), *742*
Su (T.C.), dissipation, shells (fluid-filled), submerged bodies, vibration (free), viscous effects, *5217*
Suachev (I.P.), aerodynamic performance, axial turbines, blades, separated flow, Neuimin (V.M.), (et al.), *1632*
Suarez (R.), see Manrique (J.A.), *781*
Suaris (V.W.), see Kanok-Nukulchai (W.), *7997*
Subba Rao (K.S.), experimental methods, shape factors, size factors, soil consolidation, *10247*
Subbiah (J.), shells (of revolution), shells (stiffened), structural stability, Natarajan (R.), *10179*
Subbotin (V.I.), measurements, slug flow, two phase flow, void fraction, Pokhvalov (Yu.Ye.), (et al.), *6978*
subgrade design, concrete, field tests, highways, sand, Barber (S.D.), Knapton (J.), *3417*
Subhadra Ramachandran (P.), boundary layer (thermal), drag, heat transfer, polar fluids, stagnation point, Mathur (M.N.), *1685*
sublayers, acoustic waves, mathematical methods, ultrasonics, Basatskaya (L.V.), Ermolov (I.N.), *1294*
- channel flow, laminar flow, particle dynamics, turbulent flow, Grishin (Yu.M.), Mosin (A.A.), *11489*

sublimation, mass transfer, rotating disks, Koyama (H.), Ohsawa (S.-I.), (et al.), *754*
- mathematical models, porous media, Lin (S.), *3846*
- condensation, melting, snow, Matsuo (T.), Sasyo (Y.), *5614*
- melting, snow, Matsuo (T.), Sasyo (Y.), *5615*
- combustion, fire spread, flame propagation, pyrolysis, Frenandez-Pello (A.C.), Mao (C.-P.), *6846*

submarine, design, shells (stiffened), ship structures, structural stability, Niessen (E.), *6542*
submerged bodies, finite element techniques, geometric nonlinearities, ocean, pipelines, three dimensional formulation, Odorizzi (S.), Schrefler (B.A.), *93*
- breakwater, models, wave trains, Abdul Khader (M.H.), Rai (S.P.), *677*
- cylindrical bodies, drag coefficient, gravity waves (surface), virtual mass, wave loads, Koterayama (W.), *1594*
- explosions (underwater), fluid-structure interaction, numerical methods, stability (numerical), Neishlos (H.), Israeli (M.), (et al.), *1604*
- pipelines, vortex shedding, wave loads, Schrecker (M.), *2584*
- cylindrical bodies, drag, grids, piers, piles, reynolds stresses, Ball (D.J.), Hall (C.D.), *2585*
- analysis, diffraction, shock waves, Gorshkov (A.G.), *2715*
- shells, underwater acoustics, Vasudevan (R.), Dimaggio (F.L.), *2961*
- earthquake effects, hydrodynamic pressure, ocean bed, tanks, Tung (C.C.), *3011*
- cylindrical bodies, gravity waves (surface), scattering, Leppington (F.G.), Siew (P.F.), *3717*
- cylindrical bodies, scattering, surface waves, Dragonette (L.R.), *4786*
- fluid-structure interaction, underwater acoustics, Geers (T.L.), *4791*
- dissipation, shells (fluid-filled), vibration (free), viscous effects, Su (T.C.), *5217*
- diffraction, gravity waves (surface), wave interactions, Belyaev (V.A.), *5475*
- half space, rayleigh waves, sand, Vardoulakis (I.), *6334*
- cylindrical bodies, fluid-structure interaction, tube bundles, Westermo (B.D.), *6703*
- experimental results, ocean waves, pipelines, wave loads, Grace (R.A.), Zee (G.T.Y.), *7769*
- buoys, cables, mooring, Mariano (J.J.), *8047*
- boundary layer, finite difference methods, plates, turbulence model, Markatos (N.-C.G.), Wills (C.B.), *8537*
- integral methods, vorticity, wave loads, Horton (T.E.), Feifarek (M.J.), *8629*
- cylindrical bodies, damping, gravity waves (surface), virtual mass, Sabuncu (T.), Calisal (S.), *8630*
- cylindrical bodies, gravity waves (surface), wave loads, Koterayama (W.), *8632*
- fluid-structure interaction, plasticity, transient loading, Krajcinovic (D.), *9630*
- oscillating bodies, pipelines, virtual mass, wave loads, Efthymiou (M.), Narayanan (R.), *10394*
- cables, cylindrical bodies, suppression, vibration (flow induced), vortex shedding, Every (M.J.), King (R.), (et al.), *10488*
- arrays, three dimensional flow, wave absorbers, Thomas (G.P.), Evans (D.V.), *10489*
- impact, net, networks, projectiles, ropes, Wortman (A.), *10881*
- ducts, virtual mass, wave absorbers, wave energy, Thomas (J.R.), *11602*
- gravity waves (internal), moving source, wave generation, Gorodtsov (V.A.), Teodorovich (E.V.), *11620*
- cylindrical bodies, gravity waves (surface), irrotational flow, unsteady flow, Chaplin (J.R.), *11633*
- acoustic waves, fluid-structure interaction, vibration, Clark (A.V.) Jr., Whitman (A.M.), *11634*
- fluid-structure interaction, pressure distribution, shells (spherical), transient effects, transient loading, Neilson (H.C.), Everstine (G.C.), (et al.), *11635*
- seismic loading, tube bundles, vibration, Shinohara (Y.), Shimogo (T.), *11653*
- acoustic waves, fluid-structure interaction, shells (cylindrical), shock waves, Huang (H.), *11656*
- plates, transmission, ultrasonics, Ng (K.W.), Ngoc (T.D.K.), (et al.), *11657*
- acoustic waves, fluid-structure interaction, shells (cylindrical), transient loading, Geers (T.L.), Yen (C.-L.), *11660*
- fluid-structure interaction, shells (fluid-filled), shock waves, Wright (J.P.), Misovec (A.), (et al.), *11664*
- filaments, fluid-structure interaction, impact, Belov (V.I.), Lenskii (E.V.), *11665*
- hydroelasticity, scale models, shells (axisymmetric), Takeuchi (K.), Desanto (D.F.), *11672*
- channels, flow irregularities, gravity waves (surface), Jeffrey (A.), Mvungi (J.), *11676*
- cylindrical bodies, scattering, underwater acoustics, Numrich (S.K.), Varadan (V.V.), (et al.), *11900*

suboptimal control, nonlinear systems, time delay systems, Gopalakrishnan Nair (G.), *2132*
- algorithms, optimal control, stochastic systems, Kolmanovskii (V.B.), *3195*
- approximation methods, optimal control, schwartz inequality, synthesis, Akulenko (L.D.), *5050*
- algorithms, dynamic programming, stochastic control, synthesis, Batkov (A.M.), Grinchenko (S.T.), *6145*
- airplanes, evasion, missiles, pursuit, Steinberg (A.M.), Forte (I.), *6146*
- bang-bang control, optimal control, synthesis, Gonzalez (R.), *7241*
- algorithms, linear systems, numerical methods, optimal control, Kein (V.M.), Parikov (A.N.), (et al.), *7243*
- sensitivity, time delay systems, time varying systems, Malek-Zavarei (M.), *9182*
- control, design, hydraulic machinery, robotics, Rossler (J.), *9188*
- model reduction, optimal control, time optimal systems, Fuller (A.T.), *10088*
- algorithms, optimal control, singular perturbations, Rajagopalan (P.K.), Naidu (D.S.), *11076*
- algorithms, linear programming, regulator problem, time delay systems, Kim (B.K.), Bien (Z.), *11088*

Subrahmanyam (K.B.), beams (cantilever), flexure, vibration (free), Kulkarni (S.V.), *366*
- beams (cantilever), frequency response, vibration (torsional), Kulkarni (S.V.), *5200*
- beams (cantilever), bending, blades, rotary inertia, shear, vibration (free), Kulkarni (S.V.), (et al.), *10208*

Subramanian (C.S.), boundary layer (turbulent), heat transfer, turbulence (geophysical), Antonia (R.A.), *9608*
- boundary layer (turbulent), temperature, turbulence model, Antonia (R.A.), *10485*

Subramanian (G.), curvature, grids, interferometry, twisting, Arunagiri (R.), *3486*
Subramanian (N.), eccentric loading, matrix methods, second order analysis, space frames, structural analysis, Chettiar (C.G.), *3548*
- buckling, plates (folded), roofs, space frames, structural stability, Ganapathy Chettiar (C.), *6532*

Subramonian (N.), see Liebowitz (H.), *2437*
subsidence, granular media, mining, modeling, Gustkiewicz (J.), Rogowska (J.), *1320*
- aquifers, Safai (N.M.), Pinder (G.F.), *6377*
- clay, clay hills, flow, Tschierske (N.), *7443*
- compaction, finite element methods, multiphase flow, reservoir engineering, Morgan (K.), Lewis (R.W.), (et al.), *8912*

subsonic flow, geometric nonlinearities, stability, stability (numerical), stiffness matrix, Hangai (Y.), *330*

- compressible flow, plane flow, rotational flow, streamlines, vortex flow, Nikolskiy (A.A.), *568*
- airplanes, design (optimum), transport, Torenbeek (E.), *688*
- delta wings, pressure distribution, swept wings, visualization, Nekrasova (M.N.), *2732*
- aerodynamic performance, aerodynamics, numerical methods, wings, An (J.-G.), *2747*
- boundary conditions, compressible flow, navier stokes equation, Rudy (D.H.), Strikwerda (J.C.), *3642*
- corners, turbulence, Arnal (D.), Cousteix (J.), *3647*
- boundary layer, fluid injection, laminar flow, reynolds number (high), Napolitano (M.), Messick (R.E.), *3656*
- airfoils, base pressure, drag, trailing edge, Gai (S.L.), Sharma (S.D.), *3725*
- axial compressors, blades, boundary layer, geometrical properties, viscid inviscid flow, Calvert (W.J.), Herbert (M.V.), *3745*
- aerodynamic performance, airplanes, pressure measurement, Larson (T.J.), Siemers (P.M.) III, *3753*
- coaxial jets, entrance region, jets, Ko (N.W.M.), Au (H.), *5455*
- airfoils, drag, optimization, transonic flow, Zhigulev (V.N.), *5493*
- aerodynamic interference, aerodynamic performance, longitudinal stability, visualization, wing body combinations, Lamar (J.E.), Frink (N.T.), *5494*
- airfoils, separation, Jacob (K.), *6095*
- aerodynamic loads, bodies of revolution, vortex shedding, wings, Zhu (P.), Shou (W.), (et al.), *6717*
- ballistics (exterior), flight tests, missiles, Whyte (R.H.), Winchenbach (G.L.), (et al.), *6722*
- oscillatory flow, two dimensional flow, wings, Lottati (I.), Nissim (E.), *7782*
- drag, induced drag, optimization, wakes, wings, Kuhlman (J.M.), *7786*
- aerodynamic loads, airfoils, damping, oscillating bodies, Salmond (D.J.), *7904*
- base pressure, blunt bodies, compressible flow, experimental results, spherical bodies, Kuptsov (V.M.), *8553*
- airplanes, flight path, fuel economy, optimization, Large (E.), *8644*
- aerodynamics, compressible flow, potential flow, turrets, Laderman (A.J.), De Jonckheere (R.), *9548*
- reattachment, turbulent flow, Eaton (J.K.), Johnston (J.P.), *9568*
- boundary layer (control), delta wings, drag, leading edge, Rao (D.M.), Johnson (T.D.) Jr., *9652*
- airfoils, compressible flow, numerical methods, Carey (G.F.), Pan (T.T.), *10420*
- bubble dynamics, bubbly flow, compressional waves, nozzles, supersonic flow, Nakagawa (H.), Mori (Y.), (et al.), *10491*
- induced drag, lift, optimization, swept wings, Lobert (G.), *10501*
- axial flow, cascades, choked flow, three dimensional flow, turbomachinery, Horlock (J.H.), *10526*
- acoustic waves, boundary value problems, moving media, wave equations, Krasilshchikova (E.A.), *10798*
- combustion, compressible flow, numerical methods, Kansa (E.J.), *11423*
- approximations, boundary value problems, compressible flow, difference operator, differential operator, least squares, Danilov (Yu.M.), *11433*

substructuring, elastoplasticity, finite element techniques, mesh generation, Anand (S.C.), Shaw (R.H.), *80*
- dynamic response, vibration, Nelson (F.C.), *394*
- finite element techniques, foundations, soil structure interaction, Dasgupta (G.), *1881*
- shape functions, structural analysis, Meirovitch (L.), Hale (A.L.), *2528*
- dynamic analysis, modal analysis, nonlinear analysis, Bathe (K.-J.), Gracewski (S.), *5228*
- design (optimum), frames, Govil (A.K.), Arora (J.S.), (et al.), *5347*
- dynamic loads, railroad cars, statically indeterminate structures, trains (railroad), vehicles, Balogh (V.), *6499*
- bridges (suspension), modal analysis, piers, seismic loading, Balendra (T.), *6525*
- forced systems, matrix methods, periodic structure, structures, vibration, Fricker (A.J.), Potter (S.), *7209*
- finite element techniques, matrix methods, Mucino (V.H.), Pavelic (V.), *8146*
- data analysis, design, offshore structures, structural analysis, Hatlestad (B.), Mellingen (K.), *8461*

Succi (G.P.), noise (aerodynamic), noise abatement, propellers, *904*

suction, fluid injection, heat transfer, mass transfer, pipe flow, Zaychik (L.I.), *815*
- acceleration, convection (free), magneto fluid dynamics, plates (vertical), Raptis (A.A.), Tzivanidis (G.J.), (et al.), *855*
- boundary layer, integral methods, interaction, Gray (J.D.), Maus (J.R.), *1551*
- friction (skin), poiseuille flow, porous surfaces, viscoelastic fluids, Dash (G.C.), Behera (S.C.), *3569*
- air, entrainment, vortices, wells, Anwar (H.O.), Amphlett (M.B.), *5389*
- boundary layer, friction (skin), porous media, unsteady state, Lal (K.), *5435*
- magnetic field, non newtonian flow, porous surfaces, Abdel-Gaid (M.A.), Khider (M.A.), (et al.), *6645*
- cylindrical bodies, heat addition, heat transfer, injection, porous walls, Patnaik (A.), *6760*
- fourier transform, incompressible flow, porous surfaces, two dimensional flow, Nayfeh (A.H.), Reed (H.L.), (et al.), *8563*
- boundary layer, stability theory, swept wings, transition flow, Mack (L.M.), *9570*
- boundary layer, unsteady state, Beldei (L.M.), Kulonen (L.A.), *9571*
- channel flow, fluid injection, heat transfer, nusselt number, porous walls, Yeroshenko (V.M.), Zaichik (L.I.), (et al.), *10572*
- fluid injection, fluid mechanics, heat transfer, numerical methods, rotating disks, Agarwal (R.S.), Bhargava (R.), *10685*

Sud (I.), drag, trains (railroad), tunnels, turbulent flow, Chaddock (J.B.), *5497*

Sudarev (A.V.), combustion chambers, cooling, flames, gas turbines, *846*
- combustors, cooling, gas turbines, *2871*

sudden expansion, ducts (variable area), experimental results, transition (reverse), Vallette (P.), Lebouche (M.), (et al.), *2644*
- ducts (variable area), heat transfer, navier stokes equation, viscous flow, Kharin (B.E.), Dvortsov (V.N.), *3784*
- pipe flow, slots, velocity profiles, Skawinski (R.), Lasowska (A.), (et al.), *5443*
- noncircular pipes, transonic flow, unsteady flow, Anderson (J.S.), Meier (G.E.A.), *11493*

Sudhakar (K.), see Ramachandra (S.M.), *2743*

Sudhakar Reddy (V.), see Bert (C.W.), *6225*

Sudou (K.), liquid metals, magneto fluid dynamics, numerical analysis, pipe flow, pulsatile flow, Tomita (Y.), (et al.), *864*

Suematsu (H.), desalination, evaporation, heat transfer, Inoue (S.), (et al.), *1716*

Suematsu (Y.), eccentric rotating cylinders, navier stokes equation, rotating cylinders, stokes flow, two dimensional flow, Ito (T.), (et al.), *11374*
- hydrodynamic stability, pipe flow, swirl flow, vortex flow, Ito (T.), *11537*

Sugano (Y.), see Noda (N.), *7950*

Sugimoto (K.), geometrical properties, kinematics, manipulators, robotics, Duffy (J.), *6048*
- algorithms, design, manipulators, robotics, Duffy (J.), *7630*

Sugimoto (N.), deformation (finite), nonlinear waves, plates (rectangular), waveguides, Majima (Y.), *11156*

Sugiya (T.), see Ida (T.), *6993*

Sugiyama (H.), see Hirokawa (S.), *6150*

Sugiyama (Y.), articulated structures, damping, dynamic stability, pipe flow, vibration (flow induced), Noda (T.), *11685*

Suh (N.P.), debris, friction, friction (solid solid), wear, Sin (H.-C.), *998*

Suhas (H.K.), burning rate, combustion (unsteady), depressurization, propellants, Bose (T.K.), *9762*

Suiazov (V.M.), magneto fluid dynamics, magnetoelasticity, polar fluids, suspensions, *4137*

Sukhanov (L.A.), see Gostintsev (Yu.A.), *8992*

Sukharev (B.V.), integral methods, porous media, soil consolidation, *3401*

Sukhareva (L.A.), see Voronkov (V.A.), *10559*

Sukhikh (L.I.), see Eliseev (V.I.), *3687*

Sukhov (A.V.), see Kudryavtsev (V.M.), *9774*

Sukhov (G.S.), burning rate, combustion, diffusion, liquid vapor interface, Yarin (L.P.), *5629*
- combustion instability, filtration, oxidizers, porous media, Yarin (L.P.), *9763*
- see Stolyarova (N.N.), *9773*
- combustion (submerged), immiscible fluids, jets, Yarin (L.P.), *9776*
- combustion, explosions, reactors, shock waves (normal), Yarin (L.P.), *9899*

Suleiman (S.M.), critical flow, films, shear flow, viscous buckling, viscous flow, Munson (B.R.), *11378*

Sulem (C.), existence theorems, isentropic processes, magneto plasma dynamics, one dimensional flow, theory, Sulem (P.L.), *10733*

Sulem (P.L.), see Sulem (C.), *10733*

Suliciu (I.), alloys, constitutive equations, elastoviscoplasticity, strain rate, *1052*

Sulima (I.M.), combustion, particle dynamics, particles, *9761*

Sulimov (A.A.), see Ermolaev (B.S.), *9759*

Sullivan (B.J.), dynamic behavior, plates (circular), shells (nonlinear), shells (of revolution), shells (viscoelastic), Batterman (S.C.), *10154*

Sullivan (E.J.) Jr., acoustics, arrays, sound generation, *908*

Sullivan (J.L.), see Poole (W.), *3041*

Sullivan (P.J.), see Chatwin (P.C.), *656*

Sultanian (B.K.), channel flow, conduction (heat), heat addition, heat exchangers, rockets, Sastri (V.M.K.), *3913*

Sultanov (I.A.), analytical methods, control, differential equations (ordinary), *2105*

Sultanov (I.F.), see Vishnyakov (V.I.), *11806*

Sumbatian (M.A.), creep, layered media, nonlinear materials, *4347*

Sumec (J.), see Sladek (J.), *10294*

Sumer (B.M.), bottom irregularities, channel flow, free boundary, particle fluid flow, turbulence, Deigaard (R.), *4572*

Sumi (N.), inclusions, plates (nonhomogeneous), plates (rectangular), thermal stresses, *6940*

Sumikawa (J.), see Miyamoto (M.), *764*

Summers-Smith (D.), see Ruddy (A.V.), *3061*

Sun (C.T.), see Staab (G.H.), *5313*

Sun (F.T.), kepler orbits, lambert's problem, orbit mechanics, orbits, trajectories, *2923*

Sun (J.W.H.), four bar linkage, kinematics, linkages, mechanisms (planes), synthesis, Waldron (K.J.), *5375*

Sun (K.H.), prediction, transient effects, two phase flow, void fraction, Duffey (R.B.), (et al.), *9879*

Sunada (W.), dynamic analysis, finite element methods, flexibility, linkages, matrices, mechanisms (spatial), Dubowsky (S.), *7629*

Sunakawa (M.), see Claudon (J.-L.), *5342*
Sundara Raja Iyengar (K.T.), beams, dynamic properties, vibration (free), Raman (P.V.), *4420*
Sundaram (P.N.), see Goodman (R.E.), *4834*
Sundaram (T.R.), boundary layer, oil films, pollution, *8501*
Sunderland (J.E.), see Cho (S.H.), *11773*
Super (N.A.), see Belilovskii (M.A.), *3226*
superchargers, aerodynamics, centrifugal compressors, turbomachinery, Kyrtatos (N.), Watson (N.), *703*
supercritical flow, free boundary, inviscid fluid, waterfalls, Naghdi (P.M.), Rubin (M.E.), *554*
- channel flow, reservoirs, stratification, variational methods, Benjamin (T.B.), *1495*
- airfoils, computing techniques, holography, interferometry, shock waves, Spaid (F.W.), Bachalo (W.D.), *2726*
- airfoils, boundary layer, transonic flow, wind tunnels, Spaid (F.W.), Stivers (L.S.) Jr., *3764*
- buoyant flow, convection, heat transfer, pipe flow, turbulent flow, Kakarala (C.R.), Thomas (L.C.), *3790*
- cavitation, hydrofoils, inviscid fluid, supercavitating hydrofoils, Rowe (A.), Kueny (J.-L.), *5968*
- collapse, compressional waves, ducts (variable area), flexible walls, Kececioglu (I.), Mcclurken (M.E.), (et al.), *11608*

superfluids, engines, magneto fluid dynamics, marine engineering, propulsion, Khonichev (V.I.), Yakovlev (V.I.), *9787*
- cooling, heat pipes, Murakami (M.), *10627*

superplastics, alloys, deformation, grain boundaries, plasticity, Kaibyshev (O.A.), Valiev (R.Z.), *4515*
- aluminum alloys, copper alloys, damping capacity, deformation (plastic), Furushiro (N.), Takimoto (J.), (et al.), *6188*
- constitutive equations, materials possessing memory, plasticity, Lenskii (V.S.), *8207*

supersonic flow, compressible flow, conical flow, stagnation point, Bakker (P.G.), Bannink (W.J.), (et al.), *584*
- compressible flow, finite difference methods, navier stokes equation, Berezin (Yu.A.), Kovena (V.M.), (et al.), *589*
- jets, molecular beams, nozzles, Abraham (O.), Binn (J.H.), (et al.), *623*
- fluid injection, helium, jets, penetration, Vlasov (V.V.), Masyakin (N.E.), (et al.), *631*
- acoustics, jet engines, noise, sound generation, Zhmulin (E.M.), Munin (A.G.), (et al.), *910*
- mathematical methods, perturbation methods, plk method, Mcintosh (S.C.) Jr., Nixon (D.), *1104*
- acceleration, compressible flow, wedges, Bulakh (B.M.), *1521*
- compressible flow, drag, entropy, wave drag, Wellmann (J.), *1522*
- caustics, compressible flow, conduction (unsteady), shock waves, Fung (K.-Y.), *1612*
- aerodynamic interference, experimental methods, wing-body, Vasenev (L.G.), Kharimonov (A.M.), *1624*
- aerodynamic performance, reynolds number, wing body combinations, Stallings (R.L.) Jr., Lamb (M.), (et al.), *1628*
- aerodynamics, compressible flow, inlet flow, numerical methods, Knight (D.D.), *2623*
- boundary layer, chemically reactive flow, frozen flow, lasers (gasdynamic), nozzles, Bassina (I.A.), Dorot (V.L.), (et al.), *2639*
- axisymmetric flow, nozzles, numerical analysis, Ishii (R.), *2652*
- jets, laminar flow, Myshenkov (V.I.), *2662*
- conical bodies, shock waves, stability theory, wedges, Rusanov (V.V.), Sharakshanae (A.A.), *2680*
- aerodynamic performance, conical flow, delta wings, design, Nastase (A.), *2731*
- delta wings, rotating bodies, separated flow, Staicu (S.), *2734*
- afterbodies, mathematical models, wing body combinations, Vukelich (S.R.), Williams (J.E.) Jr., *2739*
- channel flow, combustion, hydrogen, shock waves, Zimont (V.L.), Levin (V.M.), (et al.), *2865*
- flutter, vibration (flow induced), viscoelastic materials, Anvarov (R.), Gegel (E.I.), *2907*
- bending, cascades, flutter, torsion, Bendiksen (O.), Friedmann (P.), *2908*
- airplanes, noise (traffic), noise abatement, simulation, Grantham (W.D.), Smith (P.M.), (et al.), *2960*
- blunt bodies, dust, Golovachov (Yu.P.), Lunkin (Yu.P.), (et al.), *2992*
- compressible flow, jets, numerical methods, Akimov (G.A.), Sobkolov (B.N.), *3539*
- counterflow, jets, similarity methods, Kalinin (V.M.), Melbard (A.M.), *3691*
- aerodynamic loads, computer programming, missiles, pressure distribution, vortices, wing body combinations, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- conical bodies, deformation, flexible bodies, pressure distribution, wedges, Belyaev (N.M.), Khrushch (V.K.), *4585*
- exhaust gases, jets, numerical methods, plumes, shock waves, Dash (S.M.), Thorpe (R.D.), *4590*
- characteristic methods, shock waves, sonic booms, three dimensional flow, Hendrikx (T.P.M.), *4592, book*
- blunt bodies, finite difference methods, shock waves, Gustafsson (B.), Wahlund (P.), *4593*
- blunt bodies, finite difference methods, shock waves, Weilmuenster (K.J.), Graves (R.A.) Jr., *4594*
- boundary layer, friction (skin), porous surfaces, three dimensional flow, Brykina (I.G.), Gershbein (E.A.), (et al.), *4606*
- fluid injection, injection, Baranovsky (S.I.), Schetz (J.A.), *4636*
- airplanes, flight path, optimization, rockets, wing body combinations, Large (E.), *4671*
- ejectors, mixing, pumps, Ziv (A.), Wolfshtein (M.), *4679*
- jet engines, noise, noise abatement, Clauss (J.S.) Jr., Wright (B.R.), (et al.), *4805*
- cylindrical bodies, missiles, numerical methods, shock waves, three dimensional flow, turbulent flow, Hung (C.M.), Chaussee (D.S.), *5413*
- axisymmetric flow, compressible flow, jets, mathematical models, Grabitz (G.), *5414*
- bodies of revolution, combustion, compressible flow, mathematical models, Artyukh (L.Yu.), Kashkarov (V.P.), (et al.), *5415*
- chemical reactions, compressible flow, jets, nonequilibrium flow, numerical methods, Kireev (V.I.), Pirumov (U.G.), *5418*
- boundary layer, moving surfaces, recirculation, Zhuk (V.I.), Ryzhov (O.S.), *5431*
- delta wings, pressure measurement, shock waves, Squire (L.C.), *5489*
- density, moire methods, optical techniques, visualization, Stricker (J.), Kafri (O.), *5512*
- compressible flow, vortex shedding, Mendenhall (M.R.), *6630*
- boundary layer, laminar flow, swept wings, Brykina (I.G.), Gershbein (E.A.), (et al.), *6637*
- approximations (higher order), irrotational flow, nozzles, Ishii (R.), *6661*
- blunt bodies, shock waves, De Neef (T.), Moretti (G.), *6713*
- calibration, nozzles, wind tunnels, Weinert (W.), *6743*
- nozzles, propulsion, rockets, space vehicles, Ellis (R.A.), Hammond (R.N.), (et al.), *6851*
- compressible flow, elastic bodies, oscillations, panels, Babin (O.A.), Vorobev (V.I.), (et al.), *6869*
- blunt bodies, compressible flow, numerical methods, real gas effects, Antonets (A.V.), Marinin (V.P.), *7687*
- compressible flow, drag, jets, nozzles, numerical methods, Mikhail (A.G.), Hankey (W.L.), (et al.), *7688*
- base flow, compressible flow, jets, Wagner (B.), White (R.A.), *7689*
- compressible flow, numerical methods, shock waves, stability (numerical), Ivanov (M.J.), Kraiko (A.N.), *7692*
- nozzles, pressure distribution, unsteady flow, Melnikov (D.A.), Tutushkin (A.S.), *7727*
- jets, mixing layers, turbulent flow, Karpman (I.M.), Traskovskii (V.D.), *7737*
- aeroelasticity, design, flutter, panels, Pierson (B.L.), Hajela (P.), *7907*
- moving media, uniqueness, wave equations, Manwell (A.R.), *8109*
- axisymmetric flow, compressible flow, flow obstructions, impingement, jets, shock waves, vacuum, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8550*
- compressible flow, numerical methods, transonic flow, Ukeguchi (N.), Sakata (H.), (et al.), *8551*
- aerodynamics, compressible flow, three dimensional flow, Ehlers (F.E.), Epton (M.A.), (et al.), *8552*
- boundary layer, fluid injection, oscillators, wedges, Kornienko (E.S.), Shmanenkov (V.N.), *8562*
- delta wings, potential flow, Grossman (B.), Siciari (M.J.), *8638*
- airplanes, design, optimization, transonic flow, vortex flow, wings, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- delta wings, leading edge, pressure distribution, Ter-Minasyants (S.M.), *8641*
- combustion, design, geometrical properties, scramjets, Waltrup (P.J.), Billig (F.S.), (et al.), *8809*
- airplanes, noise (aerodynamic), noise abatement, O'Keefe (J.V.), Mangiarotty (R.A.), (et al.), *8867*
- fins, missiles, numerical methods, shock layer, Wardlaw (A.B.) Jr., Solomon (J.M.), *9551*
- blunt bodies, heat transfer, nonequilibrium flow, Golovachov (Yu.P.), *9552*
- duct flow, nonequilibrium flow, Ermolin (N.E.), Fomin (V.M.), *9555*
- axisymmetric flow, diffusers, entrance region, separated flow, Vishnevetskii (S.L.), Pakhomova (Z.S.), *9589*
- diffusers, inlets, simulation, unsteady flow, Colbourne (D.E.), *9590*
- finite difference methods, shock waves, three dimensional flow, Yamamoto (Y.), Kaneshima (K.), *9635*
- airfoils, numerical methods, two dimensional flow, Lewis (T.S.), Sirovich (L.), *9647*
- airfoil theory, laminar flow, oscillating bodies, trailing edge, Brown (S.N.), Cheng (H.K.), *9651*
- balance system, blowdown, rolling motion, wind tunnels, Murthy (H.S.), *9681*
- cylindrical bodies, separated flow, smoothing splines, Bespalov (A.M.), Zhdanov (V.V.), (et al.), *9712*
- cutting, elastic bodies, elastic waves, lasers, Borzykh (A.A.), *10242*
- asymptotic methods, boundary layer, finite difference methods, grids, Rai (M.M.), Anderson (D.A.), *10414*
- blunt bodies, compressible flow, shock waves, three dimensional flow, Schwarze (H.-F.), *10416*

- cavities, compressible flow, heating, jets, pressure change, resonance, Kuptsov (V.M.), Filippov (K.N.), *10417*
- aerodynamics, compressible flow, numerical methods, three dimensional flow, Voskresenskii (G.P.), Chushkin (P.I.), *10421*
- boundary layer, hypersonic flow, unsteady state, Gupta (R.N.), Mukherjee (S.), (et al.), *10427*
- fluid injection, high enthalpy, Baev (V.K.), Boshenyatov (B.V.), (et al.), *10463*
- bubble dynamics, bubbly flow, compressional waves, nozzles, subsonic flow, Nakagawa (H.), Mori (Y.), (et al.), *10491*
- boundary layer, fluid injection, heat transfer, shells (spherical), Zinchenko (V.I.), Trofimchuk (E.G.), *10682*
- composite structures, design (minimum weight), flutter, shells (cylindrical), Kosichenko (A.A.), Pochtman (Yu.M.), (et al.), *10763*
- elastoplasticity, impact, shear waves, Freund (L.B.), Douglas (A.S.), *11161*
- blunt bodies, compressible flow, transonic flow, Weiland (C.), *11394*
- aerodynamics, bodies of revolution, drag, wing body combinations, Vasilchenko (V.I.), *11397*
- compressible flow, fluid injection, nozzles, Zelentsov (V.V.), Nesterov (A.A.), (et al.), *11400*
- cavities, compressible flow, convection, Shchukin (V.K.), Gortyshov (Yu.F.), (et al.), *11401*
- axisymmetric flow, compressible flow, drag, hypersonic flow, Khlopkov (Yu.I.), *11402*
- compressible flow, lasers (gasdynamic), mixing, nozzles, Efimov (B.G.), Zaklyaziminskii (L.A.), *11403*
- compressible flow, planetary atmospheres, plasma, rarefied gases, shock waves, Gurevich (A.V.), Paschenko (N.T.), *11406*
- afterbodies, compressible flow, turbulent flow, Yoshikawa (K.K.), Wray (A.A.), *11411*
- chemically reactive flow, compressible flow, shock waves, Ni (A.L.), Ryzhov (O.S.), *11424*
- compressible flow, finite element techniques, navier stokes equation, shear layer, unsteady flow, Cooke (C.H.), Blanchard (D.K.), *11429*
- gas-trips, laser doppler velocimeters, mixing, nozzles, velocity profiles, Cenkner (A.A.) Jr., *11511*
- nozzles, pulsejets, relaxation, Belavin (V.A.), Golub (V.V.), (et al.), *11515*
- boundary layer, hydrodynamic stability, perturbations, Gaponov (S.A.), *11529*
- hydrodynamic stability, liquid vapor interface, surface tension, Shivamoggi (B.K.), *11534*
- blunt bodies, computer programming, delta wings, viscous flow, Tannehill (J.C.), Venkatapathy (E.), (et al.), *11728*
- channels, leading edge, missiles, wedges, Chushkin (O.I.), *11732*
- nonlinear waves, shock waves, sonic booms, sound propagation, Weber (M.E.), Donn (W.L.), *11916*
- jet engines, shock waves, sound generation, Norum (T.D.), Seiner (J.M.), *11956*
- shock waves, sound generation, transonic flow, Gusev (V.E.), Karabutov (A.A.), *11964*

Supple (W.J.), beam columns, postbuckling behavior, tubes, Collins (I.), *1246*

suppression, cylindrical bodies, strakes, vortex shedding, Zdravkovich (M.M.), *368*
- experimental results, jets, shear flow, turbulence, Zaman (K.B.M.Q.), Hussain (A.K.M.F.), *1582*
- turbulence, vortex rings, Vladimirov (V.A.), Lugovtsov (B.A.), (et al.), *4647*
- nonlinear systems, oscillations, Mcdonough (J.M.), *9153*
- cables, cylindrical bodies, submerged bodies, vibration (flow induced), vortex shedding, Every (M.J.), King (R.), (et al.), *10488*

Suquet (P.), buckling, plates (reinforced), *5181*

Suquet (P.-M.), existence theorems, plasticity, uniqueness, work hardening, *8205*

Surana (K.S.), elasticity, finite element techniques, isoparametric formulation, stress analysis, three dimensional formulation, *1134*
- axisymmetric loading, elasticity, finite element techniques, shells (axisymmetric), *1135*
- beams, distributed systems, finite element techniques, lumped systems, *8230*

Suresh (S.), see Ritchie (R.O.), *2414*

surf, coastal engineering, currents, sediment transport, Walton (T.E.) Jr., *2590*
- beaches, breakers, surface waves, Johns (B.), Jefferson (R.J.), *9928*

surface barrier, rayleigh waves, scattering, Biryukov (S.V.), *5244*
- scattering, sound fields, Dassios (G.), *10796*

surface effect, machinability, metallurgy, particles, steel, Kalley (N.), Matijevic (E.), *552*
- critical heat flux, nucleate boiling, nucleation, surface flaws, Messina (A.D.), Park (E.L.) Jr., *740*
- boiling, channel flow, critical heat flux, roughness, Styrikovich (M.A.), Leontev (A.I.), (et al.), *742*
- fracture toughness, steel, Ivanova (V.S.), Terentyev (V.F.), (et al.), *1416*
- convection (forced), heat transfer, orifices, Sparrow (E.M.), Gurdal (U.), *1691*
- boiling, coatings, nucleate boiling, polymers, thin films, Hinrichs (T.), Hennecke (E.), (et al.), *2792*
- convection (forced), heat transfer, melting, Solomon (A.D.), *2820*
- fracture, residual stresses, steel, Iwai (Y.), Arima (J.), *7282*
- fatigue, residual stresses, work hardening, Trofimov (V.V.), Radeeva (E.N.), *7293*
- cavitation, corrosion, erosion, vibration, Hoss (S.), Hirth (F.W.), (et al.), *7810*
- mission analysis, ship design, towing tanks, Balquet (R.J.), *8046*
- compressibility, conductivity, thermal excitation, Loudon (R.), *8677*
- boiling, critical heat flux, nucleate boiling, roughness, Avksentyuk (B.P.), *8690*
- boundary layer (thermal), heat transfer (combined modes), magneto fluid dynamics, stability, Bashtovoi (V.G.), Pavlinov (M.I.), *8813*
- damping, heaving, ship motion, virtual mass, Kim (C.H.), Tsakonas (S.), *9014*
- emissivity, radiant interchange, scattering, schuster number, Gorban (I.A.), *9719*
- acoustic waves, acoustics, scattering, Holford (R.L.), *9849*
- buckling, elastoviscoplasticity, half space, Horii (H.), Nemat-Nasser (S.), *10184*
- cavitation, cavitation inception, hydraulic machinery, hydraulic structures, scale effects, Arndt (R.E.A.), *10531*
- condensation, condensation (dropwise), gold, steam, Woodruff (D.W.), Westwater (J.W.), *10576*
- condensation (dropwise), conductivity, thermal properties, Abdelmessih (A.H.), Rotenberg (Y.), (et al.), *10577*
- magneto fluid dynamics, mass transfer, spherical bodies, two phase flow, Oreper (G.M.), *11820*
- infiltration, layered media, soils, Moore (I.D.), *12064*

surface flaws, critical heat flux, nucleate boiling, nucleation, surface effect, Messina (A.D.), Park (E.L.) Jr., *740*
- crack arrest, dynamic fracture, impact, shells (cylindrical), Popelar (C.H.), Gehlen (P.C.), (et al.), *1383*
- fatigue, flaw detection, fracture, microcracks, Verpoest (I.), Aernoudt (E.), (et al.), *2503*
- crack opening displacement, fracture toughness, material testing, stress intensity factor, weight function, Bar-Tikva (D.), Grandt (A.F.) Jr., (et al.), *3478*
- crack propagation, mixed mode fracture, photoelasticity, stress intensity factor, Smith (C.W.), Peters (W.H.), (et al.), *3479*
- bars, eddy currents, flaw detection, wires, Stumm (W.), *3508*
- bending, crack propagation, fatigue, Mukai (Y.), Matsuno (H.), (et al.), *4482*
- materials processing, thermoplasticity, upset forging, Jenner (A.), Bai (Y.), (et al.), *4496*
- rayleigh waves, scattering, Momoi (T.), *6350*
- acoustic measurements, defects, nondestructive tests, Polesskaya (L.M.), Grichuk (V.V.), (et al.), *6487*
- nondestructive tests, reflection, ultrasonics, welded joints, Perevalov (S.P.), Raikhman (A.Z.), *6489*
- acoustic measurements, acoustic waves, defects, ultrasonics, Ermolov (I.N.), Razygraev (N.P.), (et al.), *6490*
- defects, flaw detection, spectral analysis, ultrasonics, Vopilkin (A.Kh.), Ermolov (I.N.), (et al.), *6492*
- blades, chemical reactions, cyclic loading, high temperature, Kosygin (E.P.), Verkhovodov (P.A.), *7492*
- scattering, surface waves, Achenbach (J.D.), Brind (R.J.), *8333*
- ceramics, cracks, flaw detection, gas turbines, photoacoustic microscopy, Inglehart (L.J.), Thomas (R.L.), (et al.), *9435*
- bearing capacity, bearings (gas lubricated), loads, lubricants (gas), lubrication (hydrodynamic), Belasanyan (V.S.), *9975*
- half space, rayleigh waves, scattering, wave generation, Witos (F.), *10229*
- boundary integral methods, elliptical cracks, fracture mechanics, stress intensity factor, Athanassiadis (A.), Boissenot (J.M.), (et al.), *10287*
- crack tip geometry, elastodynamics, stress intensity factor, Achenbach (J.D.), Brind (R.J.), *10290*

surface flow, boundary roughness, cylindrical bodies, roughness, Buresti (G.), *604*
- pressure measurement, shear stress, turbulent flow, Pontikos (N.), Bradshaw (P.), *712*
- finite element methods (hybrid), mesh generation, seepage, Bathe (K.-J.), Khoshgoftaar (M.R.), *1870*
- ice, icebergs, ocean air interaction, oceanography, oscillations, Mcphee (M.G.), *3017*
- ice, icebergs, oceanography, weather forecasting, Gebhart (B.), Audunson (T.), *5953*
- stresses, tensor methods, viscous flow, Moreau (J.J.), *6619*
- boundary layer (atmospheric), currents, ice, icebergs, oscillations, Mcphee (M.G.), *7055*
- boundary layer (turbulent), coatings, compliant materials, interaction, viscoelastic materials, Airapetov (A.B.), *7698*
- boundary layer (atmospheric), boundary layer (turbulent), mass transfer, surface flow, turbulence (transport), Dawkins (R.A.), Davies (D.R.), *7699*
- boundary layer (atmospheric), boundary layer (turbulent), mass transfer, surface flow, turbulence (transport), Dawkins (R.A.), Davies (D.R.), *7699*
- film flow, surface tension, Tanner (L.H.), *8490*
- boundary integral methods, fredholm equations, free boundary, sluices, spillways, Cheng (A.H.-D.), Liggett (J.A.), (et al.), *10391*

surface jets, axial turbines, convection (forced), cooling, gas turbines, Repukhov (V.M.), Shvets (I.T.), *4676*
- buoyant flow, entrainment, Murota (A.), Nakatsuji (K.), *6673*

surface profiles, channel flow, flumes, free boundary, inviscid fluid, velocity profiles, Davis (R.W.), Deutsch (S.), *560*
- measurements, roughness, skid, Ishigaki (H.), Kawaguchi (I.), *999*

- contact problems, friction, roughness, wear, Kragelskii (I.V.), *1002*
- elastic bodies, hydroelasticity, rotating shafts, Zak (M.), *1174*
- contact problems, lubrication (elastohydrodynamic), micropitting, rolling contact, roughness, Berthe (D.), Flamand (L.), (et al.), *1931*
- polymers, roughness, wear, Ryzhov (E.V.), *1933*
- bearings (gas lubricated), bearings (journal), lubrication (hydrostatic), Pande (S.S.), Somasundaram (S.), *1936*
- computer graphics, human body, moire methods, Duncan (J.P.), Dean (D.P.), (et al.), *1958*
- antennas, artificial satellites, control, Buyakas (V.I.), Chekulaev (Yu.V.), *2193*
- contact stresses, fatigue, gear teeth, kinematics, wear, Huston (R.L.), Coy (J.J.), *2558*
- circular arc gears, contact stresses, gears, Lingaiah (K.), Ramachandra (K.), *2559*
- gear teeth, graphical methods, hobbing, Terashima (K.), Ueno (T.), (et al.), *2564*
- bearings (journal), damping, lubrication (hydrodynamic), whirling shafts, Garner (D.R.), Lee (C.S.), (et al.), *3052*
- finishing, gear teeth, rolling, Ozaki (T.), Imamura (A.), *3574*
- curvature, design, gears, gears (hypoid), gears (spiral), synthesis, Litvin (F.L.), *4555*
- diffraction, ocean, scattering, underwater acoustics, Holford (R.L.), *5785*
- friction, roughness, tires, Taneeranonon (P.), Yandell (W.O.), *7082*
- elasticity, friction (sliding), roughness, Phan-Thien (N.), *7083*
- fatigue, mesh generation, thin films, wear, ElSherbiny (M.G.), Salem (F.B.), *7088*
- fatigue, film thickness, lubrication (elastohydrodynamic), rolling contact, Tallian (T.E.), *7100*
- channels, discontinuities, free boundary, surge, Barr (D.I.H.), Das (M.M.), *7651*
- deformation (plastic), friction (sliding), wear, Mikhin (N.M.), Frolov (S.V.), (et al.), *8050*
- contact angle, drops, surface tension, viscosity, Welygan (D.G.), Burns (C.M.), *8491*
- boundary layer (three dimensional), flow obstructions, iterative methods, separated flow, Sykes (R.I.), *8559*
- contact problems, deformation, friction (sliding), roughness, thermal effects, Burton (R.A.), *9041*
- backlash, gear teeth, gears (trochoidal), Lehmann (M.), *9474*
- emulsions, fluid mechanics, permeability, porous media, shear, surfactants, Kalpakci (B.), Klaus (E.E.), (et al.), *9887*
- design (optimum), grinding, gyroscopes, synthesis, tools, Osman (M.O.M.), Sankar (S.), (et al.), *10370*
- design, dynamic loads, gear teeth, Hidaka (T.), Terauchi (Y.), (et al.), *10373*
- friction (sliding), roughness, surfaces, Koura (M.M.), Omar (M.A.), *10883*
- friction (sliding), friction (solid solid), roughness, surfaces, Zmitrowicz (A.), *10884*
- computer analysis, holography, roughness, wear, Groves (D.), Lalor (M.J.), (et al.), *10897*
- roughness, surfaces, tool wear, turning, Vajpayee (S.), *12088*

surface tension, finite element techniques, fluid mechanics, free boundary, incompressible flow, Ruschak (K.J.), *97*

- drops, reynolds number (small), two dimensional flow, Vanden-Broeck (J.-M.), *569*
- hydrodynamic stability, jets, liquids, Bogy (D.B.), *633*
- heat transfer, hydrodynamic stability, mass transfer, rayleigh taylor instability, viscous effects, Ho (S.-P.), *634*
- buoyancy, hydrodynamic stability, mathematical models, microgravity, Castillo (J.L.), Velarde (M.G.), *638*
- buoyant flow, cellular flow, convection (benard), thermal instability, Lebon (G.), Cloot (A.), *757*
- boundary layer, free boundary, gravity waves (surface), viscosity, Trad (A.), *1593*
- adsorption, immiscible fluids, liquid vapor interface, Haung (K.Z.), Chai (C.P.), (et al.), *1657*
- drops, interfaces, Levan (M.D.), *1861*
- drops, viscous effects, Sherwood (J.D.), *3622*
- film flow, froude number, reynolds number, rotating cylinders, weber number, Kovac (J.), Balmer (R.T.), *3628*
- capillary waves, meniscus, Chiroiu (V.), *3710*
- heat transfer, hydrodynamic stability, liquids, Takashima (M.), *5457*
- free boundary, hydrodynamic stability, liquids, Svechkareva (M.A.), Tyuptsov (A.D.), *6675*
- liquid gas mixture, two phase flow, Voinov (O.V.), Pukhnachev (V.V.), *6968*
- fredholm equations, linear theory, planing surfaces, Tuck (E.O.), *7076*
- models, scale effects, siphons, weirs, Goldring (B.T.), *7542*
- film flow, spherical bodies, stokes flow, Johnson (R.E.), *7668*
- drawing, gravity, hydrodynamic stability, inertia, Chang (J.C.), Denn (M.M.), (et al.), *7741*
- hydrodynamic stability, interfaces, Wilke (H.), *7747*
- gravity waves (breaking), nonlinear waves, surveys, Schwartz (L.W.), Fenton (J.D.), *7759*
- film flow, surface flow, Tanner (L.H.), *8490*
- contact angle, drops, surface profiles, viscosity, Welygan (D.G.), Burns (C.M.), *8491*
- cavitation flow, free boundary, plates, Vanden-Broeck (J.M.), *8515*
- buoyancy, convection, eigenvalues, hydrodynamic stability, liquids, Rosenblat (S.), Homsy (G.M.), (et al.), *8603*
- critical heat flux, film cooling, film flow, heat transfer, pipe flow, Ganic (E.N.), Roppo (M.N.), *8686*
- convection, heat addition, variational methods, Lebon (G.), Perez-Garcia (C.), *8714*
- drops, impact, Bechtel (S.E.), Bogy (D.B.), (et al.), *9881*
- froude number, plumes, rivers, stratified flow, Mcclimans (T.A.), Saegrov (S.), *10399*
- airfoil theory, cavitation, cavitation number, contact problems, membranes (inflatable), weber number, Vanden-Broeck (J.-M.), *10402*
- equations of state, molecular theory, water, Guerrero (M.I.), Davis (H.T.), *10553*
- chemical kinetics, convection, interfaces, liquid liquid interface, Dalle Vedove (W.), Sanfeld (A.), *11379*
- bubbly flow, cavities, hydrodynamic stability, Petrov (A.G.), *11532*
- hydrodynamic stability, liquid vapor interface, supersonic flow, Shivamoggi (B.K.), *11534*
- capillary waves, finite amplitude, gravity waves (surface), Hogan (S.J.), *11593*
- bubble dynamics, thermal effects, two phase flow, Meyyappan (M.), Wilcox (W.R.), (et al.), *12038*

surface waves, diffraction, gravity waves, sloping bottom, Lozano (C.), Liu (P.L.-F.), *665*

- internal waves, spectra, wave interactions, Basovich (A.Ya.), *669*
- containers (partially filled), sloshing, tanks, wedge-shaped tanks, Bauer (H.F.), *674*
- energy density, stonely waves, Meleshko (V.V.), *1296*
- elastic waves, modal analysis, Lapin (A.D.), *1297*
- elastic waves, electric effects, piezoelectric devices, Cerowski (Z.), Opilski (A.), *1298*
- shear waves, solutions (material), viscoelastic fluids, De Feijter (J.A.), Benjamins (J.), *1489*
- buoys, mathieu equation, oscillating bodies, vibration (parametric), Ogihara (K.), *1609*
- doppler effect, scattering, wind-wave interaction, Tuteur (F.B.), Tung (H.), (et al.), *1646*
- gravity waves, internal waves, ocean air interaction, ocean waves, thermocline, turbulence, turbulence (geophysical), Phillips (O.M.), *1888, book*
- ocean air interaction, wind-wave interaction, Makin (V.K.), Chalikov (D.V.), *1902*
- absorption, sound propagation, Kligman (R.L.), *2361*
- acoustic waves, scattering, Varavin (V.Yu.), Naugolnykh (K.A.), (et al.), *2946*
- shallow water, wind-wave interaction, Bitner (E.M.), *3014*
- breakers, shallow water, spectra, Iwata (K.), *3015*
- wind-wave interaction, Lake (B.M.), Yuen (H.C.), *3020*
- boundary layer, falling films, film flow, nonlinear analysis, Esmail (M.N.), *3709*
- breakers, ocean waves, probability theory, Tayfun (M.A.), *4048*
- gravity waves, swell, Larsen (L.H.), *4052*
- cylindrical bodies, scattering, submerged bodies, Dragonette (L.R.), *4786*
- beaches, currents, Kirby (J.T.) Jr., Dalrymple (R.A.), (et al.), *4853*
- oceanography, probability theory, wind-wave interaction, Matushevskii (G.V.), *4855*
- hydrodynamic stability, ocean air interaction, shear flow, wind-wave interaction, Kawai (S.), *4857*
- ocean waves, oceanography, Gent (P.R.), *4858*
- circulation, finite difference methods, ocean waves, oceanography, Niemeyer (G.), *4862*
- ocean bed, ocean waves, Dawson (T.H.), *4868*
- energy transport, ocean air interaction, wind-wave interaction, Makin (V.K.), *4887*
- acoustic waves, diffraction, Anisimkin (V.I.), Morozov (A.I.), (et al.), *5236*
- currents, dispersion, turbulence (geophysical), water pollution, Ergin (A.), *5903*
- breakers, hurricanes, ocean waves, tides, Taylor (R.B.), *5917*
- ocean air interaction, ocean waves, Kuzminskaya (G.G.), Tsareva (T.I.), *5940*
- boundary layer (atmospheric), heat transfer (atmospheric), ocean air interaction, Dvoryaninov (G.S.), *5950*
- ocean waves, wave height, Corson (W.D.), Resio (D.T.), *7052*
- ocean waves, optical instruments, optical techniques, Luchinin (A.G.), *7054*
- data analysis, ocean waves, spectra, stochastic processes, Long (R.B.), *7058*
- attenuation, free boundary, nonhomogeneous media, Lapin (A.D.), *7422*
- film flow, reynolds number (small), viscous flow, Demekhin (E.A.), Shkadov (V.Ya.), *7758*
- film flow, nonlinear analysis, solitary waves, Tsvelodub (O.Yu.), *7762*
- gravity waves, gravity waves (surface), ocean waves, spectra, wind-wave interaction, Naeser (H.), *8018*
- spectra, wind-wave interaction, Komen (G.J.), *8026*
- cylindrical waves, elastic waves, Pardee (W.J.), *8329*
- scattering, surface flaws, Achenbach (J.D.), Brind (R.J.), *8333*
- acoustics, rayleigh waves, residual stresses, Hirao (M.), Fukuoka (H.), (et al.), *8334*
- experimental methods, highways, vibration, Dhir (M.P.), Venkatesha (M.C.), (et al.), *8350*

- roughness, sound propagation, stratified flow, Tolstoy (I.), *8869*
- acoustic waves, ground effect, impedance, reflection, sound propagation, Habault (D.), Filippi (P.J.T.), *8865*
- reflection, refraction, vertical contact, Its (E.N.), Yanovskaya (T.B.), *8958*
- bottom irregularities, internal waves, roughness, stratification, tsunami, Yermakov (S.A.), Pelinovskiy (Ye.N.), *8982*
- gravity waves (surface), ocean waves, oceanography, spectra, wind-wave interaction, Komen (G.J.), *8998*
- boussinesq equation, existence theorems, uniqueness, Schonbek (M.E.), *9101*
- displacement gages, measurements (dynamic), Breckenridge (F.R.), Greenspan (M.), *9340*
- acoustic emission, brittle fracture, brittle materials, cracks, inclusions, Rose (L.R.F.), *9436*
- aerodynamic interference, aerodynamic performance, missiles, moving surfaces, wings, Putilin (S.I.), *9665*
- beaches, breakers, surf, Johns (B.), Jefferson (R.J.), *9928*
- galerkin method, half space, layered media, viscoelasticity, Chiroiu (V.), Nicolae (V.), *10234*
- bottom irregularities, coasts, diffraction, oceanography, Wang (D.-P.), *10859*
- ocean air interaction, wind, Liu (T.-F.), Ma (F.S.), *10868*
- ocean air interaction, swell, Dexter (P.E.), *10869*
- gages, wave height, Vaisband (V.B.), Shanin (V.N.), *10871*
- dispersion relation, flow irregularities, vortices, Keller (J.J.), Escudier (M.P.), *11580*
- film flow, film thickness, hydrodynamic stability, vertical surfaces, Alekseenko (S.V.), Nakoryakov (V.E.), (et al.), *11612*
- half space, hydroelasticity, layered media, Gogna (M.L.), *11697*
- beaches, breakers, Halliwell (A.R.), Machen (P.C.), *12072*
- gravity waves (surface), ocean air interaction, pressure, turbulence (geophysical), Snyder (R.L.), Dobson (F.W.), (et al.), *12080*
- velocity measurement, wave height, weather satellites, wind, Martsinkevich (L.M.), *12083*

surfactants, condensation (dropwise), drops, evaporation, Borzilov (V.A.), Klepikova (N.V.), (et al.), *1905*
- drag reduction, non newtonian flow, suspensions, Povkh (I.L.), Serdyuk (A.I.), (et al.), *3595*
- colloids, liquid solid interface, numerical methods, Gur (Y.), Ravina (I.), Babchin (A.J.), *6585*
- damping, films, liquid metals, magneto fluid dynamics, Gogosov (V.V.), Naletova (V.A.), (et al.), *9790*
- emulsions, fluid mechanics, permeability, porous media, shear, surface profiles, Kalpakci (B.), Klaus (E.E.), (et al.), *9897*
- adsorption, convection, dispersion, porous media, Ramirez (W.F.), Shuler (P.J.), (et al.), *10690*

surge, bottom irregularities, finite element techniques, ocean air interaction, shallow water, Kawahara (M.), Nakazawa (S.), (et al.), *3023*
- cavitation, geometrical properties, hydraulic turbines, vortex tubes, Dorfler (P.), *5498*
- channels, discontinuities, free boundary, surface profiles, Barr (D.I.H.), Das (M.M.), *7651*
- control stability, control surfaces, ocean waves, ship motion, unsteady flow, Haddara (M.R.), *8042*
- compressors, pumps, turbomachinery, Horvath (A.J.T.), *8654*
- axial compressors, blades, pressure distribution, strain gages, velocity measurement, Shatalov (I.K.), *8657*
- centrifugal compressors, stalling, turbomachinery, Wachter (J.), Kohn (E.), (et al.), *8658*

Surkov (G.A.), mathematical models, radiant interchange, radiation properties, transient loading, *780*

Surtees (J.O.), bolted joints, design, joints, plasticity, riveted joints, Gildersleeve (C.P.), (et al.), *8482*

surveys, computing techniques, geometric programming, nonlinear programming, Ecker (J.G.), *53*
- convection, fluid mechanics, galerkin method, numerical methods, Hughes (T.J.R.) ed., *95, book*
- composite structures, laminates, reliability analysis, structural analysis, Lenoe (E.M.) eds., Oplinger (D.W.), (et al.), *286, book*
- finite amplitude, solitary waves, wave interactions, Phillips (O.M.), *662*
- korteweg de vries equation, scattering, Miles (J.W.), *664*
- containers (partially filled), hydroelasticity, shells (fluid-filled), sloshing, Dimaggio (F.L.), *676*
- geophysics, gravity, Balk (P.I.), *962*
- computer programming, computing techniques, simulation, Stephenson (J.), *1125, book*
- fibers, flexible bodies, textiles, tires, yarn, Hearle (J.W.S.) eds., Thwaites (J.J.), (et al.), *1214, book*
- corrosion fatigue, fatigue, fretting, wear, Waterhouse (R.B.) ed., *1358, book*
- offshore structures, vibration, Rubin (S.), *1452*
- asymptotic methods, boundary layer, incompressible flow, reynolds number (high), separation, Ruban (A.I.), Sychev (V.V.), *1550*
- differential equations (partial), fluid mechanics, mathematical methods, mathematical models, perturbation theory, Brosowski (B.) eds., Martensen (E.), *2036, book*
- continuum mechanics, damage, life expectancy, materials processing, materials properties, mathematical models, Stouffer (D.C.), Krempl (E.), (et al.), *2405, book*
- constraints, structural optimization, Rangacharyulu (M.A.V.), Done (G.T.S.), *2512*
- ductile fracture, elastoplasticity, fracture, j-integral, material testing, Landes (J.D.), Begley (J.A.), (et al.), *3460, book*
- asymptotic methods, nonlinear mechanics, stochastic systems, Vladimirov (V.S.), Mitropolsky (Yu.A.), (et al.), *4158*
- cermets, composite materials, composite structures, fatigue, fracture, materials properties, metallic composites, Kawata (K.) eds., Akasaka (T.), *5122, book*
- fatigue, random loading, testing equipment, Bily (M.), Kliman (V.), (et al.), *5330*
- aerodynamic performance, conical flow, diffusers, Klein (A.), *5444*
- boundary integral methods, computing techniques, differential equations (partial), finite difference methods, galerkin method, iterative methods, Noye (J.) ed., *7180, book*
- composite structures, fatigue, fracture, material testing, structural analysis, Marshall (I.H.) ed., *7296, book*
- gravity waves (breaking), nonlinear waves, surface tension, Schwartz (L.W.), Fenton (J.D.), *7759*
- water hammer, Martin (C.S.), *7764*
- fluid-structure interaction, Belytschko (T.), *7772*
- reflection, refraction, shock waves, Griffith (W.C.), *7776*
- developing flow, pipe flow, turbulent flow, Klein (A.), *8571*
- damage (cumulative), fissured systems, fracture, spectral analysis, Fras (G.), Pons (J.C.), (et al.), *8951*
- cavities, cracks, creep, fatigue, metals, micromechanics, Gittus (J.) ed., *9380, book*
- gravity waves (solitary), Miles (J.W.), *9622*
- flow, survey, visualization, Merzkirch (W.) ed., *9677, book*
- data analysis, nondestructive tests, ultrasonics, Fu (L.S.), *79999*
- magnetoelasticity, plates, shells (thin), Ambartsumian (S.A.), *79999*
- limit analysis, mathematical programming, optimization, plasticity, Maier (G.), Munro (J.), *79999*
- hydraulic transport, pipelines, slurries, Round (G.F.), *79999*

Survila (V.), see Poskas (P.), *786*

Susiov (A.D.), capillary flow, channel flow, evaporation, heat pipes, Ustinov (V.Ya.), *11772*

suspension systems, damage (cumulative), locomotives, spectral analysis, stochastic processes, Garivaltis (D.S.), Garg (V.K.), (et al.), *4485*
- dynamic response, gust loads, magnetic levitation, modeling, vehicles, wind loads, Garg (D.P.), Barrows (T.M.), *10768*
- design, hovercraft, optimal control, vehicles, Balzer (L.A.), *11078*

suspensions, particulate flow, turbulence (transport), two phase flow, Genchev (Zh.D.), Karpuzov (D.S.), *657*
- flame propagation, powdered fuels, Shevchuk (V.G.), Goroshin (S.V.), (et al.), *836*
- ferrous metals, liquids, magnetoelasticity, oscillations, Shishkin (L.A.), *862*
- ferrous metals, liquids, magneto fluid dynamics, separation, Boguslavskii (V.A.), Dvorchik (S.E.), (et al.), *863*
- river beds, sediment transport, Higgins (R.J.), *1499*
- impulsive propulsion, particles, Immich (H.), *2984*
- averaging, reynolds stresses, two phase flow, Iwanaga (M.), Ishihara (T.-O.), *2985*
- brownian motion, emulsions, floculation, particle size, Reddy (S.R.), Fogler (H.S.), *3593*
- coal, particulate flow, pipelines, viscometry, Davis (P.K.), Muchmore (C.B.), (et al.), *3594*
- drag reduction, non newtonian flow, surfactants, Povkh (I.L.), Serdyuk (A.I.), (et al.), *3595*
- models, particle fluid flow, stochastics, Bechteler (W.), *3956*
- ferrous metals, magneto fluid dynamics, rotating bodies, seals, Morris (W.D.), *3958*
- dispersed flow, shear flow, walls, Brunn (P.), *4008*
- channels, laminar flow, Rubinstein (I.), *4009*
- channels, deposition, entrance region, Korjack (T.A.), Chen (R.Y.), *4010*
- mixtures, viscoelastic waves, waves, D'Anna (A.), De Socio (L.M.), (et al.), *4130*
- magneto fluid dynamics, magnetoelasticity, polar fluids, Suiazov (V.M.), *4137*
- deposition, particles, rotating disks, Adamczyk (Z.), Pomianowski (A.), *4822*
- convection (forced), ferrous metals, magneto fluid dynamics, thermophysical properties, Shulman (Z.P.), Kordonskiy (V.I.), (et al.), *5548*
- eddies, particles, Alquier (M.), Gruat (J.), (et al.), *5811*
- cutting, life expectancy, tools, Andreeva (I.A.), Bryukhanova (L.S.), (et al.), *6410*
- brownian motion, colloids, polar fluids, shear flow, Takamura (K.), Van De Ven (T.G.M.), (et al.), *6583*
- jets, non newtonian flow, Entov (V.M.), Kordonskii (V.I.), (et al.), *6586*
- closed conduit flow, particle fluid flow, velocity measurement, Kowalewski (T.A.), *6587*
- sound propagation, Fleury (F.), *6923*
- scale effects, two phase flow, Saha (P.) eds., Farukhi (N.M.), *6956, book*
- deposition, entrance region, tubes, Chen (R.Y.), Gelber (M.W.), *6957*
- mixing, processes, two phase flow, Einenkel (W.-D.), *6963*

- particle fluid flow, rheology, viscosity, Tanaka (H.), White (J.L.), *7639*
- cylindrical bodies, magneto fluid dynamics, pressure gradient, transforms, Gupta (S.C.), Agarwal (M.C.), *7896*
- electromagnetic waves, particles, scattering, Bayvel (L.P.), Jones (A.R.), *8088, book*
- dilute solutions, particle fluid flow, viscosity, Ryskin (G.), *8496*
- anisotropy, birefringence, colloids, optical techniques, Meeten (G.H.), *8502*
- dilute solutions, polar fluids, viscoelastic fluids, Taran (E.Yu.), *8503*
- flow measurement, scale effects, two phase flow, Lee (J.), Crowe (C.T.), *8891*
- metals, particle fluid flow, Zolotko (A.N.), Matsko (A.M.), (et al.), *9745*
- flame propagation, particles, Shevchuk (V.G.), Kondratev (E.N.), (et al.), *9768*
- electro fluid dynamics, elliptical bodies, particles, stability theory, Tsebers (A.O.), *9796*
- gases, heat transfer, mass transfer, Sheiman (V.A.), Nikolaichik (L.V.), *10664*
- boron, ignition sensitivity, particles, Zolotko (A.N.), Polishchuk (D.I.), (et al.), *10698*
- multiphase flow, slurries, transport, Bajura (R.A.) ed., *10820*
- channel flow, plates (parallel), sedimentation, Herbolzheimer (E.), Acrivos (A.), *11358*
- electro fluid dynamics, particle fluid flow, rods, Sherwood (J.D.), *11394*
- magneto fluid dynamics, thermal effects, two phase flow, vortex flow, Miroshnikov (V.K.), *11818*

Susse (H.), see Oeischlegel (D.), *1108*

Sutherland (G.H.), algorithms, design, force, kinematics, mechanisms, transmission, *3569*

Sutherland (W.R.S.), see Gray (D.F.), *11065*

Sutton (G.W.), ablation, finite difference methods, heat transfer, nucleate boiling, space vehicles, *8771*

Sutton (J.L.), arrays, holography, imaging systems, underwater acoustics, *5718*

Sutton (W.H.), see Ozisik (M.N.), *8742*

Suvorov (A.M.), floating bodies, fluid-structure interaction, plates, shear, vibration (forced), Cherkesov (L.V.), *6297*

Suvorov (A.V.), channel flow, heat exchangers, thermal diffusion, transient effects, Rabinovich (G.D.), *8746*

Suvorova (Iu.V.), see Osokin (A.E.), *3077*

Suvorova (Yu.V.), endurance limit, fatigue, plastics, Viktorova (I.V.), (et al.), *4478*
- bonded joints, composite materials, fracture, plastics, transient loading, Sorina (T.G.), (et al.), *7298*

Suwono (A.), bodies of revolution, boundary layer, laminar flow, rotating bodies, *2627*
- heat transfer, laminar flow, rotating bodies, spherical bodies, *5559*

Suzuki (H.), see Chen (W.F.), *5116*
- see Chen (W.F.), *5117*

Suzuki (K.), see Takahashi (S.), *2334*
- ablation, boundary layer (turbulent), heat transfer, mass transfer, space vehicles, transpiration, *3967*
- see Takahashi (S.), *11133*
- beams (curved), dynamic analysis, rotary inertia, shear, vibration (free), Takahashi (S.), *11148*

Suzuki (S.), elasticity (nonhomogeneous), plates (anisotropic), stress analysis, *317*

Suzuki (T.), see Yamaguchi (A.), *2586*
- see Saiga (N.), *5792*
- adaptive systems, discrete systems, identification, linear systems, observers, Nakamura (T.), (et al.), *11095*

Svalov (A.M.), see Levin (V.A.), *9831*

Svanberg (K.), convex programming, design (minimum weight), shape factors, trusses, *7593*

Svec (O.J.), beams (cantilever), experimental results, ice mechanics, Frederking (R.M.W.), *5145*

Svechinskii (V.B.), algorithms, lagrange equations, optimal control, *4272*

Svechkareva (M.A.), free boundary, hydrodynamic stability, liquids, surface tension, Tyuptsov (A.D.), *6675*

Sverdrup (E.F.), see Menguturk (M.), *8564*

Sverdrup (G.M.), particle size, plumes, *4092*

Sviridenok (A.I.), friction (sliding), lubricants (solid), polymers, wear, Savkin (V.G.), *1004*

Svirkunov (P.N.), clouds, drops, meteorology, thermal explosions, Sedunov (Yu.S.), (et al.), *5584*

Svoboda (J.V.), see Sankar (S.), *6123*

Swafford (T.W.), see Whitfield (D.L.), *6638*

Swamee (P.K.), see Singh (K.K.), *3520*

Swan (G.), bending, fracture, rocks, strength, *8357*

Swanson (R.), see Terras (R.), *6077*

Swartz (S.E.), beams (composite), beams (variable cross section), concrete, fracture mechanics, stress analysis, web openings, Elkufoo (K.S.), *3294*

Swarup (S.), cylindrical bodies, mass transfer, permeability, porous media, *8785*

sway, buckling, frames, structural stability, Kounadis (A.N.), Economou (A.P.), *2285*
- buckling, columns, framed structures, Lay (M.G.), *6530*

Swean (T.F.) Jr., see Oliver (D.A.), *7898*

Swedlow (J.L.), see Solecki (J.S.), *2073*

Sweet (L.M.), design, flywheels, optimal control, railroads, Keane (M.J.), *2189*
- internal combustion engines, minimum fuel control, optimal control, vehicles, *5066*
- derailment, dynamic analysis, experimental mechanics, rails, wheels, Karmel (A.), *6056*

Swegle (J.W.), cylindrical bodies, plastic waves, rods, Ting (T.C.T.), *10233*

swell, buildings, clay, damage, nonhomogeneous soils, Slavin (M.E.), *1321*
- axisymmetric flow, galerkin method, jets, Omodei (B.J.), *3692*
- gravity waves, surface waves, Larsen (L.H.), *4052*
- dynamic properties, shear strength, soils, Au (W.-C.), Chae (Y.S.), *5252*
- field tests, nonhomogeneous soils, Kate (J.M.), Katti (R.K.), *6376*
- jets, laminar flow, stick-slip, velocity profiles, Trogdon (S.A.), Joseph (D.D.), *6660*
- nucleation, void growth, Clement (C.F.), Wood (M.H.), *7503*
- composite materials, resins, thermal effects, thermal expansion, Adamson (M.J.), *10558*
- ocean air interaction, surface waves, Dexter (P.E.), *10869*
- gravity waves, nonlinear analysis, wave generation, wave interactions, Foda (M.A.), Mei (C.C.), *11577*
- ocean waves, spectra, wind-wave interaction, Joseph (P.S.), Kawai (S.), (et al.), *12073*

Swenson (R.J.), conduction (heat), thermal waves, transient effects, *1698*

swept wings, transportation devices, vehicles, wing-in-ground vehicles, Ollila (R.G.), *1617*
- separated flow, visualization, Werle (H.), *1618*
- airplane performance, control, longitudinal stability, Dzygadlo (Z.), Szendzielorz (C.), *1621*
- compressible flow, lifting line theory, lifting surfaces, numerical methods, transonic flow, Cheng (H.K.), Meng (S.Y.), (et al.), *2612*
- delta wings, pressure distribution, subsonic flow, visualization, Nekrasova (M.N.), *2732*
- aerodynamic performance, nozzles, propulsion, Capone (F.J.), *3885*
- aerodynamic performance, airfoils, divergence, Bland (S.R.), *3909*
- boundary layer, laminar flow, supersonic flow, Brykina (I.G.), Gershbein (E.A.), (et al.), *6637*
- cylindrical bodies, heat transfer, hypersonic flow, leading edge, shock waves, Zemlyanskii (B.A.), Shmanenkova (G.A.), *6767*
- boundary layer, stability theory, suction, transition flow, Mack (L.M.), *9570*
- airplanes, design, supercritical wings, Garabedian (P.), Mcfadden (G.), *9645*
- compressible flow, liftingline, potential theory, vortex lines, vortex sheets, Cheng (H.K.), Chow (R.), (et al.), *9649*
- induced drag, lift, optimization, subsonic flow, Lobert (G.), *10501*
- numerical analysis, three dimensional flow, transonic flow, unsteady flow, Borland (C.J.), Rizzetta (D.P.), (et al.), *10521*

Swistoniowski (A.), see Dobrucki (W.), *389*

swimming propulsion, plates, plates (waving), viscoelastic fluids, Sturges (L.D.), *11630*

Swingler (D.L.), see Nicholson (A.J.C.), *1750*

swirl, design, internal combustion engines, laser doppler velocimeters, piston driven flow, Morse (A.), Whitelaw (J.H.), (et al.), *706*
- axisymmetric flow, navier stokes equation, vortex breakdown, vortex flow, Nakamura (Y.), Uchida (S.), *1504*
- annuli, diffusers, pressure recovery, Kumar (D.S.), Kumar (K.L.), *1570*
- burners, combustion, flames (diffusion), Hellat (J.), Gunther (R.), *6836*
- atomization, nozzles, Som (S.K.), Mukherjee (S.G.), *6986*

swirl flow, entrainment, laminar flow, pipe flow, Singh (M.P.), Sinha (P.C.), (et al.), *610*
- centrifugal compressors, design criteria, visualization, volute casings, Yadav (R.), Yahya (S.M.), *704*
- convection (forced), engines, heat transfer, jets, pipe flow, Caton (J.A.), Heywood (J.B.), *735*
- ducts (curved), heat exchangers, pressure drop, Dzyubenko (B.V.), Dreitser (G.A.), *787*
- furnaces, heat exchangers, regenerators, Elkjaer (H.P.), *788*
- calibration, nozzles, pressure measurement, velocity measurement, Murakami (M.), Kito (O.), *3755*
- discharges, flow measurement, mathematical models, potential flow, Murakami (M.), Kito (O.), *3756*
- containment, discharges, plasma, theory, Boulos (M.I.), Gagne (R.), (et al.), *3898*
- bubble dynamics, rotating disks, Wang (J.H.), Yang (W.-J.), *4019*
- axisymmetric flow, jets, Epikhin (V.E.), *4632*
- nozzles, thrust, Carpenter (P.W.), *5446*
- shear flow, turbulence, turbulence model, Naot (D.), *5466*
- conical flow, ducts (variable area), flow reversal, pressure gradient, Gogolev (I.G.), Korolev (P.V.), *6654*
- compressible flow, diffusers, duct flow, numerical methods, Deckker (B.E.L.), Jeffries (C.), (et al.), *7693*
- computing techniques, heat transfer, laminar flow, noncircular pipes, pipe flow, Masliyah (J.H.), Nandakumar (K.), *7715*
- annular flow, boundary layer, cascades, vortex flow, wakes, Tan (C.S.), *7807*
- combustion, emissions, gas turbines, Mestre (A.), *7887*
- combustion (turbulent), compressible flow, turbulent mixing, Sislian (J.P.), *9554*

- axisymmetric flow, numerical analysis, parabolic equations, Nakamura (Y.), Uchida (S.), *9686*
- annuli, compressible flow, irrotational flow, pipe flow, rotating cylinders, Neuberger (A.W.), *9586*
- annular flow, diffusers, inlet flow, Elgammal (A.H.), Elkersh (A.M.), *9669*
- axisymmetric flow, finite element techniques, hydraulic machinery, incompressible flow, viscous flow, Bar-Yoseph (P.), Blech (J.J.), (et al.), *10533*
- aerodynamics, design, injection systems, vortex flow, Volchkov (E.P.), Kislykh (V.I.), (et al.), *10542*
- hydrodynamic stability, pipe flow, vortex flow, Suematsu (Y.), Ito (T.), *11537*
- boundary layer (turbulent), channel flow, turbulence (structure), velocity profiles, Shchukin (V.K.), Khalatov (A.A.), (et al.), *11547*
- axial turbines, blades, cascades, geometrical properties, Aronov (B.M.), Kerzhenkov (A.G.), *11747*

switching, design, fluidics, proximity detectors, Siwoff (F.), Stojanow (B.), (et al.), *4327*
- optimal control, optimization, singular control, Powers (W.F.), *4992*

Switzer (G.L.), combustion, combustors, optical techniques, Goss (L.P.), (et al.), *10720*

Swoboda (G.), see Moser (K.), *5260*

Sychev (V.V.), see Ruban (A.I.), *1550*

Syczewski (M.), mechanical analysis, mesh generation, singularities, Tribillo (R.), *9125*

Sykes (R.I.), asymptotic behavior, boundary layer (turbulent), flow obstructions, incompressible flow, reynolds number (high), *595*
- boundary layer (three dimensional), flow obstructions, iterative methods, separated flow, surface profiles, *8559*

Symeonidis (S.), see Argyris (J.H.), *4197*

Symm (G.T.), see Bhattacharyya (P.K.), *2225*

Symon (K.R.), see Lewis (H.R.), *1780*

Symonds (P.S.), beams, deflections, deformation, impulsive loading, *2525*
- inelasticity, large displacement, plastic behavior, strain rate, structural analysis, *8347*

Synge (J.L.), dynamic analysis, mathematical methods, strings, vibration, *1270*

synthesis, gates, karnaugh map, networks, Srivatsa (S.K.), Biswas (N.N.), *105*
- minimax techniques, model reduction, Zadorozhnyi (V.F.), Nurminskii (E.A.), (et al.), *107*
- feedback, frequency domain techniques, multivariable systems, Doyle (J.C.), Stein (G.), *108*
- algorithms, multivariable systems, regulator problem, Cheng (L.), Pearson (J.B.) Jr., *160*
- optimization, time optimal systems, Brunovsky (P.), *171*
- controllability, distributed parameters, optimal control, sensitivity, temperature, thermal stresses, Poterasu (V.F.), *178*
- controllability, optimal control, sensitivity, Poterasu (V.F.), *179*
- controllability, discrete systems, Bakan (G.M.), *180*
- design, optimal control, Afimiwala (K.A.), Mayne (R.W.), *227*
- algorithms, linkages, mechanisms (planes), Soni (A.H.), Azaez (S.A.), *540*
- linear systems, regulator problem, time delay systems, Vinter (R.B.), Kwong (R.H.), *1142*
- kinematics, mechanisms, statically indeterminate structures, Kozhevnikov (S.N.), *1466, book*
- design (optimum), mechanisms, Kothari (M.), Rao (A.C.), *1468*
- adaptive systems, identification, tracking, Baradello (C.S.), Neuman (C.P.), *2092*
- avoidance, differential games, nonlinear theory, Gusyatnikov (N.B.), *2130*
- differential games, evasion, pursuit, Tomskii (G.V.), *2131*
- adaptive systems, model reference systems, Ichikawa (K.), *2135*
- nonlinear systems, optimal control, Venets (V.I.), Dudnikov (E.E.), (et al.), *2158*
- design (optimum), geometric programming, mechanisms, Rao (A.C.), *2551*
- control, generalized linearization, nonlinear systems, Petrov (B.N.), Vasilyev (V.I.), (et al.), *3162*
- kinematics, linkages, mechanisms (planes), Erdman (A.G.), *3578*
- design, feedback, modal control, multivariable systems, Lutskiv (N.M.), Strepko (I.T.), *4221*
- convex programming, fractional convex programming, linear systems, optimal control, Pestryakov (A.K.), *4229*
- control, large scale systems, nonlinear systems, Vukobratovic (M.), Stokic (D.), *4242*
- design, multivariable systems, Horowitz (I.), Wang (T.-S.), *4268*
- dynamic programming, optimal control, terminal control, Akulenko (L.D.), *4288*
- constraints, linear systems, optimal control, Brunovsky (P.), *4291*
- minimization, optimal control, regulator problem, Romanenko (L.G.), *4305*
- aerospace vehicles, optimal control, structural response, structures, Vatolin (V.V.), Degtyarev (G.L.), (et al.), *4308*
- adaptive systems, control, stability theory, Russell (G.T.), Malcolm (J.M.), *4322*
- algorithms, linkages, mechanisms, Jaini (C.K.C.), Rao (A.C.), *4550*
- curvature, design, gears, gears (hypoid), gears (spiral), surface profiles, Litvin (F.L.), *4555*
- pole placement, time varying systems, Grigorian (F.P.), *5043*
- design, linear-quadratic optimal control, optimal control, positive control, Pachter (M.), *5048*
- approximation methods, optimal control, schwartz inequality, suboptimal control, Akulenko (L.D.), *5050*
- probability theory, stochastic control, Andreev (N.I.), *5051*
- four bar linkage, kinematics, linkages, mechanisms (planes), Sun (J.W.H.), Waldron (K.J.), *5375*
- observers, state space techniques, Schumacher (J.M.), *6133*
- sampled data systems, time delay systems, zero-order-hold, Yekutiel (O.), *6135*
- algorithms, dynamic programming, stochastic control, suboptimal control, Batkov (A.M.), Grinchenko (S.T.), *6145*
- cams, linkages, mechanisms, Singh (Y.P.), Kohli (D.), *6561*
- design, manipulators, mechanisms, robotics, Orlandea (N.), Berenyi (T.), *6564*
- bang-bang control, optimal control, suboptimal control, Gonzalez (R.), *7241*
- discrete systems, dynamic analysis, Perov (V.P.), *7245*
- differential games, optimization, Kumar (P.R.), *7247*
- adaptive systems, aerospace vehicles, optimal control, trajectories, Salmin (V.V.), *7248*
- design, digital control, mathematical models, modeling, Neugebauer (G.), *7254*
- cams, design, kinematics, robotics, Tsai (Y.C.), Soni (A.H.), *8479*
- algorithms, analytical methods, design, multivariable systems, Graser (A.), *9164*
- control, decoupling, design, linear systems, multivariable systems, nonlinear systems, Mercier (O.), *9165*
- digital simulation, microprocessors, nondestructive tests, ultrasonics, Hanstead (P.D.), *9423*
- design, high speed, linkages, mechanisms (planes), springs, Griffin (J.N.), Matthew (G.K.), *9477*
- design (optimum), grinding, gyroscopes, surface profiles, tools, Osman (M.O.M.), Sankar (S.), (et al.), *10370*
- kinematics, linkages, mechanisms, Yu Hon-Cheung, Baker (J.E.), *10380*

Syrmakezis (K.), see Stefanou (G.D.), *78*

Syshchikova (M.P.), see Beryozkina (M.K.), *7778*

Sysoev (N.N.), see Nosenko (N.I.), *681*

systems, failure, risk, weakest link systems, Garson (R.C.), *2514*
- algorithms, data analysis, measurements, Walter (P.L.), *3489*
- mixtures, multiphase flow, Hetsroni (G.) ed., *4005, book*
- lyapunov's functions, matrix inversion, stability theory, Ikeda (M.), Siljak (D.D.), *8102*
- analysis, deterministic systems, identification, Roth (R.), *8110*
- design, propulsion, space shuttle, Sackheim (R.L.), Fritz (D.E.), (et al.), *10725*
- launching, propulsion, space vehicles, Kayama (A.), Takenaka (Y.), *10728*

systems engineering, compressors, pumps, stability, Greitzer (E.M.), *4674*

Sytov (V.A.), bonded joints, internal stresses, measurements, Mirzoev (R.G.), (et al.), *1400*

Szabados (E.), see Toth (L.), *3499*

Szablewski (W.), dimensional analysis, spectra, turbulence, turbulence (isotropic), *9613*

Szabo (B.), see Babuska (I.), *9128*

Szalai (J.), cooling towers, membrane theory, shells (of revolution), thin walled structures, *10151*

Szalontay (M.), bars, thermal shock, thermal waves, thermoelasticity (transient), Szekeres (A.), *5804*

Szaniawski (A.), evaporation, heat transfer (atmospheric), mass transfer, *3021*
- see Kalita (W.), *9584*

Sze (Y.), see Jofriet (J.C.), *7635*

Szebehely (V.), coordinate systems, inverse problems, orbit mechanics, potential theory, synodic systems, Broucke (R.), *1785*
- equilibrium, libration theory, restricted three body problem, Mckenzie (R.), *3917*
- see Mckenzie (R.), *6879*
- jacobian constant, planetary theory, restricted three body problem, solar system, stability theory, Mckenzie (R.), *8837*
- galactic system, kepler orbits, planetary theory, stability theory, *9844*
- see Markellos (V.V.), *10773*

Szebehely (V.) ed., bifurcation, circumnavigation, libration theory, mathematical methods, n body problems, periodic orbits, solar system, *10769, book*

Szeidl (G.), see Kozak (I.), *7263*

Szekeres (A.), see Szalontay (M.), *5804*
- conduction (heat), thermal shock, thermoelasticity, *6942*

Szeki (J.), experimental results, joints, plates (circular), shells (cylindrical), *9272*

Szendzielorz (C.), see Dzygadlo (Z.), *1621*

Szentgyorgyi (S.), drying, evaporation, Molnar (K.), *801*

Szentogyorgyi (S.), drying, evaporation, phase changes, *792*

Szeri (A.Z.), see Adams (M.L.), *7665*

Szilard (J.), cracking, flaw detection, hydrogen embrittlement, steel, Haynes (R.), *7561*

Szopa (J.), green function, linear systems, stochastic systems, *142*

Szuladzinski (G.), elasticity (nonlinear), nonlinear structures, structural analysis, *4343*
- beams (flexural), beams (thin section), nonlinear materials, *8233*

Szumowski (A.P.), see Meier (G.E.A.), *9503*

Szymczak (C.), beam columns, beams (thin section), beams (variable cross section), buckling (torsional), postbuckling behavior, *4391*

T

Ta Phuoc Loc, see Luu (T.S.), *8593*

Tabaczynski (R.J.), flame propagation, flames (turbulent), models, spark ignition engines, Trinker (F.H.), (et al.), *10700*

Tabaie (S.), see Udwadia (F.E.), *9183*

- see Udwadia (F.E.), *11097*

Tabak (D.), see Ben-Avraham (O.), *2181*

Tabakoff (W.), see Beacher (B.), *7889*

Tabatabaie-Farashahi (M.), fluidized beds, heat transfer, tubes, Upadhyay (S.N.), (et al.), *5862*

Tabba (M.M.), mechanical properties, prediction, soils, statistical theory, Yong (R.N.), *7441*

Tabisz (K.), existence theorems, stefan problem, uniqueness, *9096*

Tabor (D.), adhesion, contact problems, deformation, friction, *1000*

Tabor (H.), absorption, energy storage, radiant interchange, solar collectors, solar ponds, thermal instability, *5602*

Taborek (P.), experimental methods, manometers, pressure, Goodstein (D.), *3777*

Tabuns (V.A.), see Viks (U.K.), *272*

Taby (J.), axial loading, damage, imperfections, offshore structures, tubes, Moan (T.), (et al.), *3557*

Tachibana (M.), capsules, hydraulic transport, particle fluid flow, pipe flow, pressure drop, Matsumoto (Y.), *10447*

Tada (H.), edge cracks, piping systems, reactor structures, stability theory, Paris (P.C.), (et al.), *4501*

Tafanelli (A.), see Corsanego (A.), *1244*

Tagliacozzo (C.), elastic bodies, impact, resistance, structural analysis, *8344*

Tagnfors ((H.), see Runesson (K.), *6385*

Taherian (A.R.), see Evans (H.R.), *5151*

Tahiani (C.), beams, euler equations, loads, Srivastava (N.K.), *1219*

Tai (R.C.), biomechanics, deformation, lungs, mechanical properties, tissues, Lee (G.C.), *8071*

tails, aerodynamic loads, gust loads, nonlinear analysis, Stapleford (R.L.), Dimarco (R.J.), *3912*

- aerodynamic interference, design, helicopters, Brocklehurst (A.), Taylor (P.), *5496*
- aerodynamic interference, canard, controllability, wing body combinations, Agnew (J.W.), Hess (J.R.) Jr., *6724*
- composite materials, design, helicopters, rotors, Huber (H.), Frommlet (H.), (et al.), *10515*

Tairov (O.P.), see Penev (G.D.), *3225*

Tait (R.J.), elastic waves, holes, mathematical methods, Moodie (T.B.), *8327*

- dispersion relation, ducts, flexible walls, water hammer, Moodie (T.B.), (et al.), *11604*

Taitel (Y.), liquid gas mixture, transition, tubes, two'phase flow, Bornea (D.), (et al.), *1846*

Taits (M.Z.), see Grebennik (V.S.), *5336*

Taiwo (O.), control, design, jet engines, multivariable systems, turbofan engines, *2179*

- control, design, power generation, regulator problem, turbomachinery, *3217*

Takada (S.), see Shinozuka (M.), *7035*

Takafuji (T.), bridges, creep, deformation, prestressed concrete, repair, Seki (S.), *3537*

Takagi (F.), see Khan (S.I.), *6599*

Takagi (T.), see Uchiyama (K.), *3572*

Takahama (H.), see Fujita (H.), *10581*

Takahara (H.), see Takamatsu (Y.), *1641*

Takahara (K.), see Yamamoto (A.), *3741*

Takahara (S.), see Tanaka (H.), *11655*

Takahashi (H.), see Murakami (T.), *4470*

- crack resistance, material testing, steel, Khan (M.A.), (et al.), *10281*

Takahashi (K.), frequency response, servomechanisms, spool valves, Takahashi (Y.), *1171*

- dynamic stability, stability theory, vibration (parametric), *5195*
- beams (thin section), thin walled structures, torsion, Mizuno (M.), *6210*
- composite materials, elliptical bodies, polymers, thermal expansion, Harakawa (K.), (et al.), *7297*
- dynamic response, harmonic balance, stability theory, *8288*
- see Urakawa (T.), *11365*

Takahashi (M.), heat transfer, interface phenomena, stratified flow, two component flow, velocity profiles, Inoue (A.), (et al.), *6600*

- channel flow, liquid liquid interface, liquid metals, stratified flow, turbulent flow, Inoue (A.), (et al.), *9691*

Takahashi (S.), see Arai (N.), *799*

- see Arai (N.), *818*
- frequencies, mindlin plates, plates (circular), vibration (free), Suzuki (K.), (et al.), *2334*
- dynamic analysis, shells (cylindrical), vibration (free), Suzuki (K.), (et al.), *11133*
- see Suzuki (K.), *11148*

Takahashi (Y.), see Takahashi (K.), *1171*

Takamatsu (Y.), flow measurement, meters, pressure measurement, water tunnels, yawing, Takahara (H.), (et al.), *1641*

Takamoto (M.), reynolds number (small), stability, visualization, vortex rings, Izumi (K.), *8525*

Takamura (K.), brownian motion, colloids, polar fluids, shear flow, suspensions, Van De Ven (T.G.M.), (et al.), *6583*

Takao (K.-I.), see Nisitani (H.), *9389*

Takao (S.), heat transfer, liquid liquid interface, mass transfer, thermal diffusion, Narusawa (U.), *5619*

Takashima (K.), ludwig tubes, transonic flow, unsteady flow, wind tunnels, *2770*

Takashima (M.), heat transfer, hydrodynamic stability, liquids, surface tension, *5457*

Takashima (T.), see Iida (Y.), *8772*

Takayama (K.), mach stem, shock waves, spherical waves, trajectories, triple-point trajectory, Sekiguchi (H.), *2721*

- mach reflection, reflection, roughness, shock waves, unsteady state, Ben-Dor (G.), (et al.), *6711*
- see BenDor (G.), *6714*

Takeda (N.), composite materials, contact problems, impact, Sierakowski (R.L.), *284*

- composite materials, elastic waves, impact, laminates, Sierakowski (R.L.), (et al.), *2376*

Takeda (T.), see Araki (T.), *11802*

Takemiya (H.), bridges, layered media, piles, soil structure interaction, Yamada (Y.), *4036*

Takemori (M.T.), crack initiation, crack propagation, fatigue, impact, polymers, *10331*

Takenaka (Y.), see Kayama (A.), *10728*

Takeuchi (D.I.), hydrodynamic stability, numerical methods, poiseuille flow, Jankowski (D.F.), *6677*

Takeuchi (H.), see Ogino (F.), *751*

Takeuchi (K.), blowdown, boilers, mathematical models, Squarer (D.), *5663*

- characteristic methods, cylindrical bodies, fluid-structure interaction, numerical methods, Spencer (A.C.), *11625*
- hydroelasticity, scale models, shells (axisymmetric), submerged bodies, Desanto (D.F.), *11672*

Takeuchi (R.), see Oie (S.), *11981*

- see Oie (S.), *11982*
- see Oie (S.), *11983*

Takeuchi (S.), see Argon (A.S.), *5101*

Takeuti (Y.), conformal mapping, thermal stresses, thermoelasticity (transient), Yamada (K.), *926*

- cylindrical bodies, rolling, stress concentration, thermal stresses, thermoelasticity (transient), Ishida (R.), *8876*

Takeyama (H.), beams, rotating bodies, vibration (free), *3373*

Takezawa (S.), artificial satellites, lyapunov's functions, magnetic stabilization, Ninomiya (K.), *1791*

Takhar (H.S.), see Soundalgekar (V.M.), *9784*

- boundary layer, constitutive equations, heat transfer, micropolar media, plane flow, Soundalgekar (V.M.), *10583*
- see Soundalgekar (V.M.), *10750*

Takhar (J.S.), experimental methods, fatigue, finite element methods, fracture mechanics, power plants, strain gages, stress analysis, Fryzel (R.A.), *10320*

Taki (Y.), see Wada (H.), *5162*

Takimoto (J.), see Furushiro (N.), *6188*

Takserman-Krozer (R.), see Kroner (E.), *8484*

Taktarov (N.G.), analytical methods, magneto fluid dynamics, statistical theory, *3889*

- see Martynov (S.I.), *9793*
- ferrous metals, films, liquid liquid interface, liquid metals, magneto fluid dynamics, Bin (C.Z.), *11817*

Tal (R.T.), chemical reactions, sound propagation, thermal effects, *11958*

Tal-Ezer (H.), see Harten (A.), *6086*

Talagrand (O.), data analysis, ocean air interaction, wind-wave interaction, *12081*

Talatynova (E.K.), see Vovkodav (I.F.), *6328*

Talbot (T.E.), fatigue, film thickness, lubrication (elastohydrodynamic), rolling contact, surface profiles, *7100*

Talukder (N.), see Reul (H.), *4917*

Tam (K.K.), combustion, initial value problems, mathematical models, *8794*

- arrhenius reaction, hot spots, models, thermal explosions, Kiang (M.T.), *10697*
- eigenvalue problems, frequencies, gravity waves (internal), stratified flow, *11623*
- combustion, combustion (catalytic), critical phenomena, *11784*

Tamaki (S.), adaptive systems, algorithms, design, discrete systems, lyapunov's functions, observers, Omatu (S.), (et al.), *6132*

Tamarin (A.I.), bubble dynamics, experimental methods, fluidized beds, Teplitskii (Yu.S.), (et al.), *2999*

- see Livshits (Yu.E.), *7988*

Tamarova (R.M.), diagnostics, eyes, optical techniques, *7127*

Tamate (O.), half space, membranes, reinforced bodies, thermoelasticity (steady), Sekine (H.), (et al.), *5795*

Tambour (Y.), combustion, evaporation, liquid fuels, sprays, *10716*

Tamhankar (M.G.), see Agrawal (S.B.), *2531*

Tamura (H.), bearings (ball), design, springs, stiffness, vibration, Tsuda (Y.), *8474*

Tamuzh (V.P.), composite materials, fracture mechanics, kinetic theory, statistical mechanics, three dimensional formulation, *1359*

Tan (C.S.), annular flow, boundary layer, cascades, swirl flow, vortex flow, wakes, *7807*

Tan (D.Y.), soil grouting, soil stability, tunnels, Clough (G.W.), *1333*

Tan (S.H.), see Awbi (H.B.), *8672*

Tan (W.T.), see Yeung (R.W.), *9007*

Tan (Y.-P.), see Balendra (T.), *8964*

Tan-Atichat (J.), see Wigeland (R.A.), *10540*

Tanabe (K.), gradient techniques, newton method, nonlinear analysis, nonlinear programming, optimization, *4996*

Tanahashi (T.), see Masuzawa (J.), *3672*

- see Sawada (T.), *11503*

Tanaka (E.), see Ohashi (Y.), *5113*

Tanaka (H.), optimization, oscillating bodies, salters duck, wave loads, wave machines, Saito-O (M.), *2713*

- see Hanamura (Y.), *2909*
- particle fluid flow, rheology, suspensions, viscosity, White (J.L.), *7639*
- see White (J.L.), *7645*
- condensation (dropwise), condensation (filmwise), drops, knudsen number, thermal contact resistance, *9693*
- duct flow, ducts (variable area), heat transfer, laminar flow, nusselt number, transition flow, turbulent flow, Kawamura (H.), (et al.), *10571*
- crossflow, dynamic stability, fluid-structure interaction, tube bundles, vibration (flow induced), Takahara (S.), *11655*

Tanaka (K.), boundary elements, elasticity (linear), piezoelectrics, Tanaka (M.), *242*

- see Tanaka (M.), *1831*
- anisotropic media, conduction (heat), transient effects, Tanaka (M.), *2811*
- boundary elements, thermoelasticity, variational methods, Tanaka (M.), *2981*
- harmonic waves, layered media, viscoelastic waves, Kon-No (A.), *4448*
- harmonic waves, layered media, viscoelastic waves, Kon-No (A.), *4449*
- fatigue, grain boundaries, microcracks, thresholds, Nakai (Y.), (et al.), *5281*
- see Tanaka (M.), *8875*
- see Tanaka (M.), *8889*
- crack initiation, dislocations, fatigue, Mura (T.), *9387*
- cylindrical waves, green function, moving media, sound generation, Ishii (S.), *9847*
- dynamic response, statistical design, vibration (forced), Onishi (H.), (et al.), *11151*

Tanaka (M.), see Tanaka (K.), *242*

- nonhomogeneous media, thermoelasticity (steady), variational methods, Tanaka (K.), *1831*
- see Fukayama (H.), *1938*
- see Tanaka (K.), *2811*
- see Tanaka (K.), *2981*
- boundary elements, boundary value problems, thermoelasticity (transient), Tanaka (K.), *8875*
- boundary elements, finite element techniques, thermoelasticity (transient), Tanaka (K.), *8889*

Tanaka (O.), see Sekoguchi (K.), *7830*

Tanaka (S.), see Kawamura (M.), *2022*

- see Ichikawa (M.), *7509*

Tanaka (T.), see Nomura (S.-I.), *6839*

Tanaka (Y.), see Sakai (Y.), *439*

- dislocations, indentation, metals, polycrystalline materials, Ido (M.), (et al.), *8214*
- control, hydraulic machinery, stability, unsteady flow, *11749*

Tananaiko (O.D.), bending, elasticity, finite element techniques, *3141*

Tandon (P.N.), drag reduction, non newtonian flow, polymers, transition, Kulshreshtha (A.K.), *6652*

Taneda (S.), boundary layer, shear layer, stability theory, turbulence (structure), wakes, *2692*

- see Hansen (S.B.), *4684*
- boundary layer (turbulent), flow irregularities, hot wire, visualization, *7700*

Taneerananon (P.), friction, roughness, surface profiles, tires, Yandell (W.O.), *7082*

Tanevskii (V.V.), see Polyakov (V.A.), *6193*

- see Polyakov (V.A.), *10133*

Tang (C.-M.), baroclinic instability, bottom irregularities, hydrodynamic stability, oceanography, *4050*

Tang (R.J.), crack opening displacement, griffith cracks, stress intensity factor, transforms, Wang (K.), *9398*

Tang (S.), bolted joints, composite materials, failure, laminates, *5380*

Tang (S.C.), automobiles, computer programming, finite element techniques, stiffness matrix, structural analysis, Yeung (K.S.), (et al.), *7208*

Tangemann (H.), crossflow, elastic behavior, tube bundles, vibration (flow induced), *10766*

Tangermann (G.), air pollution, boundary layer (atmospheric), dispersion, stratified flow, *4090*

Tangri (K.), see Arora (A.), *1307*

Tani (I.), see Kovasznay (L.S.G.), *11381*

Tani (J.), plates (annular), structural stability, Yamaki (N.), *346*

- bifurcation, buckling, plates (annular), thermal instability, vibration, *7358*
- dynamic stability, plates (anisotropic), plates (annular), torsion, *7359*

Taniguchi (H.), see Kobiyama (M.), *783*

Taniguchi (T.), see Yamashita (K.), *173*

Tanimoto (C.), elastoplasticity, rock mechanics, strain softening, structural support, tunnels, Hata (S.), *10366*

Tanimoto (T.), see Ishikawa (H.), *47*

- displacement, explosions (underwater), ocean bed, seismic waves, Sato (R.), *1879*

Taniyama (N.), see Hasegawa (E.), *5458*

tanks, deformation, displacement, foundations, shells (cylindrical), Brandes (K.), *307*

- containers (partially filled), sloshing, surface waves, wedge-shaped tanks, Bauer (H.F.), *674*
- containers (partially filled), hydroelasticity, rectangular container, sloshing, Bauer (H.F.), *675*
- containment, fracture mechanics, lng tankers, natural gas, Kaufman (J.G.), Bucci (R.J.), (et al.), *1349*
- inertial waves, rotating cylinders, shells (fluid-filled), Wood (W.W.), *1587*
- earthquake effects, hydrodynamic pressure, ocean bed, submerged bodies, Tung (C.C.), *3011*
- floating structures, plates (circular), roofs, Epstein (H.I.), *3317*
- foundations, sand, Abbs (A.F.), Sinclair (T.J.E.), *3413*
- optimization, variational methods, Singh (K.K.), Swamee (P.K.), *3520*
- energy storage, storage, stratified flow, thermal effects, thermosyphons, Young (M.F.), Baughn (J.W.), *4714*
- echinodome, optimization, shape factors, Ibidapo-Obe (O.), Royles (R.), (et al.), *5344*
- eddy viscosity, impellers, mixing, turbulent flow, Hiraoka (S.), Fan (L.T.), *6651*
- buckling, seismic loading, Niwa (A.), Clough (R.W.), *8015*
- pressure vessels, shells (anisotropic), shells (of revolution), stress analysis, wirewound vessels, Timonin (A.M.), *9464*
- pulsatile flow, self excitation, valves, Meier (G.E.A.), Szumowski (A.P.), *9503*
- deaerators, dynamic stability, liquid gas mixture, power plants, storage, Cranfield (R.R.), Wilkinson (D.H.), *9625*
- dikes, hazardous liquids, impoundments, rupture, unsteady flow, Greenspan (H.P.), Johansson (A.V.), *10450*
- bending, finite element techniques, membrane theory, shear loading, Royles (R.), Sofoluwe (A.B.), *11114*
- impact, pressure distribution, ships, sloshing, Gran (S.), *11667*

Tanna (H.K.), noise (aerodynamic), propellers, Burrin (R.H.), (et al.), *4771*

Tannehill (J.C.), blunt bodies, computer programming, delta wings, supersonic flow, viscous flow, Venkatapathy (E.), (et al.), *11728*

Tannenbaum (A.), algorithms, control stability, design, feedback, linear systems, stability theory, *4249*

Tanner (L.H.), film flow, surface flow, surface tension, *8490*

- friction (skin), interferometry, oil films, optical techniques, *10536*

Tanner (R.I.), see Gokhale (V.V.), *3067*

Tanny (G.B.), see Mikhlin (J.A.), *3852*

Tansirikongkol (V.), approximation methods, multiple degree of freedom, seismic loading, structural response, Pecknold (D.A.), *7041*

Tanthapanichakoon (W.), mathematical models, process control, stochastic systems, wastewater treatment, water pollution, Himmelblau (D.M.), *5046*

Tanttu (J.T.), adaptive systems, algorithms, prediction, stochastic processes, *146*

Tao (L.N.), boundary value problems, conduction (heat), nonlinear systems, radiant interchange, *3815*

- alloys, mathematical methods, mixtures, moving surfaces, solidification, *6802*

Tarabrin (G.T.), anisotropic media, damping capacity, elastic waves, propagation, *11167*

Tarakanov (Yu.A.), earth, error, gravity, gravity anomalies, Cherevko (T.N.), *3006*

Taran (E.N.), see Nesterko (N.A.), *5636*

Taran (E.Yu.), dilute solutions, polar fluids, suspensions, viscoelastic fluids, *8503*

Taran (M.D.), conduction (heat), numerical methods, variable thermal properties, Favorskii (A.P.), *3824*

Taranenko (V.A.), see Kudinov (V.K.), *2190*

Tarantola (A.), error, inverse problems, linear systems, statistical theory, *2043*

Tarasenko (V.F.), see Nazarov (N.G.), *3198*

Tarasev (G.S.), see Levin (V.A.), *8183*

Tarasov (V.F.), see Vladimirov (V.A.), *11373*

Tarasuk (J.D.), see Yousef (W.W.), *1668*

Tarlce (B.), coding, computer programming, simulation, *8140*

Tarn (T.-J.), algorithms, discrete systems, identification, nonlinear systems, realization, Nonoyama (S.), *3150*

Tarnopolskii (A.G.), boundary layer (atmospheric), energy dissipation, turbulence (geophysical), Shnaidman (V.A.), *2959*

Tarpy (T.S.) Jr., see Ioannides (S.A.), *2300*

Tasaka (S.), conduction (unsteady), finite element techniques, random loading, stability theory, *10073*

Tassios (T.P.), analytical methods, bond characteristics, cyclic loading, reinforced concrete, Yannopoulos (P.J.), *3530*

Tassou (S.A.), condensers, heat exchangers, mathematical models, refrigeration, Green (R.K.), *5582*

Tate (A.), see Billington (E.W.), *1973, book*
Tatenami (T.), see Nakamura (Y.), *1229*
Tateno (S.), see Shibahara (M.), *403*
Tatsumi (T.), turbulence, turbulence model, two dimensional flow, Yanase (S.), *6679*
- see Yanase (S.), *6680*
- turbulence, turbulence (homogeneous), turbulence model, *6681*

Tatsuno (M.), cylindrical bodies, oscillating bodies, secondary flow, visualization, *575*
- cylindrical bodies, oscillating bodies, secondary flow, visualization, *2604*
- cylindrical bodies, elliptical bodies, oscillating bodies, secondary flow, vortex shedding, *3626*

Tatsuoka (F.), cyclic testing, sand, shear strength, strength, Silver (M.L.), (et al.), *1316*
- cyclic testing, sand, shear strength, strength, stress strain relationships, Silver (M.L.), (et al.), *1317*
- liquefaction, penetration, soils, Iwasaki (T.), (et al.), *3419*
- constitutive relations, cyclic loading, liquefaction, sand, strain softening, Silver (M.L.), *11177*

Tatum (K.E.), see Pavelka (J.), *10499*
Taubaki (T.), see Bazant (Z.P.), *4533*
Taucher (R.), see Sockel (H.), *5698*
Tauchert (T.R.), anisotropic media, composite materials, laminates, slabs, thermoelasticity (steady), *1838*
- see Wung (P.M.), *5576*

Tausk (R.J.M.), colloids, dispersions, optical techniques, particle size, Venselaar (H.C.J.), (et al.), *7003*
Tavantzis (J.), see Reiss (E.L.), *4974*
Tavik (A.I.), see Shagal (D.I.), *6019*
Tavoularis (S.), see Sreenivasan (K.R.), *654*
- see Sreenivasan (K.R.), *10475*

Tawfik (O.M.), boundary conditions, shells (cylindrical), variable section, *4385*
- shells (cylindrical), shells (thick), theory, *9277*

Tawfik (S.Y.), see Coull (A.), *8457*
Taya (M.), elastic bodies, hybrid construction, inclusions, infinite medium, inhomogeneities, Chou (T.-W.), *279*
- metals, nonhomogeneous media, viscoelastic fluids, void growth, Seidel (E.D.), *1195*
- composite materials, ellipsoids, penny shaped crack, reinforced bodies, *4356*

Tayal (A.K.), constitutive relations, extrusion, finite element techniques, rate sensitivity, viscoplasticity, Natarajan (R.), *1339*
Tayal (S.P.), bearings (journal), finite element methods, friction (solid fluid), lubrication (hydrodynamic), non newtonian flow, Sinhasan (R.), (et al.), *7093*
- finite element methods, galerkin method, lubrication (hydrodynamic), navier stokes equation, non newtonian flow, Sinhasan (R.), (et al.), *8062*

Tayfun (M.A.), breakers, ocean waves, probability theory, surface waves, *4048*
Taylor (A.M.K.P.), ducts (curved), laminar flow, secondary flow, turbulent flow, Whitelaw (J.H.), (et al.), *3673*
Taylor (C.M.), see Dowson (D.), *1029*
- see Dowson (D.) eds., *1924, book*

Taylor (D.L.), see Black (S.H.), *2353*
- airplanes, fluidics, turbulence, *6693*

Taylor (G.), bending, girders, prestressed concrete, shear, torsion, Warwaruk (J.), *2523*
Taylor (J.J.), see Hoyt (J.W.), *946*
- see Hoyt (J.W.), *6669*

Taylor (P.), see Brocklehurst (A.), *5496*
Taylor (P.A.), see Davison (E.J.), *1163*
Taylor (P.M.), see Adler (D.), *1639*
Taylor (R.), beams (flexural), composite structures, reinforced concrete, Al-Najmi (A.Q.S.), *3531*
- thermal diffusion, thermal measurements, *5617*

Taylor (R.B.), breakers, hurricanes, ocean waves, surface waves, tides, *5917*
Taylor (R.G.), see Paulay (T.), *3010*
Taylor (R.L.), see Kanok-Nukulchai (W.), *1240*
- see Curnier (A.R.), *10894*

Taylor (S.M.), airplanes, noise (traffic), noise measurements, Hall (F.L.), (et al.), *913*
Taylor (T.D.), ballistics, launching, propellants, shock waves, Lin (T.C.), *2929*
- see Myers (R.B.), *5396*
- ballistics (interior), blast effects, launching, projectiles, solid fuels, Lin (T.C.), *6891*
- hydrodynamic stability, mathematical models, navier stokes equation, spectral analysis, Murdock (J.W.), *8608*

Taylor (W.E.) Jr., asymptotic behavior, differential equations (ordinary), oscillations, vibration, *6062*
taylor instability, plasticity, plates, Drucker (D.C.), *1301*
- dispersion relation, electro fluid dynamics, perturbations, theory, Shchelkachev (M.V.), *3890*
- dispersion, porous media, stratification, Lake (L.W.), Hirasaki (G.J.), *8919*
- porous media, two component flow, Sharma (R.C.), Sharma (K.N.), *10839*
- boundary layer, curved surfaces, heat transfer, hydrodynamic stability, Kohama (Y.), Kobayashi (R.), *11527*

taylor number, couette flow, end effects, hydrodynamic stability, Hocking (L.M.), Skiepko (J.), *4640*
taylor vortices, couette flow, hydrodynamic stability, laser doppler velocimeters, Vasilenko (Yu.G.), Kuznetsov (E.A.), (et al.), *639*
- end effects, hydrodynamic stability, rotating cylinders, stability theory, Walton (I.C.), *2685*
- hydrodynamic stability, inviscid fluid, vorticity, Vladimirov (V.A.), *10409*

Teaney (D.T.), acoustics (physiological), fourier transform, spectra, Moruzzi (V.L.), (et al.), *5789*
tectonics, buckling, faults, plates, rocks, Golecki (J.J.), *2311*
- earth, elasticity, magnetic field, Sasai (Y.), *8000*
- geophysics, porous media, viscous flow, Karakin (A.V.), Lobkovskii (L.I.), *8931*
- deformation, rocks, strain rate, Pfiffner (O.A.), Ramsay (J.G.), *10261*

Teh (C.E.), see White (R.G.), *369*
Teichmann (D.), eigenvalues, rings, vibration (forced), *3363*
Teipel (I.), see Brandt (U.), *3575*
- impulse, non newtonian flow, plates, rivlin erickson fluid, viscoelastic fluids, *6644*
- see Brandt (U.), *7731*

Teisley (B.), see Schlosser (K.), *2837*
Tejerina (A.F.), see Ibanez (J.A.), *7874*
Telles (J.C.F.), boundary elements, half space, punch problems, semi infinite media, Brebbia (C.A.), *1185*
- boundary elements, elastoplasticity, half space, Brebbia (C.A.), *8216*

Tellier (C.R.), see Pichard (C.R.), *4003*
Temam (R.), see Saut (J.C.), *41*
- see Foias (C.), *641*
- plasticity, relaxing media, variational methods, Strang (G.), *8210*

Teman (R.), evolution equations, linear equations, navier stokes equation, nonlinear analysis, *7170*
Temis (Yu.M.), see Arkhipov (A.N.), *6116*
Temnov (I.I.), prestressed concrete, reinforced concrete, viscoelasticity, Khlopovskii (Yu.N.), *3536*
Templeman (A.B.), design (optimum), drainage, highways, networks, stormwater, Walters (G.A.), *3418*
- see Yates (D.F.), *10345*

Templin (J.T.), aeroelasticity, buildings, design, vibration (forced), wind tunnels, Cooper (K.R.), *6871*
Temraz (H.M.), see Sawan (M.E.), *730*
Ten (E.V.), see Kozlov (V.F.), *1893*
Tencer (A.F.), biological joints, biomechanics, spine, Ahmed (A.M.), *3055*
tendons, exercise, experimental results, materials properties, strength, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *1032*
- biological joints, biomechanics, knees, Piziali (R.L.), Seering (W.P.), (et al.), *1946*
- biological joints, biomechanics, knees, Seering (W.P.), Piziali (R.L.), (et al.), *1947*
- biomaterials, viscoelasticity (dynamic), Schwerdt (H.), Constantinesco (A.), (et al.), *3061*
- collagen, composite materials, stress strain relationships, Kastelic (J.), Palley (I.), (et al.), *7106*
- experimental methods, stress strain relationships, tissues, viscoelastic materials, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *9046*

Tenenbaum (L.A.), dynamic analysis, graph theory, mathematical models, *10078*
Tenland (T.), see Nilsson (G.E.), *9059*
Tennankore (K.N.), chemical kinetics, chemical reactions, combustion, thermal effects, *8792*
Tennant (M.H.), measurements (dynamic), shear layer, shear stress, walls, Pierce (F.J.), (et al.), *2761*
Tennyson (R.C.), composite materials, failure, plane stress, strength, Nanyaro (A.P.), (et al.), *6435*
- see Zimcik (D.G.), *7361*
- see Hui (D.), *8271*

tensile strength, fibers, reinforced concrete, Stroeven (P.), *1444*
- dynamic loads, steel, tests, Kalner (D.A.), Basin (F.I.), *3497*
- creep, dispersion hardening, mechanical properties, nickel alloys, Whittenberger (J.D.), *3500*
- point load test, rocks, Wijk (G.), *7453*
- rocks, strength, Wijk (G.), *10263*

tension, beams (sandwich), laminated beams, laminates, Gopu (V.K.A.), *302*
- boron, fibers, high temperature, testing equipment, Erasov (V.S.), Pirogov (E.N.), (et al.), *2485*
- hopkinson bar, materials properties, radioactivity, reactor structures, strain rate, temperature, welding, Albertini (C.), Montagnani (M.), (et al.), *2489*
- bolts, shear loading, Shakir-Khalil (H.), Ho (C.M.), *3583*
- creep, experimental results, polymers, Dixon-Stubbs (P.J.), *4349*
- biaxial loading, cavities, compression, creep, modeling, torsion, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- composite materials, compression, creep, failure, Gorev (B.V.), Rubanov (V.V.), (et al.), *5103*
- experimental methods, soils, Thorne (C.R.), Tovey (N.K.), (et al.), *5261*
- beams (nonhomogeneous), fredholm equations, inclusions, Stadnik (M.M.), Sikovanyuk (V.P.), *6163*

- dynamic testing, mechanical properties, plasticity, steel, strain, Novikov (N.V.), Ulyanenko (A.P.), (et al.), *6475*
- fracture toughness, high temperature, inert gases, testing equipment, vacuum, Babak (A.V.), Uskov (E.I.), *6477*
- bending, columns (eccentrically loaded), design (ultimate strength), reinforced concrete, Nazir (C.P.), *6500*
- buckling, cracks, fracture, plates, stability, Dyshel (M.Sh.), *7550*
- nuclear radiation, steel, strain, Kiselevskii (V.N.), Kharitonov (D.F.), (et al.), *7553*
- acoustic emission, aluminum alloys, fatigue, low cycle fatigue, nondestructive tests, Baram (J.), Rosen (M.), *7559*
- compression, concrete, saturation, strength, Karapetian (K.S.), Kotikian (R.A.), (et al.), *7566*
- steel, strain, stresses, yield criteria, Bascoul (A.), Maso (J.C.), *8431*
- bars, imperfections, notch tests, ultimate strength, Miastkowski (J.), Skrocki (H.), *8437*
- experimental methods, shadowgraphic methods, tissues, Knauss (W.G.), Kenner (V.H.), *9067*
- composite materials, fibers, fracture, polymers, Protasov (V.D.), Ermolenko (A.F.), (et al.), *9251*
- calibration, data acquisition, force, measurements (dynamic), transducers (load), Dalke (D.D.), *9426*
- cement stabilized soils, compression, concrete, dynamic testing, elastic constants, soils, statics, Kolias (S.), Williams (R.I.T.), *9427*
- aluminum alloys, ultrasonic welding, welded joints, Renshaw (T.), Sarrantonio (A.), *9486*
- analog simulation, plates (holed), vibration (nonlinear), Datta (P.K.), *10206*
- beams (cantilever), measurements (dynamic), strain gages, transducers (load), Haggstrom (R.P.), *10314*

tensor methods, continuum mechanics, matrix methods, Prediger (H.), *18*
- algorithms, computing techniques, fluid mechanics, Baker (A.J.), Soliman (M.O.), *1138*
- continuum mechanics, plasticity, Blinowski (A.), *3094*
- continuum mechanics, elastic dislocations, elasticity, mathematical methods, Kunin (I.A.), *4943*
- anisotropic media, coordinate systems, stress analysis, Ting (T.C.T.), *5094*
- elasticity (linear), isotropic materials, mathematical methods, vector methods, Smith (G.F.), *6060*
- stresses, surface flow, viscous flow, Moreau (J.J.), *6619*
- mathematical methods, three dimensional formulation, Guo (Z.-H.), *7152*
- creep, experimental results, tubes, Anisimowicz (M.), Sawczuk (A.), *7275*
- functional analyis, hamilton principle, variational methods, vector methods, Reddy (J.N.), Rasmussen (M.L.), *9090*
- mathematical methods, matrix methods, Smith (M.M.), Smith (G.F.), *9093*
- magneto fluid dynamics, relaxation, stability theory, stress analysis, Simkhovich (S.L.), *9795*
- fracture mechanics, stability theory, triaxial loading, Volkov (S.D.), Dubrovina (G.I.), *10292*
- channel flow, elastoplasticity, magneto fluid dynamics, stability theory, viscous flow, Simkhovich (S.L.), Ionochkina (L.I.), (et al.), *11809*
- eigenvalues, ferrous metals, liquid metals, magneto fluid dynamics, Radojevic (D.), *11828*

Teo (K.L.), algorithms, optimal control, time lag, Craven (B.D.), *1158*
- see Reid (D.W.), *5049*

Teodorescu (D.), failure, life expectancy, markov processes, reliability analysis, *7601*

Teodorescu (P.P.), beam columns, buckling, elastic foundations, *4394*

Teodorovich (E.V.), see Gorodtsov (V.A.), *11620*

Teodosiu (C.), see Soos (E.), *3423*
- deformation (plastic), dislocations, hot working, microstructures, steel, viscoplasticity, Soos (E.), (et al.), *5273*
- see Soos (E.), *6408*

Tepavitcharov (A.), curved surfaces, fundament, shells (shallow), structural analysis, Ljutzkanov (D.), (et al.), *9271*

Tepfers (R.), concrete, fatigue, strength, *1443*

Teplitskii (Yu.S.), see Tamarin (A.I.), *2999*

Teplyi (M.I.), contact problems, machine elements, rings, Chernets (M.V.), *7327*

Ter-Minasyants (S.M.), delta wings, leading edge, pressure distribution, supersonic flow, *8641*

Terao (K.), deflagration, detonation (two phase), detonative ignition, explosives, thermal explosions, Sawada (R.), *883*
- experimental methods, fatigue, ultrasonics, Kuno (T.), (et al.), *11162*

Terasaka (H.), dynamic response, heat exchangers (crossflow), mathematical models, numerical methods, weighted residual methods, Kanoh (H.), (et al.), *10618*

Terashima (K.), gear teeth, graphical methods, hobbing, surface profiles, Ueno (T.), (et al.), *2564*

Terauchi (Y.), contact stresses, deflections, elasticity, gear teeth, half space, Nagamura (K.), *8472*
- film thickness, lubrication (elastohydrodynamic), rolling contact, roughness, surfaces, Nonishi (T.), *9035*
- see Hidaka (T.), *10373*

Terekhov (R.G.), see Shevchenko (Yu.N.), *8880*

Terentev (E.D.), detonation (two phase), detonative ignition, explosions, propagation, *8854*
- see Ryzhov (O.S.), *11730*

Terentyev (V.F.), see Ivanova (V.S.), *1416*

Tereshchenko (V.Ya.), boundary value problems, differential equations (partial), elasticity (three dimensional), functional analyis, *3231*
- boundary value problems, elasticity (three dimensional), variational methods, *8190*
- boundary value problems, elasticity (linear), rayleigh ritz method, *8192*

Terras (R.), eigenvalue problems, green function, image methods, potential theory, Swanson (R.), *6077*

Terron (L.R.), convection (free), cylindrical bodies, external flow, mass transfer, Brunello (G.), *8728*

Terry (P.W.), collision models, hamiltonian equations, oscillators, perturbation theory, two body problem, *10772*

Terskov (A.Kh.), see Zavolzhenskii (M.V.), *4664*

Teschner (W.), optimal control, optimization, orbit transfer, trajectory optimization, *5708*

Tesfatsion (L.), see Kalaba (R.), *11067*

Teshigawara (S.), elastic foundations, elasticity (linear), half space, layered media, *1178*

Teslo (A.P.), see Kanarskiy (M.V.), *7701*

Tessarotto (M.), see D'Ambrogio (E.), *3899*

Tessler (A.), beams (timoshenko), finite element techniques, numerical methods, Dong (S.B.), *8236*

Test (F.L.), anemometers, heat transfer (atmospheric), scale effects, turbulence (transport), Lessmann (R.C.), (et al.), *1662*

testing equipment, springs, vibration isolation, Barker (H.A.), Noble (A.E.), (et al.), *226*
- crack opening displacement, finite element techniques, stress intensity factor, Papaspyropoulos (V.), Ahmad (J.), *477*
- containment, nuclear reactors, reliability, structure, vessels, Weymouth (L.J.), *488*
- creep, material testing, semiconductors, stress relaxation, Kalaidzhan (S.E.), Krivoruchko (S.P.), (et al.), *496*
- control, eddy currents, temperature, Blitz (J.), Razzak (G.A.), *1419*
- boron, fibers, high temperature, tension, Erasov (V.S.), Pirogov (E.N.), (et al.), *2486*
- displacement, dynamics, fatigue, Balakovskii (O.B.), *2492*
- crack growth, deformation (plastic), impact, runge kutta method, stiffness, Zhitenev (V.V.), Markochev (V.M.), *2495*
- adhesion, fibers, high speed, hopkinson bar, matrices, strain rate, Rybin (A.A.), *2496*
- cryogenics, diamond, high pressure, thermophysical properties, Bundy (F.P.), Dunn (K.J.), *2500*
- experimental methods, impact, Golderman (M.A.), Kochetov (D.A.), (et al.), *4459*
- hopkinson bar, impact, microprocessors, strain gages, strain measurement, Signoret (C.), Pouyet (J.M.), (et al.), *4507*
- compression, deformation (plastic), high temperature, plasticity, Brovman (M.Ya.), *4517*
- ultrasonics, velocity measurement, Yogurtcu (Y.K.), Lambson (E.F.), (et al.), *5240*
- material testing, materials properties, mechanical properties, strength, Voloshchenko (A.P.), Kuzema (Yu.A.), (et al.), *5326*
- fatigue, random loading, surveys, Bily (M.), Kliman (V.), (et al.), *5330*
- cracking, experimental methods, flaw detection, instruments, magnetic field, Luz (H.), *5338*
- classification, particle size, Beeckmans (J.M.), *5826*
- alloys, bending, cyclic loading, iron, shape factors, thermal fatigue, Pryakhin (V.A.), Ivanova (L.P.), *6474*
- fracture toughness, high temperature, inert gases, tension, vacuum, Babak (A.V.), Uskov (E.I.), *6477*
- creep, deformation, ductility, nuclear reactors, tests, Kruglov (A.S.), Fazkullin (V.A.), (et al.), *6498*
- filtration, particle size, Bridgwater (J.), Cooke (M.H.), (et al.), *6998*
- emulsions, optical instruments, particle size, Lee (G.W.J.), Groves (M.J.), *7002*
- laminates, nondestructive tests, transducers (ultrasonic), ultrasonics, Crostack (H.A.), Deutsch (V.), (et al.), *7560*
- algorithms, computer programming, mechanical properties, stress strain relationships, Kharchenko (V.K.), Gnuchii (Yu.B.), (et al.), *7562*
- cavitation, erosion, rotating disks, wear, Nikulin (V.A.), Konovalov (V.M.), (et al.), *7573*
- fluidized beds, particle fluid flow, velocity profiles, Ishida (M.), Shirai (T.), (et al.), *8935*
- friction (sliding), friction (solid fluid), lubrication (boundary), lubrication (elastohydrodynamic), Capone (E.), Capone (G.), (et al.), *9034*
- missiles, ramjets, rockets, solid propellants, Readey (H.J.) Jr., Cobb (E.R.), *10729*
- dynamic stresses, flow measurement, transducers, turbomachinery, Krause (L.N.), Fralick (G.C.), *10731*
- ferrous metals, liquid metals, magneto fluid dynamics, seals, Mikhalev (Yu.O.), Orlov (D.V.), (et al.), *10755*
- axial compressors, blades, cascades, flutter, Jutras (R.R.), Stallone (M.J.), (et al.), *10764*

Tetenov (E.V.), see Nikiforovskii (V.S.), *2377*
Tetsuo (N.), bubbly flow, cavitation flow, compressible flow, wedges, Khan (O.F.), *11420*
Tewari (P.K.), convection, permeability, porous media, Torrance (K.E.), *955*
textiles, beams, fatigue, steel, welded structures, Bardell (G.R.), Kulak (G.L.), *495*
- fibers, flexible bodies, surveys, tires, yarn, Hearle (J.W.S.) eds., Thwaites (J.J.), (et al.), *1214, book*
- cracks, failure, filamentary structures, reinforced bodies, Pipkin (A.C.), Rogers (T.G.), *1385*
- charcoal cloth, materials processing, mechanical properties, Capon (A.), Maggs (F.A.P.), (et al.), *2254*
- flammability, moisture, Zeronian (S.H.), Ellison (M.S.), (et al.), *2867*
- combustion, flammability, ignition, Miller (B.), Martin (J.R.), (et al.), *4739*
- compression, filamentary structures, materials properties, yarn, Leaf (G.A.V.), Oxenham (W.), *5131*
- fibers, stress rupture, stress strain relationships, Horikawa (A.), Yaida (O.), *5132*
- equilibrium, fibers, stochastic systems, structure, thermodynamics, Lindenmeyer (P.H.), *5133*
- cross-over, mathematical models, twisting, Familant (H.M.), *5134*
- adhesives, bonding, stress analysis, Hearle (J.W.S.), Ozsanlav (V.), *5135*
- abrasion, stress strain relationships, trials, wear, Raheel (M.), *5136*
- creep, fibers, rheology, Koczy (L.), Fulop (I.), *5137*
- material testing, strength, Barker (R.L.), Poole (H.W.), (et al.), *5139*
- dynamic loads, glass fibers, materials processing, Ko (F.), Bruner, (et al.), *6200*
- adhesives, bonding, fibers, Hearle (J.W.S.), Ozsanlav (V.), *6202*
- burning rate, combustion, flammability, ignition, Reeves (W.A.), Hammons (M.A.), (et al.), *6834*
- fibers, fizeau fringes, optical techniques, El-Nicklawy (M.M.), Fouda (I.M.), *7308*
- fibers, fizeau fringes, optical techniques, El-Nicklawy (M.M.), Fouda (I.M.), *7309*
- crimping, material testing, shrinkage, thermal effects, Ouynn (R.G.), Poisson (W.H.), *7310*
- geometric nonlinearities, matrix methods, space frames, structural analysis, Stubbs (N.), Fluss (H.), *7311*
- adhesives, twisting, yarn, Lord (P.R.), Parson (J.R.), (et al.), *7312*
- damping, dynamic effects, twisting, yarn, Lord (P.R.), Stuckey (W.C.), *7313*
- ballooning, spinning bodies, yarn, Lisini (G.G.), Nerli (G.), (et al.), *7314*
- composite materials, cylindrical bodies, elastic constants, polymers, strength, Dumont (J.P.), *8220*

texture, densification, liquefaction, sand, Nemat-Nasser (S.), Tobita (Y.), *7437*
Tezcan (C.), see Inonu (E.), *2778*
Tezduyar (T.E.), see Hughes (T.J.R.), *8144*
Thacker (W.C.), computing techniques, finite difference methods, finite element techniques, mesh generation, modeling, *3122*
Thake (T.F.), see Holland (M.J.), *5560*
Thakur (D.S.), see Shirkot (K.S.), *8580*
Thang (N.T.), bubbly flow, nozzles, pressure distribution, Davis (M.R.), *12029*
Thanh (V.), acoustic measurements, interferometry, optical techniques, solids, sound speed, Burov (J.), (et al.), *3970*
Thareja (R.R.), see Kim (M.D.), *7691*
Thatcher (R.W.), computing techniques, integration, numerical analysis, *2048*
thawing, freezing, permeability, snow, soils, Shtykov (V.I.), *3402*
Theilacker (J.C.), see Klein (S.A.), *779*
Theilhaber (K.S.), see Krapchev (V.B.), *8829*
Theissen (J.), see Jarchow (F.), *2566*
Theocaris (P.S.), see Tsamasphyros (G.), *45*
- see Panayotounakos (D.E.), *299*
- see Panayotounakos (D.E.), *339*
- caustics, crack arrest, photography, stress intensity factor, Milios (J.), *472*
- bimodulus materials, caustics, composite materials, crack opening displacement, interface cracks, stress intensity factor, Stassinakis (C.A.), *474*
- composite materials, crack arrest, dynamic loads, interface cracks, stress intensity factor, Milios (J.), *475*
- corners, elastic behavior, numerical methods, singular integral equations, stress intensity factor, Ioakimidis (N.I.), *478*
- see Tsamasphyros (G.J.), *1186*
- see Panayotounakos (D.E.), *1222*
- analysis, caustics, elasticity, plane strain, plane stress, Ioakimidis (N.), (et al.), *1397*
- see Tsamasphyros (G.), *2052*
- caustics, crack arrest, crack propagation, dynamic loads, plates, Milios (J.), *2451*
- corners, elasticity (linear), plates, re-entrant corners, stress intensity factor, Prassianakis (J.), *3233*
- see Ioakimidis (N.I.), *4182*
- complex variables, elasticity (linear), plates (holed), plates (holed), Bardzokas (D.), *5086*
- see Panayotounakos (D.E.), *5153*
- composite materials, crack propagation, micromechanics, polymers, Stassinakis (C.A.), *5292*
- cauchy principal value, collocation, computing techniques, singular integral equations, *6083*
- computing techniques, crack branching, interface cracks, penny shaped crack, singular integral equations, *7516*
- bimodulus materials, crack arrest, crack coalescence, crack propagation, discontinuities, Milios (J.), *7532*
- brittle fracture, caustics, crack tip geometry, fracture mechanics, photoelasticity, surfaces, *7556*
- see Prassianakis (J.N.), *8393*
- see Ioakimidis (N.I.), *8419*
- crack arrest, crack branching, crack propagation, dynamic fracture, multiple cracks, *9413*
- caustics, crack growth, crack propagation, elastodynamics, stress intensity factor, Papadopoulos (G.A.), *9416*
- crack growth, elastoplasticity, fracture criteria, Andrianopoulos (N.P.), *10300*

Theodore (K.T.), see Dote (H.), *6547*
Theofanous (T.G.), critical heat flux, nuclear reactors, nucleate boiling, pool boiling, *738*
- see Patel (P.D.), *10826*

theorems, conduction (heat), inverse problems, uniqueness, Muzylev (N.V.), *4645*
- circulation, conservation laws, vorticity, Mobbs (S.D.), *8526*
- gravity waves (surface), sloping bottom, uniqueness, Wen (S.-L.), Sastry (M.S.K.), *11571*

Theremin (H.) eds., machinery, marine engineering, ships, Robke (H.), *4104, book*
thermal contact resistance, conduction (heat), contact problems, Cames-Pintaux (A.M.), Padet (J.P.), *766*
- conduction (heat), conductivity, thermal properties, Nakao (M.), Miyawaki (Y.), *767*
- contact resistance, unsteady flow, Sadhal (S.S.), *1696*
- composite materials, conduction (heat), conductivity, particles, Yamada (E.), Ota (T.), *2783*
- conduction, contact problems, solid solid interface, Kokorev (L.S.), Shelagin (Yu.N.), (et al.), *3818*
- conduction (heat), heat exchangers, microbial fouling, resistance, thermal effects, Characklis (W.G.), Nimmons (M.J.), (et al.), *6812*
- friction (sliding), heat transfer (direct contact), wear, Amosov (A.P.), *8051*
- composite structures, conduction (heat), layered media, slabs, Duhamel (P.), Gosse (J.), *8732*
- contact problems, corners, thermoelasticity, Comninou (M.), Dundurs (J.), *9042*
- film boiling, porous walls, spherical bodies, Kuzma-Kichta (Yu.A.), Lenkov (V.A.), (et al.), *9686*
- condensation (dropwise), condensation (filmwise), drops, knudsen number, Tanaka (H.), *9693*
- contact resistance, heat exchangers, heat exchangers (membrane), Makarov (A.M.), Romanovskii (V.R.), *11769*

thermal diffusion, distributed parameters, optimal control, thermal stresses, Vigak (V.M.), Kostenko (A.V.), *177*
- adiabatic processes, calorimeters, conduction (heat), Mcnabb (A.), *770*
- numerical methods, transient effects, Yuen (W.W.), Wong (L.W.), *771*
- nonlinear systems, particle fluid flow, Gupalo (Yu.P.), Polyanin (A.D.), (et al.), *816*
- non newtonian flow, power law fluids, separation, Tubin (A.A.), Sorokin (Yu.S.), *822*
- heat transfer, nonhomogeneous media, variable thermal properties, Dulnev (G.N.), Sigalov (A.V.), *1697*
- fluidized beds, granular media, Hirama (T.), Adachi (T.), (et al.), *1872*
- power plants, rivers, Maruta (A.), Stere (C.), (et al.), *1894*
- liquids, thermal measurements, thermal properties, Farooq (M.M.), Giedt (W.H.), (et al.), *2781*
- columns, transfer functions, Rabinovich (G.D.), *2856*
- heat transfer, plates (vertical), transient effects, Krishan (B.), *3797*
- conservation laws, mixtures, transport properties, Zamskii (B.N.), Rabinovich (G.D.), *4134*
- hot wire, turbulent flow, Gaviglio (J.), Anguillet (J.-P.), (et al.), *4652*
- energy storage, solar energy, solar ponds, Poplawsky (C.J.), Incropera (F.P.), (et al.), *4723*
- dispersion, fluidized beds, gas solid interface, Wakao (N.), Shiozawa (B.), (et al.), *5541*
- thermal measurements, Taylor (R.), *5617*
- thermal measurements, Gupta (M.C.), Hong (S.-D.), (et al.), *5618*
- heat transfer, liquid liquid interface, mass transfer, Takao (S.), Narusawa (U.), *5619*
- annular flow, dispersion coefficient, dispersion relation, Achwal (S.K.) Shenoy (A.V.), *5620*
- combustion, mathematical models, stability (numerical), Baushev (V.S.), Viliunov (V.N.), (et al.), *5643*
- gruneisen parameter, steel, thermophysical properties, Beghi (M.), Bottani (C.E.), *5807*
- cooling, cooling ponds, heat transfer, Jain (S.C.), *5904*
- evaporation, heat transfer, wind tunnels (environmental), Reijnhart (R.), Rose (R.), *6826*
- dust, explosions, flame propagation, Nomura (S.-I.), Tanaka (T.), *6839*
- finite element techniques, mesh generation, shells (thick), structural design, Baldur (R.), *3156*
- binary flow, cavities, convection (free), inclined cavity, liquids, Pinyagin (A.Yu.), Pshenichnikov (A.F.), *8706*

- channel flow, heat exchangers, transient effects, Suvorov (A.V.), Rabinovich (G.D.), *8746*
- boundary layer, heat transfer, mass transfer, moving surfaces, Chen (T.S.), Strobel (F.A.), *8776*
- diesel engines, heat sources, modeling, pistons, Kao (T.K.), Wallace (F.J.), *8805*
- heat transfer, mixing layers, oceanography, thermocline, Posmentier (E.S.), *8993*
- boussinesq equation, buoyancy, convection, mixing layers, Cushman-Roisin (B.), *9533*
- boussinesq equation, convection, hysteresis, Walden (R.W.), Ahlers (G.), *9534*
- grids, mixing layers, turbulence, turbulent mixing, Larue (J.C.), Libby (P.A.), (et al.), *10474*
- shear flow, turbulent flow, Sreenivasan (K.R.), Tavoularis (S.), *10475*
- liquids, mixtures, solutions (material), Bukhtiilova (M.A.), Gorogush (V.M.), (et al.), *10554*
- conductivity, metals, thermophysical properties, thin films, Pugachev (A.T.), Volkov (Yu.A.), (et al.), *10557*
- hydrodynamic stability, thin films, Paliwal (R.C.), Chen (C.F.), *11536*
- flames (diffusion), hydrodynamic stability, thermal instability, Joulin (G.), Mitani (T.), *11783*

thermal effects, bonded joints, nondestructive tests, sensitivity, Vavilov (V.), *436*

- solar engines, thermoelectric phenomena, Gorodetskii (S.M.), Iordanishvili (E.K.), (et al.), *722*
- convection (free), heat transfer, vibration, Dawood (A.S.), Manocha (B.L.), (et al.), *753*
- condensation (filmwise), plane surfaces, Schroppel (J.), *808*
- boundary layer, magneto fluid dynamics, numerical methods, plates (perforated), Drymonitou (M.A.), Geroyannis (V.S.), (et al.), *856*
- plates (circular), vibration (free), Tomar (J.S.), Tiwari (V.S.), *922*
- shells (spherical), shells (thick), thermoplasticity, Durban (D.), *928*
- cyclic loading, heating, polymers, thermal explosions, vibration, Meinkohn (D.), *929*
- electrical analogies, friction (solid solid), heat transfer (direct contact), Lenk (D.), Zscherpel (W.), *933*
- bearings (hydrostatic), film thickness, lubrication (hydrostatic), non newtonian flow, El-Kayar (A.), Salem (E.A.), (et al.), *1014*
- mixtures, transport properties, viscosity, Dymond (J.H.), Young (K.J.), (et al.), *1658*
- additives, adsorption, friction, lubrication (boundary), Matveeskii (R.M.), *1942*
- bauschinger effect, heat treatment, plastic behavior, Aran (A.), Demirkol (M.), *2237*
- composite materials, crack growth, finite element techniques, micromechanisms, Braun (H.), Herrmann (K.), *2456*
- dynamic testing, strain gages, strain measurement, Bagaria (W.J.), Sharpe (W.N.) Jr., *2479*
- dynamic behavior, shells (outer), steel, strain rate, torsion, Eleiche (A.-S.M.), *2487*
- elastic constants, fibers, glass, Kobayashi (M.), Fujisawa (T.), (et al.), *2491*
- rails, stress analysis, welded joints, Edel (K.-O.), *2526*
- nuclear reactors, ratchetting, shells (cylindrical), thermoplasticity, Goodman (A.M.), *2970*
- airplane structures, composite materials, patching, residual stresses, Jones (R.), Callinan (R.J.), *2980*
- bearing capacity, rotating disks, rotors, Kozlov (I.A.), *3341*
- laminar flow, pipe flow, power law fluids, pressure drop, Nowak (Z.), Gryglaszewski (P.), (et al.), *3803*
- laminar flow, pipe flow, power law fluids, pressure drop, viscous effects, Gryglaszewski (P.), Nowak (Z.), (et al.), *3804*
- heat exchangers, regenerators, resistance, Romie (F.E.), *3839*
- fuel elements, nuclear reactors, safety, Minashin (V.E.), Gorelov (I.N.), (et al.), *3886*
- scattering, underwater acoustics, Andrews (R.S.), *3928*
- drawing, thermoelasticity, tubes, wires, Asada (Y.), Mori (K.-I.), (et al.), *4004*
- bearings (journal), lubrication (hydrodynamic), turbulent flow, Wada (S.), Hashimoto (H.), (et al.), *4109*
- dynamic analysis, loads, seismic loading, structural analysis, wave loads, Brebbia (C.A.) eds., Gould (P.L.), (et al.), *4536, book*
- multilayer, plane flow, temperature, Mkhitaryan (A.M.), Girol (A.P.), (et al.), *4698*
- energy storage, storage, stratified flow, tanks, thermosyphons, Young (M.F.), Baughn (J.W.), *4714*
- materials properties, pistons, thermoelasticity (transient), Calderale (P.M.), Garro (A.), (et al.), *4743*
- concrete, convection (forced), drying, Gritsev (V.M.), Bykov (S.I.), *5573*
- cooling, cooling ponds, power plants, Kvon (V.I.), *5595*
- energy conversion, ocean, Dugger (G.L.), Francis (E.J.), (et al.), *5671*
- hybrid construction, laser plasma interaction, radiation properties, reactor structures, Avrorin (E.N.), Zuev (A.I.), (et al.), *5685*
- cylindrical bodies, gravity gradient, solar radiation, space vehicle structures, Furukawa (M.), *5702*
- vibration (forced), viscoelasticity (dynamic), Gumenyuk (B.P.), Karnaukhov (V.G.), (et al.), *5802*
- bearing capacity, composite materials, plastics, shells (cylindrical), Tretyachenko (G.N.), Dzyuba (V.S.), (et al.), *6265*
- brittle fracture, dimensional analysis, impact, Solntsev (Yu.P.), Zamyatnin (M.M.), (et al.), *6368*
- aerodynamic interference, pressure gradient, wakes, wings, Peacock (R.E.), Hashem (A.A.F.), *6720*
- immiscible fluids, plates (parallel), thermal instability, Gershuni (G.Z.), Zhukhovitskii (E.M.), *6783*
- conduction (heat), heat exchangers, microbial fouling, resistance, thermal contact resistance, Characklis (W.G.), Nimmons (M.J.), (et al.), *6812*
- sound propagation, sound speed, thermoelasticity, Tokuoka (T.), *6901*
- acoustic waves, gases, impedance, nonlinear characteristics, Artamonov (K.I.), Vorobev (A.P.), *6921*
- experimental results, eyes, heat transfer (biological), lasers, Polhamus (G.D.), *7115*
- biocontrol, heat transfer (biological), human body, Schuette (W.H.), Lees (D.E.), (et al.), *7125*
- steel, yield condition, Kovalchuk (B.I.), Lebedev (A.A.), (et al.), *7287*
- crimping, material testing, shrinkage, textiles, Quynn (R.G.), Poisson (W.H.), *7310*
- casting, computer aided design, dies, Siauw (T.H.), *7461*
- insulation, sensitivity, structural analysis, Haftka (R.T.), *7606*
- boiling, film boiling, porous surfaces, Strikovich (M.A.), Malyshenko (S.P.), (et al.), *7835*
- annular flow, cables, cooling, electrical components, joints, Abdel Aziz (M.M.), Riege (H.), *7845*
- diffusion, membranes (permeable), permeability, Ibanez (J.A.), Tejerina (A.F.), *7874*
- flames (diffusion), kinetics, Matalon (M.), Ludford (G.S.S.), *7879*
- combustion instability, flames (laminar), mathematical models, Aldushin (A.P.), Kasparyan (S.G.), *7881*
- finite difference methods, reactors, Stewart (H.B.), *7967*
- contact problems, lubrication (elastohydrodynamic), rheology, traction, Houpert (L.), Flamand (L.), (et al.), *8064*
- dynamic effects, elastoplasticity, shakedown structures, work hardening, Konig (J.A.), Maier (G.), *8436*
- cooling towers, reinforced concrete, Orosz (A.), *8452*
- fluid-structure interaction, heat transfer (combined modes), nuclear reactors, tube bundles, Bennett (J.G.), Ju (F.), *8747*
- chemical kinetics, chemical reactions, combustion, Tennankore (K.N.), *8792*
- elastodynamics, lasers, metals, thermoelasticity (transient), Scruby (C.B.), Dewhurst (R.J.), (et al.), *8877*
- anisotropic media, composite materials, laminates, plates (sandwich), Reddy (J.N.), Hsu (Y.S.), *8888*
- failure, hardness, rolling contact, wear, Rozeanu (L.), Pnueli (D.), *9022*
- contact problems, deformation, friction (sliding), roughness, surface profiles, Burton (R.A.), *9041*
- bearings (journal), computer aided design, finite difference methods, lubrication (hydrodynamic), reynolds equation, Cowking (E.W.), *9964*
- bearings (gas lubricated), bearings (journal), laminar flow, reynolds number, Fijalkowski (S.), *9965*
- aluminum alloys, residual stresses, ultrasonics, Salama (K.), Ling (C.K.), (et al.), *10321*
- creep, pressure vessels, prestressed concrete, Smith (I.G.), *10357*
- density, schlieren methods, shock tubes, shock waves, thermal gradient, Akimov (A.I.), Piskareva (M.V.), (et al.), *10492*
- composite materials, resins, swell, thermal expansion, Adamson (M.J.), *10558*
- boundary conditions, channel flow, convection (forced), micropolar media, microstructural fluids, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *10573*
- acid penetration, exothermic reactions, fracture, rocks, Lee (M.H.), Roberts (L.D.), *10679*
- heat transfer, lubricants (liquid), viscosity, Constantinescu (V.N.), Smith (R.N.), (et al.), *10895*
- concrete, heat transfer, thermal stresses, Thurston (S.J.), Priestley (M.J.N.), (et al.), *11328*
- finite element techniques, fluid-structure interaction, nuclear reactors, reactor core, Bennett (J.G.), Ju (F.D.), *11658*
- design, thermal sciences, thermodynamics, Bejan (A.), *11756*
- magneto fluid dynamics, suspensions, two phase flow, vortex flow, Miroshnikov (V.K.), *11818*
- optical techniques, sound generation, Lyamshev (L.M.), Sedov (L.V.), *11915*
- acoustics, gases, sound generation, vibration (self excited), Kilchinskaya (G.A.), Protsenko (O.P.), *11920*
- chemical reactions, sound propagation, Tal (R.T.), *11958*
- acoustic properties, jets, Kantola (R.A.), *11962*
- bubble dynamics, surface tension, two phase flow, Meyyappan (M.), Wilcox (W.R.), (et al.), *12038*

thermal excitation, benard-rayleigh problem, cellular flow, convection (benard), Wauer (J.), *758*

- asymptotic methods, ignition, Berman (V.S.), Riazantsev (Iu.S.), (et al.), *2858*
- ignition, solid fuels, Babenko (Yu.I.), *3858*
- cryogenics, helium, Sergeev (S.I.), Popov (O.M.), (et al.), *5532*
- cellular motions, convection (benard), thermal instability, Eagles (P.M.), *5556*

- conduction (heat), heat transfer, hot wire, thermal measurements, Mulyukov (R.R.), *6798*
- pulsatile flow, thermal loading, transient effects, Goloveiko (A.G.), Martynikhina (V.I.), *7851*
- compressibility, conductivity, surface effect, Loudon (R.), *8677*
- cylindrical bodies, diffusion, solids, unsteady flow, Lamvik (M.), *8678*
- cellular motions, monte carlo analysis, rayleigh benard instability, transient effects, transition flow, Jhaveri (B.), Homsy (G.M.), *8709*
- catalyzed ignition, Linan (A.), Williams (F.A.), *8787*

thermal expansion, compressibility, earth, phase changes, Trubitsyn (V.P.), *964*
- structural elements, thermal loading, thermoelasticity (steady), Hofmeister (W.), *1830*
- approximation methods, ceramics, empirical methods, quartz, Rusovic (N.), Godecke (T.), *6757*
- composite materials, elliptical bodies, polymers, Takahashi (K.), Harakawa (K.), (et al.), *7297*
- gasification, immersion, mathematical methods, phase changes, thermal loading, Hunter (L.W.), *7852*
- composite materials, resins, swell, thermal effects, Adamson (M.J.), *10558*
- compressible flow, numerical methods, one dimensional flow, two phase flow, Amit (R.), Porsching (T.A.), *11421*

thermal explosions, deflagration, detonation (two phase), detonative ignition, explosives, Terao (K.), Sawada (R.), *883*
- deflagration, detonation (two phase), detonative ignition, explosives, Calzia (J.), *884*
- cyclic loading, heating, polymers, thermal effects, vibration, Meinkohn (D.), *929*
- deflagration, detonation, explosions, liquid fuels, Mitrofanov (V.V.), Pinaev (A.V.), (et al.), *1797*
- detonative ignition, explosions, ignition, Andersen (W.H.), *3925*
- nucleation, vaporization, Henry (R.E.), Fauske (H.K.), *5547*
- clouds, drops, meteorology, Svirkunov (P.N.), Sedunov (Yu.S.), (et al.), *5584*
- ballistics (interior), heat transfer, projectiles, Grewal (B.S.), *5716*
- detonation (condensed phase), explosions, Bdzil (J.B.), *6890*
- detonation (two phase), explosions, shock waves, Ulyanitskii (V.Yu.), *7931*
- heat addition, ignition, limit analysis, Dik (I.G.), *9746*
- chemical kinetics, detonation, explosions, Eidelman (S.), Sichel (M.), *9823*
- chemical kinetics, detonation, detonative ignition, explosions, Kassoy (D.R.), Poland (J.), *9824*
- detonative ignition, explosions, ignition, self ignition, viscous effects, Aleksapolskii (N.B.), Naidenov (V.I.), *9836*
- deflagration, explosions, Dik (I.G.), Zurer (A.B.), *9837*
- arrhenius reaction, hot spots, models, Tam (K.K.), Kiang (M.T.), *10697*
- critical phenomena, pipe flow, variable fluid properties, viscous flow, Aleksanopolskii (N.B.), Naidenov (V.I.), *11501*
- film boiling, melting, shock waves, thermal shock, Inoue (A.), Bankoff (S.G.), *11760*
- film boiling, melting, shock waves, thermal shock, Inoue (A.), Ganguli (A.), (et al.), *11761*
- detonation, detonative ignition, explosions, Kassoy (D.R.), Poland (J.), *11893*

thermal fatigue, constitutive equations, creep, internal state variables, Mccartney (L.N.), *1187*
- blades, creep, turbomachinery, Peschel (W.), Schreieck (R.), *1835*
- alloys, life expectancy, material testing, Vashunin (A.I.), Kotov (P.I.), *2976*
- ceramics, endurance limit, material testing, refractories, Lamon (J.), *3435*
- material testing, rupture, simulation, Cailletaud (G.), Culie (J.-P.), (et al.), *3998*
- boilers, steel, Ginsztler (J.), *3999*
- creep, life expectancy, titanium, Plumbridge (W.J.), *4479*
- blades, crack propagation, stress intensity factor, Getsov (L.B.), Kabelevskii (M.G.), *4817*
- alloys, bending, cyclic loading, iron, shape factors, testing equipment, Pryakhin (V.A.), Ivanova (L.P.), *6474*
- experimental methods, metals, thermal stresses, Gopkalo (A.P.), Zaslotskaya (L.A.), (et al.), *6947*
- combustion, environmental tests, materials properties, Tretyachenko (G.N.), Kravchuk (L.V.), (et al.), *7474*
- composite materials, inclusions, nonhomogeneous media, Malygin (A.F.), Yankovskii (Yu.V.), *7954*

thermal instability, buoyant flow, cellular flow, convection (benard), surface tension, Lebon (G.), Cloot (A.), *757*
- heat transfer, mass transfer, moisture, soils, transient, Hartley (J.G.), Black (W.Z.), *830*
- buoyant flow, convection (free), heat transfer, stratified flow, Chashechkin (Yu.D.), Tupitsyn (V.S.), *1684*
- cooling, heat exchangers, nuclear reactors, Proshutinskii (A.P.), Lobachev (A.G.), *1713*
- convection, crystals, marangoni convection, thermal waves, Chun (C.-H.), *4710*
- calorimeters, differential thermal analysis, thermal measurements, thermodynamic processes, Vertogradskii (V.A.), Egorova (L.S.), *5533*
- binary flow, cellular motions, plane flow, thermal waves, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *5554*
- buoyant flow, convection (benard), convection (free), radiant interchange, Getling (A.V.), *5555*
- cellular motions, convection (benard), thermal excitation, Eagles (P.M.), *5556*
- annular flow, rotating fluids, variable fluid properties, Jonas (P.R.), *5557*
- convection, geophysics, geostrophic flow, geostrophic models, rotating fluids, Glukhovskiy (A.B.), Dolzhanskiy (F.V.), *5558*
- freezing, hydrodynamic stability, pipe flow, turbulent flow, Thomason (S.B.), Mulligan (J.C.), *5578*
- boiling, channel flow, circulation, cooling, heat exchangers, Braginskiy (A.M.), Ivanov (L.B.), *5593*
- conduction (steady), thermosyphons, transient effects, Mertol (A.), Greif (R.), (et al.), *5598*
- absorption, energy storage, radiant interchange, solar collectors, solar ponds, Tabor (H.), *5602*
- convection, porous media, Sharma (R.C.), *5883*
- hydrodynamic stability, variable fluid properties, viscosity, Sazontov (A.G.), *6761*
- boiling, compressional waves, hydrodynamic stability, nuclear reactors, sodium, Galati (A.), *6770*
- film boiling, nucleate boiling, pool boiling, transition boiling, Zhukov (S.A.), Barelko (V.V.), (et al.), *6772*
- fluid boundaries, heat addition, layered media, rayleigh number, Dowden (J.), *6782*
- immiscible fluids, plates (parallel), thermal effects, Gershuni (G.Z.), Zhukhovitskii (E.M.), *6783*
- cavities, channel flow, convection, Unger (J.), *6784*
- chemically reactive flow, convection (forced), plane flow, Eremin (E.A.), Kolesnikov (A.K.), *6785*
- closed conduit flow, convection (free), nuclear reactors, Zvirin (Y.), Jeuck (P.R.) III, (et al.), *6811*
- cooling, hydrodynamic stability, Kolos (V.P.), Sorokin (V.N.), *6814*
- bifurcation, buckling, plates (annular), vibration, Tani (J.), *7358*
- diffusion, liquids, thermal waves, Baydakov (V.G.), *8674*
- convection (free), film boiling, hydrodynamic stability, liquid vapor interface, pipe flow, two phase flow, Sherman (D.C.), Sabersky (R.H.), *8693*
- buoyant flow, convection (free), mixing, mixing chambers, unsteady flow, Opanasenko (A.N.), Selivanov (V.M.), (et al.), *8704*
- convection, heat sources, viscous effects, Goriei (V.V.), Shenderovskii (V.A.), *8707*
- thermal waves, thermodynamics (nonequilibrium), transport mechanisms, unsteady flow, Sieniutycz (S.), *8708*
- critical phenomena, diffusion, inclined layer, rayleigh number, stratified flow, Paliwal (R.C.), Chen (C.F.), *8712*
- convection, pipe flow, reynolds number (critical), El-Hawary (M.A.), *8713*
- closed conduit flow, hydrodynamic stability, rayleigh number, solar ponds, thermohaline stability criteria, Pnueli (D.), *8715*
- annular flow, boundary layer (thermal), convection, ekman layer, rotating fluids, Hignett (P.), Ibbetson (A.), (et al.), *8717*
- convection, radiant interchange, rotating fluids, Onyegegbu (S.O.), *8752*
- capillary flow, closed conduit flow, convection (free), heat transfer, porous media, vortex flow, Catton (I.) eds., Smith (R.N.), *9682, book*
- channel flow, conduction, convection (forced), heat transfer (combined modes), nucleate boiling, Humbert (M.), Martin (M.), *9685*
- buoyant flow, convection (free), hydrodynamic stability, transition flow, Gebhart (B.), Mahajan (R.L.), *9701*
- channel flow, conduction (heat), hydrodynamic stability, transition flow, Hassab (M.A.), Ozisik (M.N.), *9702*
- dissociation, heat transfer, real gas effects, stagnation point, Agranat (V.M.), Bertsun (V.N.), (et al.), *9704*
- circulation, convection, steam gas power plants, thermal waves, tubes, Unal (H.C.), *9705*
- navier stokes equation, stratified flow, viscous effects, Makarenko (I.P.), Simuni (L.M.), *10569*
- hypergolic propellants, self ignition, solid propellants, Kulkarni (S.G.), Panda (S.P.), *10715*
- heat addition, liquid crystals (nematic), magnetic fluids, plates (parallel), Barratt (P.J.), Sloan (D.M.), *11368*
- convection (free), heat addition, porous media, rayleigh number, Horne (R.N.), Caltagirone (J.-P.), *11369*
- conductivity, convection (benard), convection (free), heat addition, slabs, Proctor (M.R.E.), *11763*
- flame propagation, flames (laminar), hydrodynamic stability, Zeldovich (Ya.B.), *11782*
- flames (diffusion), hydrodynamic stability, thermal diffusion, Joulin (G.), Mitani (T.), *11783*

thermal loading, disks, endurance limit, turbines, Getsov (L.B.), Nigin (A.A.), (et al.), *516*
- creep, finite element methods, rocks, Anderson (C.A.), Bridwell (R.J.), *965*
- blades, centrifugal turbines, orthotropic materials, rotating disks, Paul (A.K.), *1243*
- crack opening displacement, elastoplasticity, j-integral, Aoki (S.), Kishimoto (K.), (et al.), *1374*
- laser plasma interaction, materials properties, nuclear fusion, power generation, Jaeger (T.A.) eds., Boley (B.A.), *1781, book*
- structural elements, thermal expansion, thermoelasticity (steady), Hofmeister (W.), *1830*

- computing techniques, finite element techniques, Pittr (J.), Hartl (H.), *2076*
- thermoplasticity, variational methods, Allen (D.H.), Haisler (W.E.), *2973*
- condensers, heat exchangers, tube bundles, Schrey (H.-G.), Kern (J.), *3840*
- solar collectors, solar ponds, stratified flow, Hawlader (M.N.A.), Brinkworth (B.J.), *3843*
- critical heat flux, nuclear power, nuclear reactors, safety, Hochreiter (L.E.) eds., Sozzi (G.L.), *4693, book*
- liquid solid interface, thermal measurements, thermophysical properties, Spirin (G.G.), *5535*
- axisymmetric flow, convection (free), pressure vessels, Wung (P.M.), Tauchert (T.R.), *5576*
- cooling, heat pipes, space vehicles, Vasilev (L.L.), Gil (V.V.), (et al.), *5599*
- elastoplasticity, plates (circular), welded joints, work hardening, Makhnenko (V.I.), Oleinik (V.A.), (et al.), *5796*
- constraints, optimization, penalty function, trusses, Bellagamba (L.), Yang (T.Y.), *6503*
- design (minimum weight), design (optimum), thermal stresses, Venkateswara Rao (G.), *6507*
- convection (free), plates (vertical), transient effects, Sammakia (B.), Gebhart (B.), *6763*
- absorption, coatings, heat shields, radiant interchange, solar radiation, space vehicles, spectral analysis, Bosma (J.), Levadou (F.), *6807*
- composite materials, cyclic loading, strength, Mukherjee (M.K.), *7300*
- brittle fracture, elliptical cracks, Znachkovskii (O.Ya.), Rakovskii (V.A.), (et al.), *7491*
- conduction (heat), duct flow, pulsatile flow, Baskov (V.B.), Platonov (E.G.), (et al.), *7849*
- pulsatile flow, thermal excitation, transient effects, Goloveiko (A.G.), Martynikhina (V.I.), *7851*
- gasification, immersion, mathematical methods, phase changes, thermal expansion, Hunter (L.W.), *7852*
- crack initiation, crack propagation, high temperature, Lloyd (G.J.), Wood (D.S.), *8372*
- thermoelasticity, viscoelastic materials, Shevchenko (Yu.N.), Terekhov (R.G.), (et al.), *8880*
- solar collectors, transient loading, unsteady flow, El-Refaie (M.F.), Hashish (M.A.), *9739*
- insulating materials (thermal), layered media, partition walls, transient effects, Devisme (J.-M.), *9740*
- air conditioning, cooling, heating, Urano (Y.), Nanri (H.), (et al.), *9742*
- blades, convection (forced), gas turbines, heat transfer, Graham (R.W.), *10567*
- deformation, experimental mechanics, pipelines, Kogan (E.A.), Zlodeev (V.P.), *11333*

thermal measurements, aerodynamics, flow measurement, liquid crystal, optical techniques, Zharkova (G.M.), *725*

- combustion (turbulent), convection (forced), impact jets, impingement, isothermal processes, jets, Popiel (C.O.), Van Der Meer (T.H.), (et al.), *727*
- blades, cylindrical bodies, film cooling, gas turbines, heat transfer, leading edge, Mirhosseini (A.), Barrow (H.), *733*
- conductivity, experimental methods, thermophysical properties, Buravoi (S.E.), Kurepin (V.V.), (et al.), *1661*
- boundary layer (thermal), plane flow, turbulent flow, Andreopoulos (J.), Bradshaw (P.), *1678*
- conduction (heat), conductivity, radiation, thermal properties, Salokhin (V.F.), Spirin (G.G.), *1705*
- oil wells, temperature, Shiu (K.C.), Beggs (H.D.), *1720*
- defects, flaw detection, inspection, temperature, Vavilov (V.P.), Gorbunov (V.I.), *2504*
- conductivity, density, gases, heat transfer, transient effects, Filippov (L.P.), Eldarov (F.G.), (et al.), *2780*
- liquids, thermal diffusion, thermal properties, Farooq (M.M.), Giedt (W.H.), (et al.), *2781*
- hot wire, nusselt number, thermocouples, Paranthoen (P.), Lecordier (J.C.), (et al.), *2782*
- calorimeters, conduction (heat), conductivity, Zhdanov (K.R.), Matizen (E.V.), (et al.), *2784*
- boundary layer (thermal), experimental methods, thermometer, Torkelsson (S.A.), *3775*
- boundary layer (thermal), experimental methods, heat transfer, temperature, Schreiber (V.), Christ (A.), *3776*
- axisymmetric flow, heat transfer, reattachment, separated flow, turbulent flow, Smyth (R.), *3780*
- conduction (heat), hot wire, Mohammadi (S.S.), Graboski (M.S.), (et al.), *3808*
- thermocouples, thin films, transducers, Godefroy (J.-C.), *3909*
- high pressure, pressure vessels, Bock (W.J.), *3810*
- axial pumps, three dimensional flow, Rvachev (V.L.), Slesarenko (A.P.), (et al.), *3811*
- heat transfer (combined modes), radiant interchange, radiometer, Shcherbina (D.M.), *4713*
- conduction (heat), rocks, thermodynamic properties, Topolnicki (J.), *5523*
- thermal properties, transport properties, Abdel-Wahed (R.M.), Bligh (T.P.), (et al.), *5526*
- experimental methods, soils, transport properties, Abdel-Wahed (R.M.), Pfender (E.), (et al.), *5527*
- low temperature, Novogrudskii (L.S.), Gorodyskii (N.I.), (et al.), *5530*
- calorimeters, differential thermal analysis, thermal instability, thermodynamic processes, Vertogradskii (V.A.), Egorova (L.S.), *5533*
- conduction (heat), thermocouples, Sergeev (O.A.), *5534*
- liquid solid interface, thermal loading, thermophysical properties, Spirin (G.G.), *5535*
- thermal diffusion, Taylor (R.), *5617*
- thermal diffusion, Gupta (M.C.), Hong (S.-D.), (et al.), *5618*
- combustion (turbulent), lasers, stokes flow, turbulence, Eckbreth (A.C.), *5632*
- heat transfer, thermocouples, thin films, Godefroy (J.-C.), *6793*
- conduction (heat), conductivity, edge effects, plates (circular), Bode (K.-H.), *6796*
- conduction (heat), heat transfer, hot wire, thermal excitation, Mulyukov (R.R.), *6798*
- radiant interchange, surfaces, thin films, Guernigou (J.), Indrigo (C.), (et al.), *6809*
- exhaust gases, heat transfer, one dimensional flow, spark ignition engines, Alkidas (A.C.), *6848*
- cold wire, conduction (heat), hot wire, turbulence, Lecordier (J.C.), Petit (C.), (et al.), *7757*
- nickel alloys, resistance, resistance thermometers, Lushchaev (G.A.), Karchkov (V.A.), (et al.), *7822*
- boiling, high pressure, pipe flow, Sekoguchi (K.), Tanaka (O.), (et al.), *7830*
- convection (forced), heat transfer, hot film, transient effects, Malcolm (D.G.), Verma (V.), *7846*
- cavities, convection, heat transfer, interferometry, visualization, Semas (V.), Lee (E.I.), *8769*
- aerodynamic interference, combustion chambers, computer programming, diesel engines, Gwinner (J.U.), *8803*
- axial turbines, blades, heat transfer, rotors, Pochuev (V.P.), Shcherbakov (V.F.), *8808*
- hot wire, liquids, thermophysical properties, Filippov (L.P.), Nefedov (S.N.), (et al.), *10555*
- anemometers, wires, wollaston wire, Petit (C.), Paranthoen (P.), (et al.), *10590*

thermal plumes, buoyant flow, jets, plumes, Ogino (F.), Takeuchi (H.), (et al.), *751*

- buoyancy, free jets, Gersten (K.), Schilawa (S.), (et al.), *2661*
- buoyant flow, cavities, cellular flow, convection, Berdnikov (V.S.), Kirdyashkin (A.G.), *8727*
- absorption, convection, convection (free), heat addition, radiant interchange, Yucel (A.), Bayazitoglu (Y.), *9727*
- boundary layer, convection, dispersion, smoke stacks, Venkatram (A.), *11519*

thermal properties, constitutive equations, rheology, thermodynamic properties, viscous effects, Lebon (G.), Rubi (J.M.), *719*

- steam, thermodynamic properties, transport properties, water, Straub (J.) eds., Scheffler (K.), *723, book*
- conduction (heat), hydrocarbons, thermodynamic properties, Baroncini (C.), Di Filippo (P.), (et al.), *724*
- conduction (heat), conductivity, thermal contact resistance, Nakao (M.), Miyawaki (Y.), *767*
- radiant interchange, solar collectors, Manrique (J.A.), Suarez (R.), *781*
- conductivity, liquids, physical properties, sound speed, Mamedov (A.M.), *1656*
- equations of state, ethylene, Thomas (W.), Zander (M.), *1659*
- gases, polyatomic gases, spectral analysis, spectroscopy, Miller (G.H.), Mulac (A.J.), *1660*
- boiling, cooling, transition boiling, unsteady flow, Berlin (I.I.), Kalinin (E.K.), (et al.), *1671*
- conduction (heat), conductivity, radiation, thermal measurements, Salokhin (V.F.), Spirin (G.G.), *1705*
- casting, solidification, vacuum technology, Fukusako (T.), Kubo (K.), (et al.), *2493*
- liquids, thermal diffusion, thermal measurements, Farooq (M.M.), Giedt (W.H.), (et al.), *2781*
- elasticity (nonhomogeneous), thermoelasticity, Lomakin (V.A.), El-Karamani (A.M.), *2969*
- elastic constants, polymers, Golik (A.Z.), Zabashta (Yu.F.), (et al.), *2978*
- thermodynamic properties, thermophysical properties, transport properties, Cezairliyan (A.) ed., *3770, book*
- conduction (heat), containers, paper, Bormett (D.W.), *4001*
- metals, thin films, Pichard (C.R.), Tellier (C.R.), (et al.), *4003*
- conduction (heat), gaseous ammonia, thermodynamic properties, Afshar (R.), Murad (S.), (et al.), *4692*
- thermal measurements, transport properties, Abdel-Wahed (R.M.), Bligh (T.P.), (et al.), *5526*
- gases, imperfection sensitivity, solidification, Manzhelii (V.G.), Freiman (Yu.A.), (et al.), *5528*
- conductivity, laminates, pressure vessels, Armstrong (W.P.), Jawad (M.H.), *5805*
- heat transfer, materials properties, Najjar (M.S.), Bell (K.J.), *5806*
- energy conservation, heat transfer, insulating materials (thermal), Turner (W.C.), Malloy (J.F.), *6823*
- gases, mixtures, real gas effects, Nedostup (V.I.), Galkevich (E.P.), *10548*
- thermodynamic properties, thermodynamics (nonequilibrium), Kazakov (V.A.), *10549*

- condensation (dropwise), conductivity, surface effect, Abdelmessih (A.H.), Rotenberg (Y.), (et al.), *10577*

thermal sciences, control, design, distributed parameters, Breger (A.M.), Butkovskii (A.G.), (et al.), *139*
- heat transfer (combined modes), radiant interchange, radiation, Sparrow (E.M.), Cess (R.D.), *3826, book*
- helmholtz equation, meteorology, solar radiation, three dimensional formulation, transfer theory, Ou (S.-C.S.), Liou (K.-N.), *4180*
- bibliography, heat transfer, thermodynamics, Eckert (E.R.G.), Sparrow (E.M.), (et al.), *4694*
- dynamic behavior, finite element techniques, guyan reduction, Bushard (L.B.), *9150*
- design, thermal effects, thermodynamics, Bejan (A.), *11756*

thermal shock, heat transfer, impact, Gaiduk (S.I.), Dobrushkin (V.A.), *4971*
- ceramics, scale effects, thermoelasticity (transient), Glandus (J.C.), Boch (P.), *5803*
- bars, thermal waves, thermoelasticity (transient), Szalontay (M.), Szekeres (A.), *5804*
- conduction (heat), thermoelasticity, Szekeres (A.), *6942*
- experimental results, power plants, thermal stresses, Guitton (J.), *7955*
- elastoplasticity, half space, thermal waves, Nagrelli (V.E.), *8882*
- creep, lead, models, ratchetting, stress concentration, Hyde (T.H.), Fessler (H.), (et al.), *10333*
- film boiling, melting, shock waves, thermal explosions, Inoue (A.), Bankoff (S.G.), *11760*
- film boiling, melting, shock waves, thermal explosions, Inoue (A.), Ganguli (A.), (et al.), *11761*

thermal stresses, distributed parameters, optimal control, thermal diffusion, Vigak (V.M.), Kostenko (A.V.), *177*
- controllability, distributed parameters, optimal control, sensitivity, synthesis, temperature, Poterasu (V.F.), *178*
- periodic problems, plates (circular), turbomachinery, viscoelastic materials, Raous (M.), *263*
- concrete, creep, offshore structures, England (G.L.), *530*
- plates (reinforced), thermoelasticity (transient), Kolyano (Yu.M.), Kushnir (R.M.), *925*
- conformal mapping, thermoelasticity (transient), Takeuti (Y.), Yamada (K.), *926*
- diffusion, holes, hygrothermal effects, thermoelasticity, Hartranft (R.J.), Sih (G.C.), *1832*
- casting, conduction (unsteady), heat transfer, Morgan (K.), Lewis (R.W.), (et al.), *2402*
- photoelasticity, plates (circular), transient, Stanley (P.), Edward (D.C.), *2470*
- anisotropic media, cylindrical bodies, thermoelasticity (steady), Misra (J.C.), Achari (R.M.), *2964*
- inclusions, plates (nonhomogeneous), thermoelasticity (steady), Shioya (S.), Matsuda (M.), *2965*
- inclusions, plates (nonhomogeneous), thermoelasticity (steady), Araki (H.), Shioya (S.), (et al.), *2966*
- conduction (steady), penny shaped crack, stress intensity factor, Barber (J.R.), *2967*
- anisotropic media, strips, thermoelasticity (steady), Misra (J.C.), *2968*
- anisotropic media, cooling, polymers, shells (cylindrical), shells (thick), Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- bonded joints, residual stresses, Weitsman (Y.), *2975*
- fuel elements, thermoelasticity, Friedman (M.), Argel (A.), (et al.), *3987*
- conduction (heat), gas turbines, Vytchikov (Yu.S.), Khorolskii (V.M.), *3988*
- cracks, elastic bodies, inclusions, stress concentration, Rokne (J.), Dhaliwal (R.S.), (et al.), *3990*
- plates, thermoelasticity (steady), Marin (V.A.), Popovich (V.E.), (et al.), *3991*
- disks, heat sources, Misra (J.C.), Achari (R.M.), *3993*
- nozzles, thermoelasticity (transient), Makarov (A.M.), Kuranov (B.A.), (et al.), *3994*
- complex variables, plates (holed), Yamada (K.), *4814*
- anisotropic media, nonhomogeneous media, plates (annular), rotating disks, Misra (J.C.), Achari (R.M.), *4815*
- creep, deformation (plastic), metals, thermoelasticity (transient), Morjaria (M.), Mukherjee (S.), *4818*
- inclusions, plates (nonhomogeneous), Shioya (S.), Matsuda (M.), (et al.), *5794*
- rotating disks, vibration (thermally excited), Chen (L.-T.), Dugundji (J.), *5797*
- design (minimum weight), design (optimum), thermal loading, Venkateswara Rao (G.), *6507*
- inclusions, plates (nonhomogeneous), plates (rectangular), Sumi (N.), *6940*
- cylindrical bodies, fluids, Nabarro (F.R.N.), *6941*
- convection, cylindrical bodies, thermoelasticity (transient), Satyamurthy (K.), Singh (J.P.), (et al.), *6943*
- fracture, particles, shock waves, Levin (A.L.), Murzinov (I.N.), (et al.), *6946*
- experimental methods, metals, thermal fatigue, Gopkalo (A.P.), Zaslotskaya (L.A.), (et al.), *6947*
- rotors, stress analysis, turbines, Strunkin (V.A.), Sagadeev (R.G.), (et al.), *6950*
- anisotropic media, composite materials, cylindrical bodies, thermoelasticity (steady), Iesan (D.), *6952*
- laminates, layered media, shear, shells (sandwich), thermoelasticity, Khoroshun (L.P.), Babich (D.V.), *6953*
- fracture mechanics, inelasticity, pipes, stress analysis, Severud (L.K.), *7619*
- half space, heat sources, semi infinite media, thermoelasticity (steady), Chowdhury (K.L.), Glockner (P.G.), *7948*
- convection, cylindrical bodies, thermoelasticity (transient), Noda (N.), Sugano (Y.), *7950*
- constitutive equations, elastoviscoplasticity, pressurized pipes, Inoue (T.), Nagaki (S.), (et al.), *7951*
- composite materials, polymers, Korotkov (V.N.), Turusov (R.A.), (et al.), *7952*
- experimental results, power plants, thermal shock, Guitton (J.), *7955*
- photoelasticity (dynamic), thermoelasticity (transient), Miskioglu (I.), Gryzagorides (J.), (et al.), *7957*
- cylindrical bodies, thermoelasticity (transient), Koizumi (T.), Ishikawa (O.), (et al.), *8871*
- shells (conical), thermoelasticity (steady), Harinath (K.S.), *8873*
- cylindrical bodies, rolling, stress concentration, thermoelasticity (transient), Takeuti (Y.), Ishida (R.), *8876*
- nonhomogeneous media, semi infinite media, thermoelasticity (steady), Aderogba (K.), *8887*
- channel flow, convection (forced), slots, turbulent flow, Ryadno (A.A.), Franko (N.V.), *9683*
- concrete, heat transfer, thermal effects, Thurston (S.J.), Priestley (M.J.N.), (et al.), *11328*
- gases, theory, Galkin (V.S.), Kogan (M.N.), *11446*

thermal waves, one dimensional waves, thermoelasticity (transient), Brun (L.), Molinari (A.), *924*
- gravity waves, nonlinear waves, stability theory, three dimensional formulation, Shrira (V.I.), *1083*
- conduction (heat), transient effects, Swenson (R.J.), *1698*
- plates (parallel), radiant interchange, radiation, Baltsevich (Ya.A.), Rubtsov (N.A.), *1707*
- conduction (unsteady), thermoelasticity (transient), Bargmann (H.), *2972*
- absorption, conduction (heat), nonlinear materials, Granik (I.S.), Martinson (L.K.), *3814*
- boiling, conduction (heat), rewetting, Zhukov (S.A.), Bareiko (V.V.), (et al.), *4704*
- convection, crystals, marangoni convection, thermal instability, Chun (C.-H.), *4710*
- hydrodynamics, liquids, thermodynamic functions, variable fluid properties, variable thermal properties, Andreev (A.F.), *5516*
- binary flow, cellular motions, plane flow, thermal instability, Gershuni (G.Z.), Zhukhovitskii (E.M.), (et al.), *5554*
- bars, thermal shock, thermoelasticity (transient), Szalontay (M.), Szekeres (A.), *5804*
- cylindrical waves, magnetoelastic waves, thermoelasticity (transient), Chian (C.T.), Moon (F.C.), *6945*
- boundary value problems, thermoelasticity (transient), Ignaczak (J.), *7949*
- diffusion, liquids, thermal instability, Baydakov (V.G.), *8674*
- thermal instability, thermodynamics (nonequilibrium), transport mechanisms, unsteady flow, Sieniutycz (S.), *8708*
- aerothermochemistry, bifurcation, combustion, propagation, Sivashinsky (G.), *8789*
- combustion, exothermic reactions, propagation, Leibenzon (A.S.), *8795*
- combustion instability, frequency response, solid propellants, De Luca (L.), *8799*
- elastoplasticity, half space, thermal shock, Nagrelli (V.E.), *8882*
- circulation, convection, steam gas power plants, thermal instability, tubes, Unal (H.C.), *9705*
- creep, earth, mantle, Birger (V.I.), Kovtunenko (S.M.), *9915*

thermocline, gravity waves, internal waves, ocean air interaction, ocean waves, surface waves, turbulence, turbulence (geophysical), Phillips (O.M.), *1888, book*
- breakers, currents, gravity waves (internal), internal waves, oceanography, spectra, Eriksen (C.C.), *4871*
- microstructures, oceanography, turbulence (geophysical), Gregg (M.C.), *7057*
- entrainment, heat transfer, mass transfer, mixing layers, oceanography, turbulence (geophysical), Shapiro (G.I.), *7059*
- heat transfer, mixing layers, oceanography, thermal diffusion, Posmentier (E.S.), *8993*
- finite difference methods, mass transfer, oxygen, stratified flow, Naito (K.), Nakamura (Y.), (et al.), *9509*
- currents, inertial waves, ocean air interaction, oceanography, oscillations, Pollard (R.T.), *10867*

thermocouples, experimental methods, heat transfer, Breitkopf (G.), Wittig (S.), (et al.), *1694*
- hot wire, nusselt number, thermal measurements, Paranthoen (P.), Lecordier (J.C.), (et al.), *2782*
- thermal measurements, thin films, transducers, Godefroy (J.-C.), *3809*
- conduction (heat), thermal measurements, Sergeev (O.A.), *5534*
- heat transfer, thermal measurements, thin films, Godefroy (J.-C.), *6793*
- friction (sliding), interference fits, sliding, temperature, Spurr (R.T.), *7085*
- cutting, interfaces, temperature, tools, Bhatia (S.M.), Pandey (P.C.), (et al.), *8055*
- mathematical models, thermophysical properties, Shashkov (A.G.), *8680*

thermodynamic functions, entropy, thermodynamic properties, viscous effects, Hsiao (L.), *2774*
- energy transport, thermodynamic processes, Kotas (T.J.), *2777*
- energy, power generation, thermodynamics (irreversible), Kotas (T.J.), *3769*
- energy conversion, geothermal energy, heat engines, thermodynamic processes, Lamb (J.P.), Polansky (G.F.), (et al.), *4691*
- hydrodynamics, liquids, thermal waves, variable fluid properties, variable thermal properties, Andreev (A.F.), *5516*
- entropy, thermodynamics (statistical), Lo Schiavo (M.), Maschio (G.), *6745*
- boltzmann equation, constitutive equations, mathematical models, thermodynamics (nonequilibrium), Nonnenmacher (T.F.), *6746*
- statistical mechanics, thermodynamic processes, Kaimykov (G.I.), *6751*
- conduction (heat), conductivity, dispersed flow, spherical bodies, viscosity, Endler (B.S.), *6759*
- adiabatic processes, caratheodory's axiom, entropy, Kuiken (G.D.C.), *7818*
- constitutive relations, liquid crystal, thermodynamics (irreversible), thermodynamics (nonequilibrium), Hess (S.), Pardowitz (I.), *10551*
- constitutive equations, liquids, thermodynamic processes, Doolittle (A.K.), *10552*
- clausius-planck inequality, continuum mechanics, thermodynamics, Truesdell (C.), *11757*

thermodynamic processes, cascades, compressible flow, finite difference methods, two dimensional flow, Thyagaraja (A.), *590*
- entropy, thermodynamics, thermodynamics (irreversible), Kestin (J.), *716, book*
- entropy, materials possessing memory, thermodynamics (irreversible), thermodynamics (nonequilibrium), Bataille (J.), Kestin (J.), *720*
- heat engines, real gas effects, Sandri (R.), *721*
- polytropic processes, steam, two phase flow, Bayer (Z.), *1651*
- flow measurement, internal combustion engines, ultrasonics, Lakshminarayanan (P.A.), Janakiraman (P.A.), (et al.), *1761*
- exhaust gases, internal combustion engines, Raible (C.J.), Cox (F.W.), *1762*
- materials properties, metallurgy, thermodynamics, Gaskell (D.R.), *2773, book*
- heat transfer, thermodynamics, thermodynamics (nonequilibrium), Smith (D.A.), *2776*
- energy transport, thermodynamic functions, Kotas (T.J.), *2777*
- diesel engines, fuel jets, injection systems, Watson (N.), Kamel (M.), *2969*
- cycles, design, gas turbines, heat engines, Harman (R.T.C.), *2870, book*
- statistical mechanics, thermodynamics (statistical), Zaripov (R.G.), *3768*
- friction, internal combustion engines, pressure measurement, Vogt (R.), *3882*
- energy conversion, heat engines, Steimle (F.), *4690*
- energy conversion, geothermal energy, heat engines, thermodynamic functions, Lamb (J.P.), Polansky (G.F.), (et al.), *4691*
- cycles, heat exchangers, solar energy, Johnston (A.M.), O'Sullivan (C.H.), *4724*
- calorimeters, differential thermal analysis, thermal instability, thermal measurements, Vertogradskii (V.A.), Egorova (L.S.), *5533*
- statistical mechanics, thermodynamic functions, Kaimykov (G.I.), *6751*
- chemically reactive flow, cycles, energy transport, heat pumps, Abelson (H.I.), Horowitz (J.S.), *6752*
- energy conservation, thermodynamics, Paolino (M.A.), Burghardt (M.D.), *10544*
- constitutive equations, thermodynamic properties, thermodynamics (nonequilibrium), Keller (J.U.), Hess (S.), *10545*
- heat engines, mathematical models, stirling cycles, Beans (E.W.), *10546*
- constitutive equations, liquids, thermodynamic functions, Doolittle (A.K.), *10552*
- clausius-duhem inequality, continuum mechanics, thermodynamics (irreversible), Esposito (R.), Romano (A.), *11758*
- electron beams, energy transport, heat addition, laser plasma interaction, vacuum, Derzhiev (V.I.), Marchenko (V.S.), (et al.), *11840*

thermodynamic properties, equations of state, vapor pressure, Harmens (A.), Knapp (H.), *717*
- steam, steam tables, Burnside (B.M.), *718*
- constitutive equations, rheology, thermal properties, viscous effects, Lebon (G.), Rubi (J.M.), *719*
- steam, thermal properties, transport properties, water, Straub (J.) eds., Scheffler (K.), *723, book*
- conduction (heat), hydrocarbons, thermal properties, Baroncini (C.), Di Filippo (P.), (et al.), *724*
- empirical methods, equations of state, gases, Rogankov (V.B.), Chumachenko (A.V.), *1654*
- entropy, thermodynamic functions, viscous effects, Hsiao (L.), *2774*
- entropy, mixtures, thermodynamics (nonequilibrium), Bree (J.), *2779*
- thermal properties, thermophysical properties, transport properties, Cezairliyan (A.) ed., *3770, book*
- constitutive equations, equations of state, Karnaukhov (V.G.), Senchenkov (I.K.), *3771*
- conduction (heat), gaseous ammonia, thermal properties, Afshar (R.), Murad (S.), (et al.), *4692*
- conduction (heat), rocks, thermal measurements, Topolnicki (J.), *5523*
- polar fluids, rheology, statistical continuum mechanics, Lago (S.), Lombardero (M.), *6582*
- statistical mechanics, thermodynamics (nonequilibrium), Zurek (W.H.), Schieve (W.C.), *6748*
- thermodynamics, transport properties, Brey (J.J.), Cruz (J.L.), (et al.), *6750*
- cryogenics, exergy analysis, low temperature, thermodynamics, Brodyanskii (V.M.), Semenov (A.M.), *8679*
- cavitation, cryogenics, ogives, variable area flow, venturi, Billet (M.L.), Holl (J.W.), (et al.), *10396*
- constitutive equations, thermodynamic processes, thermodynamics (nonequilibrium), Keller (J.U.), Hess (S.), *10545*
- thermal properties, thermodynamics (nonequilibrium), Kazakov (V.A.), *10549*
- closed cycle, design, gas turbines, materials properties, working fluids, Lee (J.C.), Campbell (J.) Jr., (et al.), *11740*
- binary flow, critical region, liquid vapor mixture, mixtures, Wielopolski (P.), *11759*

thermodynamics, entropy, thermodynamic processes, thermodynamics (irreversible), Kestin (J.), *716, book*
- drying, evaporation, mechanics, Lampinen (M.), *800*
- continuum mechanics, micromechanisms, viscoelasticity, Morro (A.), *1053*
- combustion, flame propagation, kinetics, vessels, Babkin (V.S.), Babushok (V.I.), (et al.), *1742*
- materials properties, metallurgy, thermodynamic processes, Gaskell (D.R.), *2773, book*
- heat transfer, thermodynamic processes, thermodynamics (nonequilibrium), Smith (D.A.), *2776*
- aluminum alloys, crack propagation, griffith cracks, Izumi (Y.), Fine (M.E.), (et al.), *3441*
- clausius-duhem inequality, conduction (heat), shock waves, viscoelastic fluids, Morro (A.), *3722*
- radiant interchange, radiation, Kelly (R.E.), *3766*
- conduction, relativity, thermodynamics (irreversible), Pavon (D.), Jou (D.), (et al.), *3767*
- bibliography, heat transfer, thermal sciences, Eckert (E.R.G.), Sparrow (E.M.), (et al.), *4694*
- fokker-planck equation, kinetic theory, mathematical methods, Meyer (J.), Schroter (J.), *4958*
- equilibrium, fibers, stochastic systems, structure, textiles, Lindenmeyer (P.H.), *5133*
- thermodynamic properties, transport properties, Brey (J.J.), Cruz (J.L.), (et al.), *6750*
- crack growth, fracture criteria, inelasticity, Nikolaevskii (V.N.), *7524*
- compressible flow, discontinuities, nonequilibrium effects, Sharma (V.D.), Singh (R.S.), *7780*
- entropy, strain energy, wear, Klamecki (B.E.), *8054*
- elastic waves, electroelasticity, Naerlovic-Veljkovic (N.), *8330*
- cryogenics, exergy analysis, low temperature, thermodynamic properties, Brodyanskii (V.M.), Semenov (A.M.), *8679*
- heat pumps, high temperature, Grisval (J.-P.), *9732*
- energy conservation, thermodynamic processes, Paolino (M.A.), Burghardt (M.D.), *10544*
- ekman layer, ocean air interaction, oceanography, Schopf (P.S.), *10866*
- design, thermal effects, thermal sciences, Bejan (A.), *11756*
- clausius-planck inequality, continuum mechanics, thermodynamic functions, Truesdell (C.), *11757*

thermodynamics (irreversible), entropy, thermodynamic processes, thermodynamics, Kestin (J.), *716, book*
- entropy, materials possessing memory, thermodynamic processes, thermodynamics (nonequilibrium), Bataille (J.), Kestin (J.), *720*
- conduction, relativity, thermodynamics, Pavon (D.), Jou (D.), (et al.), *3767*
- energy, power generation, thermodynamic functions, Kotas (T.J.), *3769*
- constitutive equations, two phase flow, Hung (N.), *4133*
- entropy, heat engines, thermodynamics (nonequilibrium), Heidug (W.), Muschik (W.), *7817*
- fluid mechanics, rotating disks, variational methods, Singh (P.), Ram (P.), *10435*
- constitutive relations, liquid crystal, thermodynamic functions, thermodynamics (nonequilibrium), Hess (S.), Pardowitz (I.), *10551*
- clausius-duhem inequality, continuum mechanics, thermodynamic processes, Esposito (R.), Romano (A.), *11758*

thermodynamics (nonequilibrium), entropy, materials possessing memory, thermodynamic processes, thermodynamics (irreversible), Bataille (J.), Kestin (J.), *720*
- critical heat flux, flashing, friction (internal), pipe flow, pressure drop, void fraction, Miropolskiy (Z.L.), Shneyerova (R.I.), (et al.), *747*
- continuum mechanics, kinematics, lagrangian formulation, Rougee (P.), *1049*
- heat transfer, thermodynamic processes, thermodynamics, Smith (D.A.), *2776*
- entropy, mixtures, thermodynamic properties, Bree (J.), *2779*
- cellular flow, channel flow, convection (free), numerical methods, Luijkx (J.M.), Platten (J.K.), *2900*
- binary flow, convection (benard), galerkin method, poiseuille flow, Artiz-Cohen (J.A.), Velarde (M.G.), *2901*
- continuum mechanics, hydrodynamic stability, non newtonian flow, Fosdick (R.L.), Rajagopal (K.R.), *4128*
- materials possessing memory, rheology, Huet (C.), *4566*
- constitutive equations, deformation (finite), elasticity (nonlinear), shock waves, Malek-Madani (R.), *4925*

- continuum mechanics, entropy, Woods (L.C.), *6040*
- continuum mechanics, functional analyis, stability theory, Elzanowski (M.), *6041*
- continuum mechanics, functional analyis, Kopisz (M.), *6042*
- compressible flow, mathematical models, two dimensional flow, Popov (S.P.), Romashkevich (Yu.I.), *6631*
- boltzmann equation, constitutive equations, mathematical models, thermodynamic functions, Nonnenmacher (T.F.), *6746*
- hydrodynamics, multicomponent flow, statistical mechanics, transport phenomena, Bashkirov (A.G.), *6747*
- statistical mechanics, thermodynamic properties, Zurek (W.H.), Schieve (W.C.), *6748*
- couette flow, statistical mechanics, viscosity, Naitoh (T.), Ono (S.), *6749*
- continuum mechanics, internal state variables, rheology, Pfeifroth (L.), *7133*
- entropy, microstructures, structured continua, Michelet (G.), Darrozes (J.-S.), *7143*
- entropy, heat engines, thermodynamics (irreversible), Heidug (W.), Muschik (W.), *7817*
- axiomatic models, continuum mechanics, plasticity, Lubliner (J.), *8206*
- thermal instability, thermal waves, transport mechanisms, unsteady flow, Sieniutycz (S.), *8708*
- constitutive equations, thermodynamic processes, thermodynamic properties, Keller (J.U.), Hess (S.), *10545*
- thermal properties, thermodynamic properties, Kazakov (V.A.), *10549*
- constitutive relations, liquid crystal, thermodynamic functions, thermodynamics (irreversible), Hess (S.), Pardowitz (I.), *10551*
- electro fluid dynamics, porous media, Blokhra (R.L.), Kohli (S.), *10843*

thermodynamics (statistical), statistical mechanics, thermodynamic processes, Zaripov (R.G.), *3768*

- entropy, thermodynamic functions, Lo Schiavo (M.), Maschio (G.), *6745*
- chemical thermodynamics, dilute solutions, statistical mechanics, Dudowicz (J.), *6756*

thermoelasticity, buckling (thermal), failure, shells (stiffened), Reznikov (B.S.), *352*

- creep rupture, cyclic loading, life expectancy, Bocek (M.), Hoffmann (M.), *452*
- constitutive relations, continuum theory, space frames, Nayfeh (A.H.), Hefzy (M.S.), *522*
- conduction (heat), finite element techniques, nonhomogeneous media, Lisitsyn (B.M.), Bulyga (K.G.), *921*
- elastic waves, shock waves (normal), Ukeje (E.), *1291*
- diffusion, holes, hygrothermal effects, thermal stresses, Hartranft (R.J.), Sih (G.C.), *1832*
- deformation, inverse problems, numerical methods, Nikitenko (N.I.), *1833*
- deformation, heat, polymers, Persoz (B.), Rosso (J.C.), *1837*
- constitutive equations, dielectrics, Dost (S.), *2215*
- shells (thin), variational methods, Podstrigach (Ya.S.), Shvets (R.N.), *2963, book*
- elasticity (nonhomogeneous), thermal properties, Lomakin (V.A.), El-Karamani (A.M.), *2969*
- layered media, state space techniques, Bahar (L.Y.), Hetnarski (R.B.), *2979*
- boundary elements, variational methods, Tanaka (K.), Tanaka (M.), *2981*
- failure, friction (sliding), scuffing, sliding, wear, Durkee (D.B.), Cheng (H.S.), *3037*
- fuel elements, thermal stresses, Friedman (M.), Argel (A.), (et al.), *3987*
- connected bodies, contact stresses, joints, machine elements, Attia (M.H.), Kops (L.), *3989*
- continuum theory, granular media, Jaric (J.), Golubovic (Z.), *4000*
- drawing, thermal effects, tubes, wires, Asada (Y.), Mori (K.-I.), (et al.), *4004*
- conduction (heat), contact problems, green function, Comninou (M.), Dundurs (J.), (et al.), *5793*
- cosserat solids, micromechanics, Smirnov (V.N.), *5798*
- sound propagation, sound speed, thermal effects, Tokuoka (T.), *6901*
- boundary conditions, half space, Wilms (E.V.), Cohen (H.), *6939*
- conduction (heat), thermal shock, Szekeres (A.), *6942*
- contact problems, stability theory, Barber (J.R.), *6949*
- laminates, layered media, shear, shells (sandwich), thermal stresses, Khoroshun (L.P.), Babich (D.V.), *6953*
- finite element techniques, stress concentration, Gibert (P.), Gorge (Y.), *7213*
- contact problems, half space, punch problems, Comninou (M.), Barber (J.R.), (et al.), *8870*
- thermal loading, viscoelastic materials, Shevchenko (Yu.N.), Terekhov (R.G.), (et al.), *8880*
- inclusions, micromechanisms, phase changes, steel, Ling (H.C.), Owen (W.S.), *8884*
- contact problems, corners, thermal contact resistance, Comninou (M.), Dundurs (J.), *9042*
- lubrication (hydrodynamic), reynolds equation, roughness, seals, surfaces, Wu (Y.-T.), Burton (R.A.), *12092*

thermoelasticity (nonlinear), continuum mechanics, deformation (finite), Iesan (D.), *4816*

- mechanical joints, tools, Attia (M.H.), Kops (L.), *5800*
- gas turbines, rotors, thermoelasticity (transient), Hagen (K.), Sandsmark (N.), *8872*

thermoelasticity (steady), bending, bimodulus materials, composite materials, plates (rectangular), plates (thick), Reddy (J.N.), Bert (C.W.), (et al.), *920*

- structural elements, thermal expansion, thermal loading, Hofmeister (W.), *1830*
- nonhomogeneous media, variational methods, Tanaka (M.), Tanaka (K.), *1831*
- anisotropic media, composite materials, laminates, slabs, Tauchert (T.R.), *1838*
- anisotropic media, cylindrical bodies, thermal stresses, Misra (J.C.), Achari (R.M.), *2964*
- inclusions, plates (nonhomogeneous), thermal stresses, Shioya (S.), Matsuda (M.), *2965*
- inclusions, plates (nonhomogeneous), thermal stresses, Araki (H.), Shioya (S.), (et al.), *2966*
- anisotropic media, strips, thermal stresses, Misra (J.C.), *2968*
- analog simulation, heat addition, Matsumoto (E.), Sekiya (T.), *3986*
- plates, thermal stresses, Marin (V.A.), Popovich (V.E.), (et al.), *3991*
- cylindrical bodies, deformation (finite), Kamiya (N.), Kameyama (E.), *3992*
- edge effects, shells, Rogacheva (N.N.), *4813*
- anisotropic media, cylindrical bodies, rayleigh ritz method, Kalam (M.A.), *4819*
- coatings, piston rings, residual stresses, stress analysis, Kulik (A.Ya.), Shapiro (M.I.), *5099*
- half space, membranes, reinforced bodies, Tamate (O.), Sekine (H.), (et al.), *5795*
- anisotropic media, shells (cylindrical), Biswas (P.), *5799*
- anisotropic media, composite materials, cylindrical bodies, thermal stresses, Iesan (D.), *6952*
- half space, heat sources, semi infinite media, thermal stresses, Chowdhury (K.L.), Glockner (P.G.), *7948*
- shells (conical), thermal stresses, Harinath (K.S.), *8873*
- nonhomogeneous media, semi infinite media, thermal stresses, Aderogba (K.), *8887*

thermoelasticity (transient), crack growth, griffith cracks, interaction, stress intensity factor, Hata (T.), *460*

- one dimensional waves, thermal waves, Brun (L.), Molinari (A.), *924*
- plates (reinforced), thermal stresses, Kolyano (Yu.M.), Kushnir (R.M.), *925*
- conformal mapping, thermal stresses, Takeuti (Y.), Yameda (K.), *926*
- nonlinear materials, springs, viscoelastic materials, Senchenkov (I.K.), Gumenyuk (B.P.), *927*
- plates (annular), structural stability, Trombski (M.), Wojciech (S.), *930*
- conduction (unsteady), thermal waves, Bargmann (H.), *2972*
- creep, cylindrical bodies, stress relaxation, Ishikawa (H.), *2974*
- cylindrical bodies, magnetoelasticity, thermomagnetic phenomena, Maruszewski (B.), *3238*
- nozzles, thermal stresses, Makarov (A.M.), Kuranov (B.A.), (et al.), *3994*
- acceleration waves, cosserat solids, shock waves, Nistor (I.), *4129*
- materials properties, pistons, thermal effects, Calderale (P.M.), Garro (A.), (et al.), *4743*
- creep, deformation (plastic), metals, thermal stresses, Morjaria (M.), Mukherjee (S.), *4818*
- ceramics, scale effects, thermal shock, Glandus (J.C.), Boch (P.), *5803*
- bars, thermal shock, thermal waves, Szalontay (M.), Szekeres (A.), *5804*
- convection, cylindrical bodies, thermal stresses, Satyamurthy (K.), Singh (J.P.), (et al.), *6943*
- cylindrical waves, magnetoelastic waves, thermal waves, Chian (C.T.), Moon (F.C.), *6945*
- boundary value problems, thermal waves, Ignaczak (J.), *7949*
- convection, cylindrical bodies, thermal stresses, Noda (N.), Sugano (Y.), *7950*
- photoelasticity (dynamic), thermal stresses, Miskioglu (I.), Gryzagorides (J.), (et al.), *7957*
- cylindrical bodies, thermal stresses, Koizumi (T.), Ishikawa (O.), (et al.), *8871*
- gas turbines, rotors, thermoelasticity (nonlinear), Hagen (K.), Sandsmark (N.), *8872*
- boundary elements, boundary value problems, Tanaka (M.), Tanaka (K.), *8875*
- cylindrical bodies, rolling, stress concentration, thermal stresses, Takeuti (Y.), Ishida (R.), *8876*
- elastodynamics, lasers, metals, thermal effects, Scruby (C.B.), Dewhurst (R.J.), (et al.), *8877*
- cladding, nuclear fuels, Ma (B.M.), *8878*
- energy density, slabs, Day (W.A.), *8879*
- fracture mechanics, nonhomogeneous media, thermoviscoelasticity, Atkinson (C.), Smelser (R.E.), *8881*
- boundary elements, finite element techniques, Tanaka (M.), Tanaka (K.), *8889*
- calibration, force, measurements, transducers (load), Pontius (P.E.), Mitchell (R.A.), *10313*

thermoelectric phenomena, solar engines, thermal effects, Gorodetskii (S.M.), Iordanishvili (E.K.), (et al.), *722*

- energy conversion, ocean, power plants, solar energy, Bohn (M.S.), Benson (D.K.), (et al.), *4718*
- energy conversion, heat exchangers, ocean, power plants, Bohn (M.S.), Benson (D.K.), (et al.), *5954*
- electroelasticity, magnetoelasticity, piezoelectrics, Parkus (H.) ed., *7265, book*
- duct flow, liquid metals, magneto fluid dynamics, nonuniform flow, Shercliff (J.A.), *8812*
- end effects, interface phenomena, magneto fluid dynamics, pipe flow, Shercliff (J.A.), *10735*

thermography, metallography, pattern recognition, Fainzilberg (L.S.), *156*
- inspection, soldered joints, Bekeshko (N.A.), *1477*
- defects, delamination, heat transfer, nondestructive tests, plates, Vavilov (V.P.), *3509*
- optical techniques, refraction, schlieren methods, Kiss (L.), *3774*
- inspection, laminates, layered media, nondestructive tests, Rapoport (D.A.), *6484*
- cracks, fatigue, flaw detection, Rantsevich (V.B.), *6496*
- flaw detection, glass fibers, laminates, liquid crystals (cholesteric), nondestructive tests, Williams (J.H.), Mansouri (S.H.), (et al.), *7574*
- composite materials, flaw detection, laminates, liquid crystal, Wilson (D.W.), Charles (J.A.), *7576*
- delamination, flaw detection, inclusions, nondestructive tests, Williams (J.H.) Jr., Mansouri (S.H.), (et al.), *7579*
- aerodynamic heating, convection, heat transfer, surface temperature, wind tunnels, Balageas (D.L.), Ory (D.), *7816*
- damage, laminates, stress concentration, vibration, Henneke (E.G.) II, *10135*

thermomagnetic phenomena, cylindrical bodies, magnetoelasticity, thermoelasticity (transient), Maruszewski (B.), *3238*
- cracks, magnetoelasticity, plates (weakened), Kudriavtsev (B.A.), Parton (V.Z.), (et al.), *7266*

thermonuclear energy, control stability, equilibrium, magnetic field, tokamak, Rubin (I.K.), *2903*
- automatic control, plasma (toroidal), stability, tokamak, Guberev (V.F.), Krivonos (Yu.G.), (et al.), *3218*
- design criteria, laser plasma interaction, nuclear fusion, reactor structures, Basov (N.G.), Krokhin (O.N.), (et al.), *5686*
- absorption, experimental results, implosion, laser plasma interaction, nuclear fusion, Bekiarian (A.), Decroisette (M.), *5688*
- containment, nuclear fusion, plasma (toroidal), tokamak, Bromberg (L.), Cohn (D.R.), (et al.), *8831*
- liquid metals, magneto fluid dynamics, particles, reactor structures, Muravev (E.V.), *11824*

thermophysical properties, conductivity, experimental methods, thermal measurements, Buravoi (S.E.), Kurepin (V.V.), (et al.), *1661*
- cryogenics, diamond, high pressure, testing equipment, Bundy (F.P.), Dunn (K.J.), *2500*
- heat transfer (combined modes), transforms, transient effects, Dulnev (G.N.), Zavgorodnii (V.I.), (et al.), *2812*
- conduction (heat), dispersed flow, dispersed media, freezing, melting, Pavlov (A.R.), Permyakov (P.P.), (et al.), *2815*
- thermal properties, thermodynamic properties, transport properties, Cezairliyan (A.) ed., *3770, book*
- alloys, polyvalent metals, Pashaev (B.P.), Palchaev (D.K.), (et al.), *5517*
- cyclohexane, hydrocarbons, Nefedov (S.N.), Filippov (L.P.), *5519*
- high pressure, transport properties, viscosity, Bimboim (M.H.), Weiss (H.), *5520*
- liquid solid interface, thermal loading, thermal measurements, Spirin (G.G.), *5535*
- convection (forced), ferrous metals, magneto fluid dynamics, suspensions, Shulman (Z.P.), Kordonskiy (V.I.), (et al.), *5548*
- gruneisen parameter, steel, thermal diffusion, Beghi (M.), Bottani (C.E.), *5807*
- corresponding states principle, critical region, hydrocarbons, molecular theory, Mansoori (G.A.), Patel (V.K.), (et al.), *8676*
- mathematical models, thermocouples, Shashkov (A.G.), *8690*
- hot wire, liquids, thermal measurements, Filippov (L.P.), Nefedov (S.N.), (et al.), *10555*
- creep, equations of state, molecular theory, polymers, Ainbinder (S.B.), Tyunina (E.L.), (et al.), *10556*
- conductivity, metals, thermal diffusion, thin films, Pugachev (A.T.), Volkov (Yu.A.), (et al.), *10557*
- anisotropic media, conductivity, polymers, thin films, Voronkov (V.A.), Sukhareva (L.A.), (et al.), *10559*
- phase changes, specific heat, Kuleshov (G.G.), *10560*
- high pressure, lubricants (dry film), phase changes, Rolle (K.C.), Crisp (J.N.), (et al.), *10564*

thermoplasticity, shells (spherical), shells (thick), thermal effects, Durban (D.), *928*
- anisotropy, composite materials, effective elastic moduli, Stephenson (R.C.), Turner (S.), (et al.), *1834*
- material testing, polymers, recoil, viscoelastic fluids, Apicella (A.), Nicodemo (L.), (et al.), *2576*
- nuclear reactors, ratchetting, shells (cylindrical), thermal effects, Goodman (A.M.), *2970*
- thermal loading, variational methods, Allen (D.H.), Haisler (W.E.), *2973*
- deformation (plastic), half space, plastic waves, Nagrelli (V.E.), *3996*
- materials processing, surface flaws, upset forging, Jenner (A.), Bai (Y.), (et al.), *4496*
- buildings, cushioning materials, foundations, stress analysis, structural support, Klepikov (S.N.), Khorunzhii (V.I.), *5361*
- deformation, plasticity, strain analysis, viscoplasticity, Lehmann (T.), *6034*
- gas turbines, mechanical joints, residual stresses, Kravchenko (B.A.), Gutman (G.N.), (et al.), *7953*

thermosyphons, annular flow, heat transfer, nusselt number, Seki (N.), Fukusako (S.), (et al.), *1718*
- condensation, evaporation, heat transfer, two phase flow, Imura (H.), Kusuda (H.), (et al.), *1719*
- critical heat flux, energy conversion, heat transfer, refrigeration, Savchenkov (G.A.), Kunakov (V.G.), *3836*
- energy storage, storage, stratified flow, tanks, thermal effects, Young (M.F.), Baughn (J.W.), *4714*
- boussinesq equation, buoyant flow, Damerell (P.S.), Schoenhals (R.J.), *5552*
- conduction (steady), thermal instability, transient effects, Mertol (A.), Greif (R.), (et al.), *5598*
- solar collectors, solar energy, Young (M.F.), Bergquam (J.B.), *5955*
- boussinesq equation, conduction, convection (free), heat transfer, open thermosyphons, rayleigh number, Penot (F.), Peube (J.-L.), *6790*
- laminar flow, rayleigh number, three dimensional flow, Mallinson (G.D.), Graham (A.D.), (et al.), *8702*
- energy storage, heat exchangers, mathematical models, solar collectors, solar energy, Mertol (A.), Place (W.), (et al.), *8756*
- convection, energy conversion, solar collectors, Sodha (M.S.), Tiwari (G.N.), *8764*
- aquifers, conduction (heat), convection (free), geothermal reservoirs, heat transfer (combined modes), Torrance (K.E.), Chan (V.W.C.), *9724*
- channel flow, two phase flow, Beinusov (A.G.), Utkin (V.B.), *10619*

thermoviscoelasticity, cyclic loading, nonlinear mechanics, viscoelasticity (dynamic), Gumenyuk (B.P.), Kamaukhov (V.G.), *1188*
- creep, viscoelastic materials, Caruthers (J.M.), Cohen (R.E.), *1190*
- alloys, creep, high temperature, Nerodenko (L.M.), Dabizha (E.V.), *1192*
- deformation (finite), materials possessing memory, Senchenkov (I.K.), *3997*
- bending (viscoelastic), elastic foundations, plates (rectangular), viscoelastic materials, Misra (J.C.), Samanta (S.), *6944*
- fracture mechanics, nonhomogeneous media, thermoelasticity (transient), Atkinson (C.), Smelser (R.E.), *8881*

Thews (K.), differential equations (partial), dirichlet problem, functional analyis, nonlinear analysis, *1093*

Thibodeaux (J.J.), automatic control, cryogenics, simulation, wind tunnels, Balakrishna (S.), *5063*

Thielen (H.), attenuation, pipelines, pressure gradient, water hammer, Burmann (W.), *10487*

thin films, jets, polymers, viscoelastic fluids, Entov (V.M.), Kestenboim (Kh.S.), (et al.), *1487*
- contact angle, drops, sliding, two dimensional flow, Hocking (L.M.), *1534*
- boiling, experimental methods, nucleate boiling, resistance thermometers, Oker (E.), Merte (H.) Jr., *1692*
- boiling, coatings, nucleate boiling, polymers, surface effect, Hinrichs (T.), Hennecke (E.), (et al.), *2792*
- damping, experimental mechanics, vibration (forced), Fox (M.J.H.), Whitton (P.N.), *3387*
- gravitational stabilization, hydrodynamic stability, viscous effects, Hasegawa (E.), *3703*
- thermal measurements, thermocouples, transducers, Godefroy (J.-C.), *3909*
- metals, thermal properties, Pichard (C.R.), Tellier (C.R.), (et al.), *4003*
- adhesives, friction (sliding), lubricants (dry film), lubrication (boundary), metals, Iliuc (I.), *4889, book*
- hydrodynamic stability, wind-wave interaction, Hasegawa (E.), Tanlyama (N.), *5458*
- hydrodynamic stability, rotating cylinders, rotational flow, stability theory, Iwasaki (Y.), Hasegawa (E.), *5462*
- conduction (heat), Vigdorovich (V.N.), Garanin (V.P.), (et al.), *5524*
- non newtonian flow, stresses (normal), Hariharan (S.), *6573*
- contact angle, experimental results, liquids, Feijter (J.A.), Vrij (A.), *6594*
- heat transfer, thermal measurements, thermocouples, Godefroy (J.-C.), *6793*
- coatings, mie scattering, radiant interchange, radiation properties, scattered light, spherical bodies, Shafey (H.M.), Kunitomo (T.), *6804*
- coatings, mie scattering, radiant interchange, radiation properties, scattered light, spherical bodies, Kunitomo (T.), Shafey (H.M.), (et al.), *6805*
- radiant interchange, surfaces, thermal measurements, Guernigou (J.), Indrigo (C.), (et al.), *6809*
- fatigue, mesh generation, surface profiles, wear, El-Sherbiny (M.G.), Salem (F.B.), *7088*
- coatings, eddy currents, nondestructive tests, radiography, thickness, Goring (W.H.), *7577*
- anemometers, hot wire, turbulence (geophysical), Otten (L.J.), Pavel (A.L.), (et al.), *9003*
- failure, friction (sliding), lubrication (elastohydrodynamic), oil films, viscosity, Begelinger (A.), De Gee (A.W.J.), *9037*
- liquid metals, magneto fluid dynamics, stability theory, theory, Tsebers (A.O.), Maiorov (M.M.), *9782*
- conductivity, metals, thermal diffusion, thermophysical properties, Pugachev (A.T.), Volkov (Yu.A.), (et al.), *10557*
- anisotropic media, conductivity, polymers, thermophysical properties, Voronkov (V.A.), Sukhareva (L.A.), (et al.), *10559*
- heat transfer, vaporization, Tokubinskii (V.I.), Antonenko (V.A.), (et al.), *10645*
- film flow, hydrodynamic stability, pressure gradient, Mikielewicz (J.), Ihnatowicz (E.), (et al.), *11533*
- hydrodynamic stability, thermal diffusion, Paliwal (R.C.), Chen (C.F.), *11536*

- hydrodynamic stability, nonlinear theory, oscillations, Hasegawa (E.), *11538*

thin walled structures, bearing capacity, buckling, finite element methods, ultimate strength, Pettersen (E.), *2506*
- large displacement, tubes, viscoplasticity, Murase (K.), Nishimura (T.), *3291*
- beams (thin section), shear loading, shells (cylindrical), warping, Kholoptsev (V.V.), *4373*
- attenuation, ultrasonics, Lee (S.S.), Williams (J.H.) Jr., *5247*
- bending (elastic), torsion, Zhong-Heng (G.), *6208*
- beams (thin section), torsion, Takahashi (K.), Mizuno (M.), *6210*
- beams (thin section), shear walls, Coull (A.), Low (C.K.), *6211*
- contact problems, structural analysis, Artyukhin (Yu.P.), Gerkina (V.S.), *6223*
- finite element techniques, shells (thin), Idelsohn (S.), *6232*
- beams (thin section), structural stability, Chai Hong Yoo, *6248*
- bending (elastic), shells (cylindrical), structural stability, Makeev (E.M.), *6256*
- buckling (torsional), collapse, plates (stiffened), Nordve (N.T.), Moan (T.), *6261*
- postbuckling theory, strips, Sridharan (S.), Graves Smith (T.R.), *6271*
- deformation (plastic), fuel elements, grain boundaries, Wire (G.L.), Duncan (D.R.), (et al.), *6550*
- beams (thin section), bending (elastic), shells (cylindrical), Antonenko (E.V.), *7325*
- computer aided design, shape factors, shells (shallow), structural design, Alpa (G.), Bozzo (E.), (et al.), *7336*
- mine shafts, mines, pipes, reinforced bodies, stress analysis, Tsoi (N.G.), Kolesnikov (A.V.), (et al.), *7621*
- buckling (experimental), experimental mechanics, pressure vessels, shells (toroidal), Stanley (P.), Campbell (T.D.), *7622*
- beams, dynamic response, flexure, vibration (forced), Voveris (A.V.), Kalinin (V.S.), *8296*
- buckling, deformation, pressure vessels, strain, Stanley (P.), Campbell (T.D.), *8468*
- reinforced concrete, shells (stiffened), Gupta (A.K.), *10150*
- cooling towers, membrane theory, shells (of revolution), Szalai (J.), *10151*
- dynamic stability, shells (cylindrical), shells (viscoelastic), Koltunov (M.A.), Karimov (A.I.), (et al.), *10181*
- buckling (local), plates (rectangular), Murray (N.W.), Khoo (P.S.), *10186*
- crossflow, flutter, shells (cylindrical), Paidoussis (M.P.), Wong (D.T.-M.), *11941*

Thirsk (R.B.), blood flow, blood vessels, blood volume, circulatory systems, Kamm (R.D.), (et al.), *1954*

Thiruvengadam (J.), axial compressors, cascades, secondary flow, *705*

thixotropic media, constitutive equations, plastic flow, power law fluids, Kemblowski (Z.), Petera (J.), *1483*
- friction factor, materials possessing memory, non newtonian flow, pipe flow, Kemblowski (Z.), Petera (J.), *11504*

Thoft-Christensen (P.), collision models, offshore structures, probability theory, simulation, *7615*

Thom (A.S.), see Raupach (M.R.), *11554*

Thomann (H.), oscillating bodies, pipe flow, valves, water hammer, *8478*

Thomas (A.G.), see Derham (C.J.), *8016*

Thomas (D.W.), see Chaturvedi (G.K.), *10374*

Thomas (G.), beams, error, finite element techniques, mathematical methods, variational methods, *81*
- beams, boundary conditions, *3287*

Thomas (G.E.), see Gay (C.), *5947*

Thomas (G.H.), see Rose (J.L.), *1479*

Thomas (G.P.), arrays, submerged bodies, three dimensional flow, wave absorbers, Evans (D.V.), *10489*

Thomas (H.R.), heat transfer, mass transfer, nonlinear analysis, porous media, Morgan (K.), (et al.), *8783*

Thomas (I.T.), finite element techniques, shells (cylindrical), shells (stiffened), Webber (J.P.H.), *11117*

Thomas (J.H.), atmospheric circulation, rossby waves, Lux (R.A.), *4053*

Thomas (J.R.), ducts, submerged bodies, virtual mass, wave absorbers, wave energy, *11602*

Thomas (J.R.) Jr., see Siewert (C.E.), *3644*

Thomas (L.C.), buoyant flow, convection (free), heat transfer, nusselt number, turbulent flow, Wood (M.L.), *754*
- see Kakarala (C.R.), *3790*
- boundary layer (turbulent), heat transfer, incompressible flow, integral methods, Al-Sharif (M.M.), *8558*
- boundary layer (turbulent), convection (forced), heat transfer, shear flow, turbulence, Ibrahim (M.B.), *10472*

Thomas (M.), see Larkin (W.J.), *2164*

Thomas (R.L.), see Inglehart (L.J.), *9435*

Thomas (R.M.), bubble dynamics, turbulent flow, two phase flow, *6992*

Thomas (W.), equations of state, ethylene, thermal properties, Zander (M.), *1659*

Thomas (W.R.L.), energy storage, heat pumps, solar collectors, solar energy, *10534*

Thomason (S.B.), freezing, hydrodynamic stability, pipe flow, thermal instability, turbulent flow, Mulligan (J.C.), *5578*

Thomasson (S.-I.), impedance, sound propagation, *6938*

Thomee (V.), convergence, estimation, galerkin method, norms, parabolic equations, *7189*

Thompson (A.G.), damping, dynamic analysis, optimization, vibration isolation, *4440*

Thompson (B.S.), finite element techniques, machinery, noise, radiation, *11943*

Thompson (E.), algorithms, computer programming, matrices, Shimasaki (Y.), *2056*

Thompson (E.F.), experimental results, gravity waves (shallow water), ocean waves, spectra, *11696*

Thompson (I.J.), modes, ocean, ocean bed, sound propagation, underwater acoustics, *887*

Thompson (J.M.T.), dynamic stability, stability theory, *4390*
- dynamic stability, pipe flow, vibration (flow induced), Lunn (T.S.), *7773*
- bifurcation, elastic bodies, flutter, limit cycles, modeling, oscillators, Lunn (T.S.), *7910*

Thompson (K.J.), buildings, earthquake effects, prestressed concrete, seismic waves, Park (R.), *1883*
- beams (flexural), concrete, cyclic loading, reinforced concrete, Park (R.), *7290*

Thompson (R.B.), nondestructive tests, stresses, surfaces, transducers, ultrasonics, *9426*

Thompson (R.J.), banach space, differential equations (ordinary), functional equations, time delay systems, *32*

Thompson (R.O.R.Y.), gravity waves (breaking), gravity waves (surface), turbulent mixing, wave energy, *2708*
- inertial waves, numerical analysis, rotational flow, vortices, *7766*

Thompson (W.) Jr., see Reese (J.M.), *11984*

Thoms (R.L.), see Gipson (G.S.), *1729*

Thorley (A.R.D.), propagation, slurries, transient, two phase flow, *6962*

Thorne (C.R.), experimental methods, soils, tension, Tovey (N.K.), (et al.), *5361*

Thornton (D.R.), edge effects, plates (rectangular), Conway (H.D.), *306*

Thorp (I.), air pollution, diesel engines, emulsions, fuels, heat engines, Armstrong (G.), (et al.), *1759*

Thorpe (R.D.), see Dash (S.M.), *4590*

Thorpe (S.A.), coherent structure, lakes, loch ness, mixing layers, wind, Hall (A.J.), *11521*

Thorton (E.B.), see Guza (R.T.), *977*

Thowsen (A.), continuous systems, discrete systems, routh-hurwitz method, stability theory, time delay systems, *11055*

threaded joints, cracks, fatigue, flaw detection, pipes, reflection, Lyaphov (A.A.), Spektorov (I.Sh.), *6494*
- bolts, screws, stress analysis, stress concentration, Schwack (E.), *7636*
- grease, lubricants, Gensheimer (J.), *9038*

three body problem, circumnavigation, lagrangian solution, libration theory, periodic orbits, Broucke (R.), Anderson (J.D.), (et al.), *874*
- trajectories, transformation, Langlois (M.), *875*
- libration theory, topological techniques, Llibre (J.), Simo (C.), *1787*
- orbit mechanics, restricted three body problem, Patetta (N.), *1789*
- computing techniques, periodic orbits, three dimensional formulation, Markellos (V.V.), *1790*
- resonance, solar system, Mettler (E.), *2917*
- computing techniques, periodic orbits, Ichtiaroglou (S.), *2919*
- artificial satellites, n body problems, stability theory, Walker (I.W.), Emslie (A.G.), (et al.), *4756*
- circumnavigation, restricted three body problem, Llibre (J.), Simo (C.), *4953*
- libration theory, orbit mechanics, rotating bodies, space vehicles, Barkin (Yu.V.), *5699*
- lunar theory, oblateness, perturbation methods, planetary satellites, Schmidt (D.S.), *6881*
- collision models, hamiltonian equations, periodic orbits, Losco (L.), Marchal (C.), *7914*
- bifurcation, periodic orbits, stability theory, Markellos (V.V.), *8809*
- kepler orbits, special functions, variational methods, Waldvogel (J.), *9814*
- circumnavigation, lunar theory, orbit mechanics, perturbation methods, planetary satellites, Henrard (J.), *10771*

three dimensional flow, existence theorems, incompressible flow, navier stokes equation, Saut (J.C.), Temam (R.), *41*
- blasius flow, boundary layer, hydrodynamic stability, Cebeci (T.), Stewartson (K.), *632*
- gravity waves, permanent form, Saffman (P.G.), Yuen (H.C.), *671*
- shock waves, two dimensional flow, Hunt (B.L.), *680*
- ablation, ellipsoids, heat transfer, Apshtein (E.Z.), Pilyugin (N.N.), *786*
- boundary layer, corners, transition, Nomura (Y.), Kotake (M.), *1542*
- boundary layer, computing techniques, laminar flow, Dwyer (H.A.), *1543*
- boundary layer, elliptical bodies, laminar flow, Stock (H.W.), *1544*
- boundary layer, compressible flow, similarity methods, stagnation point, unsteady flow, Kumari (M.), Nath (G.), *1545*
- drag coefficient, shaping, Dubinskii (A.V.), *1622*
- condensation, mixing, modeling, visualization, Mostofizadeh (C.), Kriegel (E.), (et al.), *1642*
- interference, porous walls, transonic flow, wall effects, wind tunnels, Parker (R.L.) Jr., Sickles (W.L.), *1647*
- existence theorems, navier stokes equation, uniqueness, Naumann (J.), *3013*
- axisymmetric bodies, compressible flow, finite difference methods, transonic flow, Chen (L.-T.), Caughey (D.A.), *3614*
- compressible flow, separated flow, Hirschel (E.H.), Kordulla (W.), *3636*

- axial turbines, cascades, crossflow, Langston (L.S.), *2751*
- jets, laser doppler velocimeters, turbulence, Hjertager (B.H.), Magnussen (B.F.), *2765*
- ducts (constant area), entrance region, laminar flow, noncircular pipes, Del Giudice (S.), Strada (M.), (et al.), *3659*
- hydrodynamic stability, poiseuille flow, stability theory, Itoh (N.), *3701*
- axial pumps, thermal measurements, Rvachev (V.L.), Slesarenko (A.P.), (et al.), *3811*
- fredholm equations, potential flow, Groh (G.), *4166*
- characteristic methods, shock waves, sonic booms, supersonic flow, Hendrika (T.P.M.), *4592, book*
- boundary layer, friction (skin), porous surfaces, supersonic flow, Brykina (I.G.), Gershbein (E.A.), (et al.), *4606*
- boundary layer, mathematical methods, unsteady state, Vereshchagina (L.I.), *4607*
- liquids, reynolds equation (turbulence), turbulent flow, Shablovskii (O.N.), *4650*
- flow irregularities, plane flow, Chelyshkov (V.S.), *4660*
- aerodynamics, elliptical bodies, lifting surfaces, wings, Kida (T.), *4668*
- blades, conformal mapping, potential flow, turbomachinery, Agarwal (P.K.), Viktorov (G.V.), *4677*
- separation, transition, two dimensional flow, visualization, Werle (H.), *4685*
- error, pitot tube, vortex flow, Bubnov (V.A.), Gabdullin (I.Z.), (et al.), *5401*
- linear theory, potential flow, vorticity, Hart (R.W.), *5402*
- conservation laws, navier stokes equation, Spradley (L.W.), Stalnaker (J.F.), (et al.), *5407*
- cascades, compressible flow, transonic flow, turbomachinery, Spurr (A.), *5412*
- cylindrical bodies, missiles, numerical methods, shock waves, supersonic flow, turbulent flow, Hung (C.M.), Chaussee (D.S.), *5413*
- axial compressors, rotors, stalling, waves, Al-Daini (A.J.), Railly (J.W.), *5500*
- internal flow, shock waves, transonic flow, Brochet (J.), *6662*
- developing flow, hydrodynamic stability, pipe flow, reynolds number (critical), Garg (V.K.), Gupta (S.C.), *6676*
- airfoils, oscillating bodies, transient effects, transonic flow, two dimensional flow, Dowell (E.H.), *6718*
- automatic control, balancing, pneumatic components, velocimeters, Wachter (J.), Heneka (A.), (et al.), *6739*
- coastal engineering, computer programming, modeling, wind generation, Koutitas (C.), O'Connor (B.), *7662*
- compressible flow, hypersonic flow, numerical methods, streamlines, viscous effects, Kim (M.D.), Thareja (R.R.), (et al.), *7691*
- flow obstructions, navier stokes equation, vorticity, Kitchens (C.W.) Jr., Gerber (N.), (et al.), *7711*
- gravity waves (surface), hydrodynamic stability, nonlinear theory, Crawford (D.R.), Lake (B.M.), (et al.), *7746*
- finite element techniques, turbomachinery, Haas (W.), Keck (H.), *7801*
- coal, combustion products, particulate flow, trajectories, turbomachinery, Beecher (B.), Tabakoff (W.), (et al.), *7989*
- energy conversion, magneto plasma dynamics, nonequilibrium effects, perturbations, Artemov (V.I.), Sinkevich (O.A.), *7900*
- conformal mapping, hypersonic flow, magneto plasma dynamics, solar wind, Belotserkovskii (O.M.), Mitnitskii (V.Ya.), *7902*
- multifluid flow, vortex flow, De Josselin De Jong (G.), *7979*
- mathematical models, reservoirs, Coats (K.H.), *7984*
- reservoir engineering, simulation, Kunlansky (J.), Hillestad (J.G.), *7995*
- deformable bodies, force, inviscid fluid, potential flow, Vilkhovchenko (S.D.), Yakimov (Yu.L.), *8524*
- aerodynamics, compressible flow, supersonic flow, Ehlers (F.E.), Epton (M.A.), (et al.), *8552*
- aerodynamics, axial compressors, blades, pressure distribution, rotors, Dring (R.P.), Joslyn (H.D.), (et al.), *9656*
- blades, incompressible flow, modeling, turbomachinery, Buisine (D.), *8659*
- calibration, data analysis, flow measurement, pitot tube, velocity measurement, Nishimura (H.), *8673*
- channel flow, ducts (curved), gases, Sepp (V.A.), *8688*
- laminar flow, rayleigh number, thermosyphons, Mallinson (G.D.), Graham (A.D.), (et al.), *8702*
- annular flow, convection (free), cylindrical bodies, Ozoe (H.), Shibata (T.), (et al.), *8703*
- combustors, heat transfer (combined modes), magneto fluid dynamics, mass transfer, Im (K.H.), Ahluwalia (R.K.), *8811*
- heat transfer, interaction, interface phenomena, sprays, Palaszewski (S.J.), Jiji (L.M.), (et al.), *8911*
- boundary integral methods, darcy flow, Lennon (G.P.), Liu (P.L.-F.), (et al.), *8960*
- blood flow, numerical analysis, stenoses, Liou (R.J.), Clark (M.E.), (et al.), *9063*
- diffusion, two component flow, uniqueness, unsteady flow, Beirao Da Veiga (H.), Serapioni (R.), (et al.), *9537*
- compressible flow, duct flow, perturbation methods, Kraiko (A.N.), Shironosov (V.A.), *9553*
- compressible flow, stability (numerical), Bosman (C.), Ahrabian (D.), *9557*
- finite difference methods, shock waves, supersonic flow, Yamamoto (Y.), Karashima (K.), *9635*
- design, potential flow, transonic flow, wings, Henne (P.A.), *9653*
- coordinate systems, heat transfer, navier stokes equation, plane surfaces, Agrawal (A.K.), Peckover (R.S.), *10415*
- blunt bodies, compressible flow, shock waves, supersonic flow, Schwarze (H.-F.), *10416*
- aerodynamics, compressible flow, numerical methods, supersonic flow, Voskresenskii (G.P.), Chushkin (P.I.), *10421*
- boundary layer, corners, curvature, Barclay (W.H.), *10429*
- friction (skin), separated flow, topological techniques, Horstman (C.C.), Settles (G.S.), (et al.), *10432*
- arrays, submerged bodies, wave absorbers, Thomas (G.P.), Evans (D.V.), *10489*
- blades, helicopters, unsteady flow, wind tunnels, wings, Monnerie (B.), Philippe (J.-J.), *10514*
- aerodynamic interference, vortex lines, wind turbines, Schatzle (P.R.), Klimas (P.C.), (et al.), *10518*
- numerical analysis, swept wings, transonic flow, unsteady flow, Borland (C.J.), Rizzetta (D.P.), (et al.), *10521*
- axial compressors, mixing, secondary flow, Adkins (G.G.) Jr., Smith (L.H.) Jr., *10523*
- axial flow, cascades, choked flow, subsonic flow, turbomachinery, Horlock (J.H.), *10526*
- numerical methods, turbomachinery, Kremenetskii (M.D.), Leonteva (N.V.), (et al.), *10534*
- heat transfer (combined modes), magneto fluid dynamics, mie scattering, radiant interchange, radiating flow, scattering, Ahluwalia (R.K.), Im (K.H.), *10512*
- recirculation, turbulence model, ventilation, Sakamoto (Y.), Matsuo (Y.), *10643*
- algorithms, numerical methods, transport, Pepper (D.W.), Baker (A.J.), *10693*
- airfoils, rolling, trailing edge, vortex sheets, Schwartz (L.W.), *11360*
- boundary layer (turbulent), rotating bodies, separation, turbomachinery, Ugryumov (M.L.), *11551*
- axial compressors, blades, hot wire, wakes, Reynolds (B.), Lakshminarayana (B.), *11738*
- aerodynamic coefficients, axial compressors, cascades, velocity profiles, Starke (J.), *11739*
- aerodynamic performance, axial compressors, cascades, geometrical properties, Stark (U.), Hoheisel (H.), *11741*
- cascades, centrifugal compressors, compressible flow, vortices, Murata (S.), Miyake (Y.), (et al.), *11744*
- centrifugal compressors, compressible flow, inviscid fluid, streamlines, Bosman (C.), *11750*
- ionic flow, unsteady flow, Powell (C.), *11804*
- canals, finite element methods, linear theory, ship motion, Bai (K.J.), *12087*

Thresher (R.W.), see Moretti (P.M.), *6856*

thrust, fluid injection, nozzles, rockets, Lazarev (G.P.), Shaikhutdinov (Z.G.), (et al.), *847*
- control, rockets, solid propellants, space vehicles, Verble (A.J.) Jr., Mccool (A.A.), (et al.), *1770*
- optimization, rockets, Hermesh (R.), Katzir (S.), (et al.), *1795*
- interaction, propellers, unsteady flow, wing body combinations, Mccormick (B.W.), Aljabri (A.S.), (et al.), *2759*
- centrifugal pumps, experimental methods, geometrical properties, rotors, Okamura (T.), *3743*
- nozzles, swirl flow, Carpenter (P.W.), *5446*
- geometrical properties, nozzles, reversers, Tsyblzov (Yu.I.), Salmanova (N.G.), *5969*
- aerodynamic interference, aerodynamic performance, airplanes, boundary layer (control), longitudinal stability, stol, Paulson (J.W.) Jr., *10511*
- ignition, rockets, solid propellants, space shuttle, transient effects, Caveny (L.H.), Kuo (K.K.), (et al.), *10723*

thrusters, contamination, discharges, particles, plasma, Rudolph (L.K.), Pless (L.C.), (et al.), *5965*
- argon, ionic propulsion, xenon, Wilbur (P.J.), Kaufman (H.R.), *5966*
- arcjet engines, magneto fluid dynamics, space shuttle, Kuriki (K.), *5968*
- control, modeling, space vehicles, Garg (S.), *6852*
- optimization, orbit transfer, payloads, space shuttle, Mackis (H.), Seckheim (R.L.), (et al.), *7892*

Thunder (T.D.), attenuation, reverberation, sound generation, *7944*

Thuribeck (A.), see Horsfield (K.), *9061*

Thurston (A.J.), diagnostics, experimental methods, gait, spine, Whittle (M.W.), (et al.), *9071*

Thurston (S.J.), concrete, heat transfer, thermal effects, thermal stresses, Priestley (M.J.N.), (et al.), *11328*

Thwaites (J.J.), see Hearle (J.W.S.) eds., *1214, book*

Thwaites (S.), acoustic waves, jets, waves, Fletcher (N.H.), *2969*
- see Fletcher (N.H.), *5768*

Thyagaraja (A.), cascades, compressible flow, finite difference methods, thermodynamic processes, two dimensional flow, *590*

Tiab (D.), hydrocarbons, pressure gradient, reservoirs, Crichlow (H.B.), *960*

Tibarewala (D.N.), biodynamics, biomechanics, gait, locomotion, Ghosh (A.K.), (et al.), *9065*

Tichy (J.), see Hwang (Y.F.), *4763*

Tichy (J.A.), see Smith (R.N.), *9039*

- bearings (journal), damping, squeeze films, vibration, viscoelasticity, *9955*

tidal waves, estuaries, nonlinear waves, shallow water, two dimensional flow, Debnath (L.), Chatterjee (A.K.), *11359*
- channels, friction factor, perturbation methods, Kabbaj (A.), Le Provost (C.), *11610*

tides, oscillatory flow, spectra, turbulence, Anwar (H.O.), Atkins (R.), *2695*
- channel flow, gravity waves (surface), propagation, rivers, saint venants equation, Chatterjee (A.K.), *2707*
- finite difference methods, one dimensional flow, shallow water, Stelling (G.S.), *3612*
- dissipation, friction (solid solid), moon, planetary satellites, stochastics, Cappallo (R.J.), Counselman (C.C.) III, (et al.), *3913*
- energy transport, ocean air interaction, Lappo (S.S.), Rozhdestvenskiy (A.Ye.), *4064*
- oceanography, Naito (I.), *4883*
- finite element techniques, rivers, Meissner (U.), *5901*
- hydrostatics, Trubitsyn (V.P.), *5910*
- breakers, hurricanes, ocean waves, surface waves, Taylor (R.B.), *5917*
- inertial waves, Pekeris (C.L.), *5936*
- ocean air interaction, resonance, rossby waves, Ivanovskii (A.I.), Krivokutskii (A.A.), *5941*
- ocean waves, power generation, Harrison (R.), Smith (K.G.), (et al.), *8021*
- orbit mechanics, Nagasawa (K.), *8024*
- circumnavigation, damage, probability theory, solar system, Ziglina (I.N.), *8838*
- finite element techniques, shallow water, Platzman (G.W.), *8972*
- energy conversion, estuaries, pumps, reservoirs, Robinson (I.S.), Perry (J.M.), *9521*
- bottom irregularities, coriolis forces, oceanography, vorticity, Zimmerman (J.T.F.), *10858*
- finite difference methods, gravity waves (shallow water), Henry (R.F.), *11579*
- estuaries, finite element techniques, liquid liquid interface, Kawahara (M.), Morihira (M.), (et al.), *11609*

Tiefenbruck (G.), bubble dynamics, creeping flow, non newtonian flow, spherical bodies, viscoelasticity (dynamic), Leal (L.G.), *10412*

Tiefenbruck (G.F.), bubble dynamics, motion, viscoelastic fluids, Leal (L.G.), *4829*

Tielking (J.T.), contact problems, shells (nonlinear), tires, Schapery (R.A.), *8201*

Tien (D.H.), rarefied gases, wedges, *8555*

Tien (C.L.), see Shiralkar (G.S.), *3783*
- see Vafai (K.), *8782*

Tien (J.S.), see Feng (C.C.), *835*
- catalyzed ignition, combustors, models, transient effects, *1754*

Tietjen (B.W.), acoustics, transducers, *5739*

Tikhomirov (S.G.), see Pilyugin (N.N.), *11516*

Tikhomirov (V.V.), perturbation theory, relay systems, stability, *128*
- flexure, shells, shells (long), torsion (plastic), *9265*

Tikhomolova (K.P.), mixtures, porous media, powders, Shishkanova (L.A.), *5830*

Tikhonenko (L.K.), choked flow, discharges, pipes, tubes, Kovorkov (L.R.), (et al.), *941*

Tikhonov (A.N.), see Gracheva (S.M.), *11745*

Timco (G.W.), brittle materials, ice, mechanical properties, tests, *3490*
- bending, flexure, ice, strength, *7565*

time delay systems, banach space, differential equations (ordinary), functional equations, Thompson (R.J.), *32*
- linear systems, maximum principle, pursuit, rendezvous, Bien (Z.), Chyung (D.H.), *1141*
- linear systems, regulator problem, synthesis, Vinter (R.B.), Kwong (R.H.), *1142*
- digital control, optimal control, Hammarstrom (L.G.), Gros (K.S.), *1148*
- differential equations (ordinary), least squares, Shih (Y.-P.), Hwang (C.), (et al.), *2054*
- nonlinear systems, suboptimal control, Gopalakrishnan Nair (G.), *2132*
- boundary layer, experimental results, turbulence (correlations), Legendre (R.), *2693*
- differential equations (ordinary), impulse, nonlinear systems, Martynyuk (D.I.), Tsyganovskii (N.S.), *4154*
- almost periodic solutions, integro differential equations, mathematical models, volterra equations, Alexiades (V.), *4980*
- differential equations (ordinary), routh-hurwitz criterion, stability theory, tools, vibration, Stepan (G.), *6070*
- sampled data systems, synthesis, zero-order-hold, Yekutiel (O.), *6135*
- biomechanics, limit cycles, modal analysis, oscillators, van der pol oscillators, Linkens (D.A.), Kitney (R.I.), *7154*
- algorithms, identification, linear systems, lumped systems, Saha (D.C.), Rao (G.P.), *7246*
- elastic behavior, laplace transform, singular waves, tauberian theorems, Lokshin (A.A.), *8124*
- multivariable systems, nyquist theory, stability theory, Mossaheb (S.), *8159*
- discrete systems, prediction, process control, regression rate, Potapova (T.P.), *8164*
- differential inclusion, optimal control, optimization, Pshenichnyi (B.N.), Yakovleva (A.P.), *8166*
- discrete systems, nonlinear systems, sensitivity, Kukhtenkov (L.P.), Ruban (A.I.), *8167*
- controllability, linear systems, Manitius (A.), *9154*
- design, frequency domain techniques, sampled data systems, Schnieder (E.), Kraft (K.H.), *9162*
- distributed parameters, stability theory, time lag, Zhang (D.-C.), *9168*
- sensitivity, suboptimal control, time varying systems, Malek-Zavarei (M.), *9182*
- continuous systems, discrete systems, routh-hurwitz method, stability theory, Thowsen (A.), *11055*
- algorithms, estimation, identification, Banks (H.T.), Burns (J.A.), (et al.), *11060*
- algorithms, linear programming, regulator problem, suboptimal control, Kim (B.K.), Bien (Z.), *11088*

time dependence, differential equations (ordinary), differential equations (partial), mesh generation, numerical methods, Lee (N.N.), Meyers (R.E.), *59*
- boundary conditions, free boundary, potential flow, two dimensional flow, Longuet-Higgins (M.S.), *567*
- differential equations (ordinary), evolution equations, Shugrin (S.M.), *1091*
- finite element techniques, nonlinear mechanics, shock waves, wave equations, Cella (A.), Lucchesi (M.), (et al.), *1130*
- dynamic stresses, impact, photoviscoelasticity, propagation, Arenz (R.J.), Soltesz (U.), *1391*
- boundary elements, cracks, elliptical cracks, plates, Mukherjee (S.), Morjaria (M.), *2459*
- asymptotic behavior, boundary layer, laminar flow, Hultgren (L.S.), Gustavason (L.H.), *2631*
- digital simulation, elliptic equations, flow measurement, Essers (J.A.), *3121*
- boundary conditions, conduction (unsteady), dirichlet problem, parabolic equations, Sommeijer (B.P.), Van Der Houwen (P.J.), (et al.), *5002*
- acoustics, boundary value problems, elliptic equations, harmonic waves, Neittaanmaki (P.), Picard (R.), *5026*
- buckling, structural stability, Amiro (I.Ya.), *5185*
- finite element methods (hybrid), heat transfer, nonlinear systems, Chung (K.S.), *6121*
- models, rocks, strength, Kaiser (P.K.), Morgenstern (N.R.), *6402*
- damage, fatigue, fracture mechanics, material testing, Biegler (K.K.), Sandor (B.I.), *6412*
- crack propagation, cracks, discontinuities, infinite medium, Wesolowski (Z.), *6452*
- computing techniques, inequalities, variational methods, Glowinski (R.), Lions (J.-L.), (et al.), *7176, book*
- cauchy problem, navier stokes equation, three dimensional formulation, Bell (J.B.), *8111*
- conical bodies, deformation (plastic), finite element techniques, impact, plasticity, Chiesa (M.L.), Callabresi (M.L.), *8342*
- crack growth, fracture mechanics, rocks, strength, Wilkins (B.J.S.), *8352*
- adhesives, bonded joints, finite element methods, interlaminar stresses, stiffness, Gali (S.), Ishai (O.), *8483*
- moving loads, spectral analysis, structural analysis, Padovan (J.), *9332*
- impulse, rods, Galduk (S.I.), *10029*
- creep, deformation, rock mechanics, tunnels, Kaiser (P.K.), Morgenstern (N.R.), *10365*
- combustion, flame propagation, Zeldovich (Y.), *10699*
- earthquakes, fracture mechanics, modeling, Das (S.), Scholz (C.H.), *10846*

time domain techniques, earthquakes, simulation, stochastic processes, Hoshiya (M.), Chiba (T.), *147*
- inverse problems, mathematical methods, scattering, wave equations, Burridge (R.), *1088*
- cracks, flaw detection, ultrasonics, welded joints, Silk (M.G.), Lidington (B.H.), (et al.), *7583*
- beams (cantilever), influence matrix, modal control, simply supported structures, structural analysis, Vinay (O.), *7592*
- blades, cascades, finite volume method, numerical methods, Younis (M.E.), Camarero (R.), *9588*

time invariant systems, automatic control, duality, geometric control, linear theory, Fuhrmann (P.A.), *99*
- decoupling, feedback, linear systems, multivariable systems, Sinha (P.K.), *113*
- biomathematics, mathematical models, Matis (J.H.), Tolley (H.D.), *150*
- adaptive systems, control, linear systems, Kreisselmeier (G.), *188*
- dynamic analysis, model reduction, redundancy, Britov (G.S.), Mironovskiy (L.A.), *2087*
- algorithms, controllability, linear systems, observability, Paige (C.C.), *2104*
- inverse problems, linear systems, process control, time lag, Borukhov (V.T.), *4228*
- oscillations, riccati equation, Nishimura (T.), Kano (H.), *5041*
- discrete systems, entropy, linear systems, linear theory, Zames (G.), *7231*
- dynamic analysis, oscillations, transient effects, Kononyuk (V.A.), *7234*
- decision theory, dynamic programming, linear systems, optimization, Hess (J.), Kagiwada (H.), (et al.), *8175*

time lag, algorithms, optimal control, Teo (K.L.), Craven (B.D.), *1158*
- design, process control, regulator problem, Khasmamedov (F.I.), *2169*
- autonomous systems, large scale systems, linear systems, stability theory, Lewis (R.M.), Anderson (B.D.O.), *3154*
- decoupling, linear systems, time varying systems, Nakanishi (E.), Nanbara (K.), *4204*
- inverse problems, linear systems, process control, time invariant systems, Borukhov (V.T.), *4228*

- feedback, linear systems, multivariable systems, stability theory, Goslewski (A.), Olbrot (A.W.), *4231*
- averaging, vibration (nonlinear), Kolesov (Yu.S.), *8281*
- distributed parameters, stability theory, time delay systems, Zhang (D.-C.), *9168*
- adaptive systems, design, optimal control, time optimal systems, Kim (B.K.), Bien (Z.), *11073*

time optimal systems, control, design, linear sequential machines, Feredzhev (R.G.), *134*
- optimization, synthesis, Brunovsky (P.), *171*
- dynamic programming, nonlinear systems, rotating bodies, Akulenko (L.D.), *2085*
- damping, optimal control, rotating bodies, Zubov (V.I.), *4271*
- optimal control, servomechanisms, Zaytsev (G.G.), Steklov (V.K.), *4302*
- design, discrete systems, observers, realization, Inoue (A.), Fisher (D.G.), (et al.), *4314*
- biocontrol, man machine systems, optimization, rowing, Senator (M.), *7258*
- linear systems, mathematical theory, optimal control, Arutyunov (A.V.), *8158*
- iterative methods, large scale systems, optimal control, regulator problem, Sarnovsky (J.), *8165*
- optimal control, sensitivity, Becker (N.), *8171*
- optimal control, stochastic control, stochastic systems, Kolmenovskii (V.B.), Maizenberg (T.L.), *9173*
- design, multivariable systems, trajectory optimization, Frick (K.), *9178*
- model reduction, optimal control, suboptimal control, Fuller (A.T.), *10088*
- adaptive systems, design, optimal control, time lag, Kim (B.K.), Bien (Z.), *11073*

time varying systems, identification, linearization, nonlinear systems, Haber (R.), Kmetty (P.), (et al.), *118*
- linear systems, lyapunov's functions, stability theory, Kuznetsov (V.P.), Kukareko (E.P.), *1145*
- eigenvalues, linear systems, matrix methods, Wu (M.-Y.), *1991*
- multivariable systems, nonlinear systems, pole placement, Sommer (R.), *2085*
- algorithms, identification, lumped systems, Saha (D.C.), Rao (G.P.), *2088*
- mathematical models, state space techniques, Milov (L.T.), Solodovnikov (V.V.), *3157*
- decoupling, linear systems, time lag, Nakanishi (E.), Nanbara (K.), *4204*
- algorithms, linearization, quaternion equations, Yen (K.), Cook (G.), *4212*
- analytical methods, operational methods, transient effects, Sololev (L.G.), *4239*
- pole placement, synthesis, Grigorian (F.P.), *5043*
- linear systems, volterra series, Lawrence (P.J.), *6127*
- analytical methods, dynamic analysis, Wu (M.-Y.), *9161*
- feedback, guidance, navigation, stability theory, Dornscheidt (F.), Lauer (A.), *9169*
- distributed parameters, stability theory, Gil (M.I.), *9172*
- sensitivity, suboptimal control, time delay systems, MalekZavarei (M.), *9182*
- algorithms, guidance, linear systems, pole placement, pursuit, Solenski (N.), *10092*

Timmerman (W.H.), see Nealy (D.A.), *4744*

Timofeev (N.A.), atmosphere, mass transfer, meteorology (physical), moisture, ocean, *3025*

Timofeyev (A.V.), see Malyshev (V.A.), *201*

Timofeyev (B.B.), design, optimization, process control, Litvinov (A.M.), (et al.), *2146*

Timonin (A.M.), pressure vessels, shells (anisotropic), shells (of revolution), stress analysis, tanks, wirewound vessels, *9464*

Timoshenko (N.N.), inspection, magnetic field, mechanical properties, rolling, sheet metal, Pyatunin (G.A.), (et al.), *10322*

Timsit (R.S.), see Rosenfeld (A.M.), *4957*

Timson (W.J.), see Benney (D.J.), *6618*

T' . Loi (F.), beams, deflections, shakedown structures, *5340*
- deformation, elastoplasticity, framed structures, inelasticity, variable loading, work hardening, *6528*

Tindle (C.T.), modes, ocean, sound propagation, underwater acoustics, *894*
- attenuation, ocean bed, sound propagation, underwater acoustics, *5735*
- attenuation, ocean bed, shallow water, underwater acoustics, Weston (D.E.), (et al.), *5747*
- eigenvalues, group velocity, pulsatile flow, ray theory, shallow water, Bold (G.E.J.), *6612*
- see Weston (D.E.), *11913*

Ting (T.C.T.), analogies, layered media, viscoelastic waves, Mukunoki (I.), *2364*
- elasticity (nonlinear), fluids, jump conditions, shock waves, *4930*
- anisotropic media, coordinate systems, stress analysis, tensor methods, *5094*
- anisotropic media, composite materials, edge effects, stress concentration, wedges, Chou (S.C.), *7269*
- see Swegle (J.W.), *10233*

Tingshi (Z.), see Wei (S.), *10338*

Tinling (B.E.), airplanes, control, flight control, simulation, vtol, Cole (G.L.), *1166*

Tippetts (J.R.), amplification, jet pumps, pumps, *221*

tires, fibers, flexible bodies, surveys, textiles, yarn, Hearle (J.W.S.) eds., Thwaites (J.J.), (et al.), *1214, book*
- contact problems, friction (rolling), wheels, Browne (A.L.) eds., Tsai (N.T.), *1454, book*
- friction (rolling), simulation, Guntur (R.), Sankar (S.), *1456*
- contact stresses, wheels, Jenkins (J.T.), *1458*
- experimental mechanics, photoelasticity, strain, Chow (C.L.), Woo (C.W.), *3560*
- contact stresses, dynamic properties, friction (rolling), rubber, Sakai (H.), *5357*
- friction, roughness, surface profiles, Tanoerananon (P.), Yandell (W.O.), *7082*
- contact problems, shells (nonlinear), Tielking (J.T.), Schapery (R.A.), *8201*
- deflections, stiffness, Koutny (F.), *9461*

Tirosh (J.), brittle materials, crack initiation, fracture mechanics, mixed mode fracture, Catz (E.), *456*
- see Gur (M.), *9295*

Tirskii (G.A.), see Benilov (M.S.), *3864*
- see Benilov (M.S.), *6858*

Tischler (M.B.), airplane performance, flight tests, spin recovery, wind tunnels, Barlow (J.B.), *692*

tissues, biomaterials, constitutive equations, deformation (finite), Demiray (H.), *1038*
- arteries, biomaterials, elasticity (nonlinear), Fung (Y.C.), *1039*
- biomaterials, constitutive equations, nonlinear materials, viscoelastic materials, Decraemer (W.F.), Maes (M.A.), (et al.), *1951*
- biomechanics, blood, blood flow, Fung (Y.C.), *3054, book*
- biomaterials, lungs, viscoelastic materials, Grotberg (J.B.), Davis (S.H.), (et al.), *3060*
- biomaterials, lungs, rheology, Fung (Y.C.), *3062*
- biomaterials, elastic behavior, fixation agents, Fung (Y.C.), Sobin (S.S.), *4911*
- aging, skin, ultrasonics, Bhagat (P.K.), Kerrick (W.), (et al.), *6011*
- acoustics (physiological), experimental methods, scattering, Braun (M.), Robinson (D.E.), *6012*
- experimental methods, nervous system, spine, stress strain relationships, Hung (T.-K.), Chang (G.-L.), (et al.), *7105*
- cyclic loading, membranes, stress strain relationships, Vito (R.P.), Macmenus (R.K.), (et al.), *7112*
- arteries, stress strain relationships, Vito (R.P.), Hickey (J.), *7113*
- diagnostics, ultrasonics, Foster (F.S.), Hunt (J.W.), *7114*
- blood vessels, brain, muscles, viscoelasticity, Misra (J.C.), Chakraverty (S.), *7646*
- heart, muscles, stress strain relationships, Capelo (A.), Comincioli (V.), (et al.), *8070*
- biomechanics, deformation, lungs, mechanical properties, Tai (R.C.), Lee (G.C.), *8071*
- absorption, experimental methods, ultrasonics, Christman (C.L.), *8082*
- experimental methods, stress strain relationships, tendons, viscoelastic materials, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *9046*
- experimental methods, shadowgraphic methods, tension, Knauss (W.G.), Kenner (V.H.), *9057*
- blood flow, flow measurement, laser doppler velocimeters, Nilsson (G.E.), Tenland (T.), (et al.), *9059*
- diagnostics, muscles, scattering, ultrasonics, Engin (A.E.), Peindl (R.D.), (et al.), *9072*

titanium, aluminum alloys, flaw detection, ingots, material testing, ultrasonics, Zavyalova (N.S.), Grishina (V.M.), (et al.), *501*
- creep, life expectancy, thermal fatigue, Plumbridge (W.J.), *4479*
- copper alloys, creep, maraging steel, steel, stress relaxation, Pollock (J.T.A.), Barton (S.G.), (et al.), *6473*
- creep, deformation, fracture, low cycle fatigue, Strizhalo (V.A.), *9428*
- damage (cumulative), empirical methods, fatigue, life expectancy, prediction, Adams (J.H.), *10327*
- composite materials, gas turbines, materials processing, steel, Meetham (G.W.) ed., *11337, book*

Tittmann (B.R.), acoustic waves, fatigue, fracture mechanics, life expectancy, nondestructive tests, Buck (O.), *6417*

Tiwari (G.N.), see Sodha (M.S.), *8764*
- see Sodha (M.S.), *10633*

Tiwari (K.), see Prakash (J.), *10889*

Tiwari (R.K.), see Khatwani (K.J.), *3155*

Tiwari (V.S.), see Tomar (J.S.), *922*

Tjan (T.G.), see Dees (P.J.), *7007*

Tjoa (G.L.), see De Vries (M.I.), *7501*

Tjotta (J.N.), acoustic waves, arrays, focusing, nonlinear waves, Tjotta (S.), *2960*
- ocean bed, penetration, sedimentation, underwater acoustics, Tjotta (S.), *7943*

Tjotta (S.), see Tjotta (J.N.), *2960*
- see Tjotta (J.N.), *7943*

Tkachenko (V.A.), gravity waves (surface), laplace transform, propagation, viscous flow, waves, *670*
- linear theory, regulator problem, stability theory, *3167*
- fluid-structure interaction, gravity waves (finite depth), half space, propagation, unsteady flow, *4663*

Tkachenko (V.G.), see Lashuk (N.K.), *7502*

Tkhai (V.N.), lyapunov's functions, mechanical systems, resonance, stability theory, *1077*

To (C.W.S.), beams (variable cross section), eigenvalues, rotary inertia, stiffness matrix, vibration, *5033*

Tobe (E.), autocorrelation function, diffraction, fourier transform, lasers, statistical theory, yarn, *2256*

Tobak (M.), see Hui (W.H.), *3540*
- laminar flow, separated flow, steps, Peake (D.J.), *10433*
- see Hui (W.H.), *12103*

Tobin (R.F.), see Highter (W.H.), *2387*
Tobita (Y.), see Nemat-Nasser (S.), *7437*
Tobler (W.), see Kampfen (Y.), *12056*
Toda (H.), see Fukuoka (H.), *8428*
Toda (S.), buckling, holes, shells (cylindrical), shells (thin), *349*
- axial loading, buckling, holes, shells (cylindrical), *11123*

Todadze (T.V.), see Askadskii (A.A.), *3256*
Todd (C.J.), see Howell (W.E.), *9001*
Toder (I.A.), see Usov (P.P.), *9970*
Todreas (N.), see Coeffe (Y.), *8900*
Todten (H.), bottom irregularities, rivers, sediment transport, shear stress, Vetter (B.), *1497*
Toei (R.), drops, drying, experimental methods, ultrasonics, Furuta (T.), (et al.), *10640*
Toews (H.), see Chandna (O.P.), *2875*
Tognetti (K.), see Aldis (G.), *8178*
Tognola (S.), moving surfaces, slots, turbulent flow, two dimensional flow, *3663*
Toh (C.T.), anisotropic media, collapse, failure, finite element methods, soils, Sloan (S.W.), *6382*
Toi (Y.), elastoplasticity, shells (axisymmetric), snap-through, Ishinabe (M.), (et al.), *7365*
tokamak, buildings (tall), finite difference methods, walls, Lieuw (T.-C.), Luk (W.-K.), *2539*
- diagnostics, nuclear fusion, plasma, radiation properties, Koopman (D.W.), McIlrath (T.J.), (et al.), *2898*
- control stability, equilibrium, magnetic field, thermonuclear energy, Rubin (I.K.), *2903*
- automatic control, plasma (toroidal), stability, thermonuclear energy, Gubarev (V.F.), Krivonos (Yu.G.), (et al.), *3218*
- modes, nonlinear theory, plasma (toroidal), stability theory, Biskamp (D.), *3896*
- heating, macroscopic characterization, plasma (toroidal), turbulence (mechanisms), Mitarai (O.), *3902*
- alfven number, plasma, stability theory, turbulence (mechanisms), Hatakeyama (R.), Inutake (M.), (et al.), *4749*
- free boundary, magneto fluid dynamics, plasma (toroidal), Berestycki (H.), Brezis (H.), *4969*
- bifurcation, elliptic equations, free boundary, plasma, Sibrand (J.), *4975*
- energy spectrum, high temperature, measurements (dynamic), plasma (toroidal), Nakamura (K.), Hiraki (N.), (et al.), *5692*
- density, interferometry, measurements (dynamic), plasma (toroidal), Mitarai (O.), Nakashima (H.), (et al.), *5693*
- density, nonlinear characteristics, plasma (toroidal), waveguides, Krapchev (V.B.), Theilhaber (K.S.), (et al.), *8829*
- containment, nuclear fusion, plasma (toroidal), thermonuclear energy, Bromberg (L.), Cohn (D.R.), (et al.), *8831*

Tokar (I.Ya.), adiabatic processes, bubble dynamics, two phase flow, Leshchinskiy (G.A.), (et al.), *6979*
Tokar (Ya.I.), aerosols, approximation methods, asymptotic behavior, coagulation, particles, *6970*
Tokareva (N.A.), flood flow, oil removal, petroleum, Tsynkova (O.E.), *5842*
Tokuoka (T.), continuum mechanics, elastic waves, rubber elasticity, *5234*
- chemical reactions, constitutive equations, continuum mechanics, phase changes, *6037*
- sound propagation, sound speed, thermal effects, thermoelasticity, *6901*
- acoustic waves, nonlinear waves, sound propagation, *6903*
- dispersion, elastic bodies, nonlinear waves, one dimensional waves, *10232*

Tokuyama (M.), brownian motion, equilibrium, fluids, statistical mechanics, Oppenheim (I.), *2842*
Toland (J.F.), see Amick (C.J.), *2702*
- boussinesq equation, channels, finite amplitude, gravity waves (solitary), *11537*

Tolikas (D.K.), see Latinopoulos (P.), *3711*
Tolikas (P.K.), absorption, diffusion, galerkin method, moisture, soils, Tzimopoulos (C.D.), (et al.), *8780*
Tolley (H.D.), see Matis (J.H.), *160*
tollmien schlichting waves, boundary layer (control), hydrodynamic stability, reynolds number (critical), Milling (R.W.), *1579*
- boundary layer (control), hydrodynamic stability, perturbations, Levchenko (V.Ya.), Solovev (A.S.), *3699*
- boundary layer, experimental results, hydrodynamic stability, perturbations, Dovgal (A.V.), Kozlov (V.V.), (et al.), *5463*
- hydrodynamic stability, perturbations, sound flow interaction, Murdock (J.W.), *9802*
- couette flow, hydrodynamic stability, transition, waves (azimuthal), Lvov (V.S.), Predtechensky (A.A.), *11487*

Tolokomnikov (L.A.), see Penkov (V.B.), *8389*
Tolstoy (I.), roughness, sound propagation, stratified flow, surface waves, *8869*
Tolubinskii (V.I.), evaporation, heat pipes, mechanics, Antonenko (V.A.), (et al.), *804*
- boiling, critical heat flux, pool boiling, Kichigin (A.M.), (et al.), *2795*
- heat transfer, thin films, vaporization, Antonenko (V.A.), (et al.), *10645*

Tomar (J.S.), plates (circular), thermal effects, vibration (free), Tiwari (V.S.), *822*
- dynamic properties, shells (conical), vibration (torsional), Gupta (D.C.), (et al.), *9318*
- elastic foundations, mindlin plates, plates (circular), vibration (free), Gupta (D.C.), *11129*

Tomashevskii (V.T.), composite materials, polymers, shells (anisotropic), structural stability, Yakovlev (V.S.), *1257*
- anisotropic media, composite materials, mathematical programming, optimization, polymers, shells (of revolution), Nikolaev (B.A.), (et al.), *7594*
- composite materials, cracks, delamination, polymers, Shalygin (V.N.), (et al.), *9246*

Tomey (T.D.), see Picot (J.J.C.), *6985*
Tomita (Y.), see Arai (S.), *853*
- see Sudou (K.), *854*
- pipelines, pneumatic transport, slug flow, two phase flow, waves, Jotaki (T.), (et al.), *1839*
- see Mochimaru (Y.), *2041*
- see Shirakashi (M.), *2697*
- forming, plane strain, plasticity, stream function, Seguchi (Y.), (et al.), *3274*

Tomizuka (M.), see Auslander (D.M.), *2187*
- control, design, discrete systems, linear systems, observers, Auslander (D.M.), (et al.), *7251*

Tomkins (B.), crack initiation, ductile fracture, plasticity, rings, rotating disks, Atkins (A.G.), *3431*
Tomlinson (J.R.), flaw detection, stainless steel, ultrasonics, welded joints, Wagg (A.R.), (et al.), *7590*
Tomlinson (N.P.), see Nagabhushan (B.L.), *7799*
Tomonari (Y.), see Nakamura (Y.), *7905*
Tomskii (G.V.), differential games, evasion, pursuit, synthesis, *2131*
Ton Tran-Cong, boundary value problems, elasticity (linear), potential theory, *7262*
Tondl (A.), dynamic response, nonlinear theory, vibration (parametric), vibration (self excited), *1265*
Tong (P.), see Pian (T.H.H.), *83*
- see Lin (K.Y.), *2071*

Tongtaow (C.), see White (J.E.), *5241*
Too (J.R.), mixing, mixtures, particulate flow, solids, Fan (L.T.), (et al.), *10562*
tool wear, cutting, wear, Sewailem (M.R.), *1010*
- adhesion, cutting, diffusion, magnetic field, wear, Muju (M.K.), Ghosh (A.), *8055*
- cutting, steel, tools, turning, Sewailem (M.R.), Moberak (I.M.), *9376*
- abrasion, chip formation, cutting, grinding, Kita (Y.), Ido (M.), (et al.), *9377*
- roughness, surface profiles, surfaces, turning, Vajpayee (S.), *12088*

tools, mathematical models, robotics, trajectories, Clement (A.), *8*
- life expectancy, machine design, optimization, probability, Sheikh (A.K.), Kendall (L.A.), (et al.), *1346*
- computer aided manufacturing, numerical control, positioning accuracy, robotics, Farkas (J.), El-Sonbaty (I.), *2166*
- algorithms, computer aided manufacturing, numerical control, optimal control, sampled data systems, Schluter (R.A.), Retford (E.T.), (et al.), *2194*
- chatter, vibration (self excited), Kondo (Y.), Kawano (O.), (et al.), *2354*
- high speed, lubrication (hydrodynamic), rotating shafts, Gaillard (M.), Boudet (R.), *3048*
- automobiles, casting, computer aided design, Welbourn (D.B.), Cox (G.M.A.), *3426*
- finite element techniques, machining (electrochemical), Jain (V.K.), Pandey (P.C.), *3429*
- energy, forging, screw presses, Xi-Xian (J.), *4469*
- stability theory, vibration (forced), Stephan (G.), *5230*
- experimental results, field tests, penetration, soils, Spektor (M.), *5253*
- mechanical joints, thermoelasticity (nonlinear), Attia (M.H.), Kops (L.), *5800*
- differential equations (ordinary), routh-hurwitz criterion, stability theory, time delay systems, vibration, Stepan (G.), *6070*
- dynamic response, machinery, vibration (self excited), Soevi (F.), *6315*
- penetration, plane strain, plastic behavior, Sitzer (M.R.), Durban (D.), *6406*
- cutting, life expectancy, suspensions, Andreeva (I.A.), Bryukhanova (L.S.), (et al.), *6410*
- cutting, interfaces, temperature, thermocouples, Bhatia (S.M.), Pandey (P.C.), (et al.), *8065*
- chip formation, machine design, metallography, temperature, Wright (P.K.), Mccormick (S.P.), (et al.), *8363*
- grinding, stochastics, Matsui (S.), *8366*
- forming, ultrasonics, vibration, vibrational forming, Biddell (D.C.), *9375*
- cutting, steel, tool wear, turning, Sewailem (M.R.), Moberak (I.M.), *9376*
- algorithms, contact problems, friction (solid solid), mechanical joints, Sachdeva (T.D.), Ramakrishnan (C.V.), *9945*
- cyclic loading, impact, soils, Spektor (M.), *10248*
- design (optimum), grinding, gyroscopes, surface profiles, synthesis, Osman (M.O.M.), Sankar (S.), (et al.), *10370*

Toong (T.Y.), see Abouself (G.E.), *6708*

Toorani-Goloosalar (Z.), see Narayanan (R.), *9450*
Tooth (A.S.), collapse, cylindrical bodies, pressure vessels, shakedown structures, Jones (N.), *11336*
Topilskiy (S.V.), see Potseluyev (A.V.), *122*
Topolnicki (J.), conduction (heat), rocks, thermal measurements, thermodynamic properties, *5523*
topological techniques, libration theory, three body problem, Libre (J.), Simo (C.), *1787*
- continuum mechanics, discrete systems, functional analyis, Wozniak (C.), *4123*
- bifurcation, eigenvalue problems, nonlinear theory, Alexander (J.C.), Antman (S.S.), *4946*
- lift, optimal control, reentry, spinning bodies, Platus (D.H.), *5709*
- continuum mechanics, functional analyis, geometrical properties, Banfi (C.), Fabrizio (M.), *7135*
- bifurcation, catastrophe theory, fluid mechanics, singularities, Stewart (I.), *7172*
- linear systems, linear theory, state space techniques, Petrov (B.N.), Babak (S.F.), (et al.), *8160*
- friction (skin), separated flow, three dimensional flow, Horstman (C.C.), Settes (G.S.), (et al.), *10432*

Topovinina (I.V.) ed., averaging, composite materials, mixture theories, multiphase media, *7130, book*
Topper (T.H.), see Williams (D.P.), *1201*
Tordion (G.V.), see Cardou (A.), *9472*
Toren (M.), boundary layer, compressible flow, edge effects, laminar flow, rotating disks, Solan (A.), *8718*
- boundary layer (three dimensional), disks, fluid mechanics, machinery, rotational flow, Solan (A.), (et al.), *9559*

Torenbeek (E.), airplanes, design (optimum), subsonic flow, transport, *688*
Toridis (T.G.), adina, algorithms, computing techniques, strain, Judy (J.), (et al.), *4188*
Torkamani (M.A.M.), inverse problems, linear equations, matrix methods, optimization, *17*
Torkelsson (S.A.), boundary layer (thermal), experimental methods, thermal measurements, thermometer, *3775*
Tormala (P.), experimental methods, hopkinson bar, relaxing media, stress strain relationships, viscoelasticity, Paakkonen (E.), (et al.), *5106*
tornados, aerodynamic performance, chimneys, wind turbines, Ayad (S.S.), *5502*
- solid-fluid interaction, stability, stratification, vortices, Nikulin (V.V.), *9528*

toroids, rotating bodies, stokes flow, Majumdar (S.R.), O'Neill (M.E.), *3624*
- equilibrium, fredholm equations, magneto fluid dynamics, resistance, Lo Surdo (C.), *4748*
- moment coefficient, rotating bodies, stokes flow, viscous flow, Bhattacharyya (T.K.), *5406*
- perturbation methods, rotating bodies, stokes flow, viscous flow, Murray (J.C.), *8530*
- containers (partially filled), containment, flexible walls, nuclear reactors, Lu (S.C.H.), Mccauley (E.W.), (et al.), *11674*

torque gages, measurements (dynamic), shafts, Artamonov (A.T.), Volkov (N.P.), (et al.), *225*
Torrance (K.E.), see Tewari (P.K.), *955*
- see Bau (H.H.), *7840*
- aquifers, conduction (heat), convection (free), geothermal reservoirs, heat transfer (combined modes), thermosyphons, Chan (V.W.C.), *9724*

torsion, elasticity (linear), shells (spherical), stamping, stress intensity factor, Aleksandrov (V.M.), Karpenko (V.A.), *344*
- bonded joints, cylindrical bodies, reinforced bodies, Kuo (Y.-M.), Conway (H.D.), *245*
- elasticity (nonhomogeneous), inclusions, inhomogeneities, Datta (S.), Kanwal (R.P.), *246*
- axial loading, creep, polymers, Vilks (U.K.), Tabuns (V.A.), (et al.), *272*
- cylindrical bodies, plastic behavior, rate sensitivity, work hardening, Meguid (S.A.), *277*
- buckling, buckling (local), flexure, Wang (S.T.), Pao (H.Y.), *334*
- cyclic loading, relaxation, tests, wires, Kuznetsov (B.I.), *494*
- loads, wind loads, Kareem (A.), *515*
- bending, bridges (box girder), Kambe (S.-I.), *520*
- anisotropic media, creep, cylindrical bodies, Gupta (S.K.), Rana (V.D.), *1194*
- beams (torsional), elastic bodies, rods, Jenkins (J.T.), *2220*
- plates (nonhomogeneous), plates (thick), shear, Mukhopadhyay (A.), Mukhopadhyay (J.), *2266*
- crack propagation, fracture toughness, plates, Chow (C.L.), Ngan (K.M.), *2438*
- dynamic behavior, shells (outer), steel, strain rate, thermal effects, Elaiche (A.-S.M.), *2487*
- bending, girders, prestressed concrete, shear, Taylor (G.), Warwaruk (J.), *2523*
- shear transfer, trusses, Schmidt (L.C.), *2537*
- bending, cascades, flutter, supersonic flow, Bendiksen (O.), Friedmann (P.), *2908*
- beams (torsional), warping, Gay (D.), Boudet (R.), *3289*
- multiple cracks, shells (cylindrical), stress intensity factor, three dimensional formulation, Shibuya (T.), Koizumi (T.), (et al.), *3457*
- finite element techniques, fracture mechanics, stress intensity factor, three dimensional formulation, wedges, Tseng (A.A.), Berry (J.T.), *3477*
- dynamic properties, pendulums, polymers, ropes, transducers (displacement), Rind (E.), Bryant (E.L.), *3510*
- bending, panels (flat), reinforced concrete, shear, ultimate strength, Majid (K.I.), Celik (T.), *3534*
- cylindrical bodies, elasticity (nonhomogeneous), nonhomogeneous media, Chakravorty (J.G.), *4340*
- complex variables, elasticity (linear), holes, prisms, Bhargava (R.D.), Puranik (S.S.), *4341*
- beams, bending, reinforced concrete, shear loading, Rajagopalan (K.S.), *4362*
- elliptical bodies, shells (cylindrical), structural stability, Konoplev (Yu.G.), Kopp (A.V.), *4398*
- biaxial loading, cavities, compression, creep, modeling, tension, Dyson (B.F.), Verma (A.K.), (et al.), *4514*
- buildings, seismic loading, Kan (C.L.), Peter (Y.S.), (et al.), *4948*
- beams, elasticity (linear), solid mechanics, Singh (P.N.), Jha (P.K.), *5070, book*
- half space, inclusions, spherical bodies, Dhaliwal (R.S.), Singh (B.M.), (et al.), *5090*
- beams (torsional), reinforced concrete, ultimate strength, Izumi (M.), *5353*
- stiffness, strength, structural analysis, Shermer (C.L.), *5355*
- elastic constants, elasticity (nonhomogeneous), Gladwell (G.M.L.), Coen (S.), *6154*
- constitutive equations, plasticity, shells (thin), Mozharovskaya (T.N.), *6178*
- bending (elastic), thin walled structures, Zhong-Heng (G.), *6208*
- beams (thin section), thin walled structures, Takahashi (K.), Mizuno (M.), *6210*
- deformation (finite), springs, strips, Mansfield (E.H.), *6218*
- bending (elastic), large displacement, plates, Simmonds (J.G.), *6222*
- beam columns, buckling, buckling (torsional), Cuk (P.E.), Trahair (N.S.), *6246*
- buckling, shells (cylindrical), shells (stiffened), Yen (S.-W.), *6263*
- bending, fatigue, multiaxial fatigue, Mcdiarmid (D.L.), *6414*
- bending, combined loading, fatigue, notch tests, Matake (T.), Imai (Y.), *6418*
- boron, fibers, propagation, ultrasonics, vibration, Kaplan (M.D.), Veremeenko (S.V.), *6482*
- beams, grooves, reinforced concrete, strength, Pandit (G.S.), Gupta (S.P.), *6519*
- bolted joints, bolts, experimental results, shear, Bahia (C.S.), Martin (L.H.), *6556*
- elastoplasticity, mathematical methods, unloading, Caffarelli (L.A.), Friedman (A.), *7165*
- cylindrical bodies, elasticity (three dimensional), saint venant principle, Khatiashvili (G.M.), *7259*
- deformation (finite), elastoplasticity, failure, Billington (E.W.), *7286*
- beams (box), girders, wood structures, Heimeshoff (B.), *7316*
- dynamic stability, plates (anisotropic), plates (annular), Tani (J.), *7359*
- fracture, notch tests, polymers, yield condition, Truss (R.W.), Duckett (R.A.), (et al.), *7564*
- bars, elastic bodies, optimization, shape factors, Dems (K.), *7599*
- elastoplasticity, shear walls, structural analysis, Coull (A.), Tawfik (S.Y.), *8457*
- computing techniques, difference equations, poisson equation, relaxation methods, Banki (I.), *9124*
- cables, ocean bed, underwater structures, Shashaty (A.J.), *9256*
- airfoils, beams (cantilever), flexure, Wang (K.-F.), *9259*
- cracks, fracture mechanics, spectroscopy, stress corrosion, Briggs (A.), Airey (R.), (et al.), *9391*
- bending, fiber reinforced concrete, fibers, reinforced concrete, Narayanan (R.), Toorani-Goloosalar (Z.), *9450*
- bars, beams (anisotropic), beams (variable cross section), Gawecki (A.), Boruszak (A.), *10137*
- cylindrical bodies, interface cracks, multiple cracks, stress intensity factor, Shibuya (T.), Koizumi (T.), (et al.), *10293*
- buildings, coupled buildings, seismic loading, vibration, Tsicnias (T.G.), Hutchinson (G.L.), *10850*
- girders, hulls, ships, Westin (H.), *10876*
- design (optimum), shells (of revolution), structural optimization, Gura (N.M.), *11115*

torsion (plastic), extrusion, kinematics, Soos (E.), Teodosiu (C.), (et al.), *6408*
- flexure, shells, shells (long), Tikhomirov (V.V.), *9265*

torsional waves, boundary layer, disks, hall effect, magneto fluid dynamics, Krishna (D.V.), Prasada Rao (D.R.V.), *2883*
- asymptotic methods, piezoelectric devices, Paul (H.S.), Raju (D.P.), *4443*
- elastic bodies, scattering, spherical bodies, Griitzki (D.V.), Poddubnyak (A.P.), *6352*
- cylindrical bodies, half space, reflection, Wada (H.), *6353*
- elastic waves, waveguides, Muller (P.), *9333*
- half space, layered media, vibration, viscoelastic materials, Martincek (G.), *10239*

Toscano (R.), elastic foundations, plates (anisotropic), Maceri (A.), *1230*
- beams, elastic foundations, structural stability, Maceri (A.), *2295*

Tot (L.), deformation, fracture, low temperature, twinning, *10277*
Totani (T.), control, manipulators, mathematical models, robotics, Miyakawa (S.), *10011*
Toth (K.), cooling, extended surfaces, fins, heat addition, *4720*
Toth (L.), creep, fractography, steel, tests, Szabados (E.), (et al.), *3499*
Toth (O.), see Verga (G.), *8477*

toughness, fatigue, materials properties, offshore structures, steel, Wilson (A.D.), *2413*
- ferrous metals, fracture toughness, mechanical properties, micromechanisms, stainless steels, Luis (R.A.) ed., *3501, book*
- crack opening displacement, fracture mechanics, j-integral, steel, Dahl (W.), *3503*
- failure, fracture mechanics, structural analysis, Sih (G.C.), Hartranft (R.J.), *9381*

Tougou (H.), see Obayashi (T.), *3645*
Toure (P.), see Carstensen (J.T.), *2404*
- compression, cyclic testing, powders, tablets, Puisieux (F.), (et al.), *7466*

Tovey (N.K.), see Thorne (C.R.), *5261*
towed body dynamics, maneuverability, Mudie (J.D.), Kastens (K.A.), *5963*
Tower (L.K.), see Kaufman (W.B.), *5601*
towers, galloping, vortex shedding, wind loads, Parkinson (G.V.), Wawzonek (M.A.), *867*
- dynamic analysis, offshore structures, stress analysis, Bolotin (V.V.), Chirkov (V.P.), (et al.), *2544*
- deformation, optical instruments, wind loads, Neuerburg (W.), *3906*
- galloping, turbulence (freestream), wind loads, wind tunnels, Kwok (K.C.S.), Melbourne (W.H.), *3907*
- dynamic response, wind loads, Musio (G.), *5362*
- cables, dynamic response, electric power, vibration (forced), wind loads, Matheson (M.J.), Holmes (J.D.), *6872*
- deformation, pressure measurement, wind loads, Neuerburg (W.), *7909*
- cable stayed bridges, structural analysis, Sofronie (R.), *9454*
- dynamic stability, guyed structures, structural stability, Irvine (H.M.), O'Sullivan (M.J.), *11118*

towing cables, aerodynamics, cables, dynamic analysis, nonlinear analysis, Karlsen (L.K.), *1215*
- dynamic analysis, Gilbert (N.E.), *1217*
- dynamic analysis, stress analysis, Matuk (C.), *7315*
- naval mechanics, ship dynamics, ship towing, Latorre (R.), Bernitsas (M.M.), *8036*
- cables, crossflow, fluid-structure interaction, vibration (forced), vortex shedding, Alexander (C.M.), *8291*

towing tanks, cavitation, hulls, propellers (marine), rudders, water tunnels, Rutgersson (O.), *8044*
- mission analysis, ship design, surface effect, Balquet (R.J.), *8046*

Townsend (A.A.), curved surfaces, shear flow, turbulence (structure), *2699*
- see Elliott (C.J.), *10455*

Townsend (P.), see Richards (G.D.), *10445*
Townsin (R.L.), drag, models, ship resistance, viscous effects, wakes, Wynne (J.B.), *7073*
Toya (M.), cylindrical bodies, elasticity (nonhomogeneous), inclusions, screw dislocations, *1176*
Toyoda (M.), see Karppi (R.A.J.), *2461*
- see Mutoh (Y.), *6450*

Toyokura (T.), see Kanemoto (T.), *3683*
- see Kurokawa (J.), *11377*

Tozeren (H.), particle fluid flow, pressure drop, reynolds equation, Skalak (R.), *5985*
Tracey (D.M.), elastoplasticity, finite element techniques, numerical methods, yield criteria, Freese (C.E.), *278*
tracking, linear systems, multivariable systems, regulator problem, Wolovich (W.A.), Ferreira (P.), *112*
- design, estimation, kalman filters, Weiss (H.), Moore (J.B.), *119*
- filters, optimal control, optimization, Kosut (R.L.), *196*
- correlation, mellin transform, oscillations, Lindsey (W.C.), Chie (C.M.), *2090*
- adaptive systems, identification, synthesis, Baradello (C.S.), Neuman (C.P.), *2092*
- algorithms, lyapunov's functions, stochastic control, trajectories, wiener-hopf technique, Afanasev (V.N.), Danilina (A.N.), *2137*
- algorithms, gradient techniques, optimal control, Rybashov (M.V.), *2151*
- algorithms, randomly moving object, search, statistical theory, Mangel (M.), *2177*
- design, discrete systems, lur'e plants, nonlinear systems, Grujic (I.T.), Porter (B.), *3159*
- adaptive systems, design, linear systems, multivariable systems, process control, Davison (E.J.), *4236*
- estimation, stochastic processes, Bar-Shalom (Y.), Marcus (G.D.), *4264*
- doppler effect, sound speed, underwater acoustics, Wilcox (R.E.), *5762*
- algorithms, navigation, optimal control, Reid (J.G.), Chaffin (D.E.), (et al.), *7249*
- detection, underwater acoustics, Moura (J.M.F.), *12002*

traction, friction drives, nutation, transmissions, Kemper (Y.), *1470*
- adhesion, bearings, friction, lubrication, Dowson (D.) eds., Taylor (C.M.), (et al.), *1924, book*
- energy density, functional analyis, stresses, Day (W.A.), *7132*
- contact problems, lubrication (elastohydrodynamic), rheology, thermal effects, Houpert (L.), Flamand (L.), (et al.), *8064*
- contact stresses, fatigue, friction drives, rolling contact, Rohn (D.A.), Loewenthal (S.H.), (et al.), *8473*

Tracy (J.V.), see Neuzil (C.E.), *10832*
Trad (A.), boundary layer, free boundary, gravity waves (surface), surface tension, viscosity, *1593*
- see Salem (A.), *9542*

Trahair (N.S.), see Kitipornchai (S.), *2293*
- see Cuk (P.E.), *6246*
- see Bradford (M.A.), *11119*

trailing edge, airfoil characteristics, incompressible flow, pressure distribution, stagnation point, Baskaran (V.), Holla (V.S.), *1616*
- blades, cascades, friction, pressure distribution, Ribaut (M.), Niessner (H.), *2654*
- lifting bodies, separation, unsteady flow, vorticity, Zaitsev (A.A.), Tyurev (V.V.), *2913*
- boundary layer (turbulent), noise (aerodynamic), sound generation, Howe (M.S.), *2941*
- airfoils, base pressure, drag, subsonic flow, Gai (S.L.), Sharma (S.D.), *3725*
- afterbodies, pressure gradient, separation, turbulence, Solignac (J.-L.), *4610*
- afterbodies, pressure gradient, separation, turbulence, Solignac (J.-L.), *4611*
- noise (aerodynamic), noise measurements, Brooks (T.F.), Hodgson (T.H.), *4768*
- jet engines, noise, noise abatement, wall jets, Joshi (M.C.), Yu (J.C.), *4806*
- airfoils, control, flutter, incompressible flow, Nissim (E.), Lottati (I.), *7906*
- noise (aerodynamic), sound fields, turbulent flow, Howe (M.S.), *7937*
- turbulence (structure), velocity profiles, wakes, Hah (C.), Lakshminarayana (B.), *9596*
- airfoil theory, laminar flow, oscillating bodies, supersonic flow, Brown (S.N.), Cheng (H.K.), *9651*
- airfoils, rolling, three dimensional flow, vortex sheets, Schwartz (L.W.), *11360*
- diffraction, sound, vortex shedding, Rienstra (S.W.), *11978*

Traill-Nash (R.W.), see Gupta (R.K.), *2349*
trains (railroad), compressible flow, tunnels, unsteady flow, velocity profiles, Woods (W.A.), Pope (C.W.), *3629*
- drag, tunnels, turbulent flow, Sud (I.), Chaddock (J.B.), *5497*
- dynamic loads, railroad cars, statically indeterminate structures, substructuring, vehicles, Balogh (V.), *6499*
- dynamic response, experimental mechanics, railroads, Fries (R.H.), Cooperrider (N.K.), (et al.), *7151*

trajectories, mathematical models, robotics, tools, Clement (A.), *8*
- ballistics, estimation, least squares, Chang (C.B.), *130*
- optimal control, space vehicles, Farrenkopf (R.L.), *197*
- control, robotics, Pyatkin (V.P.), Sirotenko (V.Ya.), *202*
- algorithms, control, design, manipulators, robotics, Lakota (N.A.), Lisenko (S.A.), (et al.), *214*
- algorithms, control, design, manipulators, robotics, Vereshchagin (A.F.), Generozov (V.L.), *216*
- blood flow, reynolds number (small), spherical bodies, Starobin (I.M.), *571*
- three body problem, transformation, Langlois (M.), *875*
- bifurcation, differential equations (ordinary), sliding, Grishin (S.A.), Utkin (V.I.), *1143*
- estimation, stochastic control, Rubinovich (E.Ya.), *1156*
- algorithms, avoidance, missiles, singular control, variable metric algorithm, Blank (D.), Shinar (J.), *1160*
- airplanes, dynamic stability, mathematical models, Young (J.W.), Schy (A.A.), (et al.), *1161*
- airplanes, lift, potential flow, sprays, streamlines, vortices, Wickens (R.H.), *1620*
- interplanetary probes, space vehicles, Frauenholz (R.B.), *1792*
- ballistics (terminal), dispersion, reentry, rockets, Platus (D.J.), *1796*
- algorithms, lyapunov's functions, stochastic control, tracking, wiener-hopf technique, Afanasev (V.N.), Danilina (A.N.), *2137*
- fire control, jets, Hatton (A.P.), Osborne (M.J.), *2670*
- mach stem, shock waves, spherical waves, triple-point trajectory, Takayama (K.), Sekiguchi (H.), *2721*
- kepler orbits, lambert's problem, orbit mechanics, orbits, Sun (F.T.), *2923*
- drag, ejectable containers, falling bodies, Studnicki (A.), Ronen (T.), *3733*
- diffusion, particles, pipelines, slurries, two phase flow, Okuda (K.), *4011*
- ducts (curved), particle fluid flow, perturbation methods, Yeung (W.-S.), *4621*
- adaptive systems, aerospace vehicles, optimal control, synthesis, Salmin (V.V.), *7248*
- control stability, projectiles, Murphy (C.H.), *7792*
- coal, combustion products, particulate flow, three dimensional flow, turbomachinery, Beecher (B.), Tabakoff (W.), (et al.), *7889*
- astronautics, celestial mechanics, design, mission analysis, optimization, orbits, space vehicles, Friedlander (A.L.), Cefola (P.J.), (et al.), *7911*
- orbit mechanics, potential theory, Vjuga (A.A.), *7912*
- airplanes, containers, ejectable containers, ejectors, falling bodies, separation, Maddox (A.R.), *8645*
- algorithms, cybernetics, optimal control, optimization, pursuit, search, Vereshchagin (A.F.), Medvedev (V.S.), (et al.), *9184*
- boundary layer, critical heat flux, cylindrical bodies, drops, two phase flow, Lu (C.C.), Heyt (J.W.), *9690*
- aerodynamic interference, fins, launching, projectiles, Schmidt (E.M.), *10519*
- aerodynamics, disks, wind, Frohlich (C.), *11731*
- buoyancy, hele-shaw flows, laminar flow, optical techniques, particles, Bugliarello (G.), Yanizeski (G.M.), *12016*

trajectory optimization, constraints, linear systems, optimal control, Pelczewski (W.), Walczak (S.), *199*
- computer programming, impulsive transfers, orbit correction, reduction, simplex method, Vladimirov (V.P.), Aleksandrov (E.V.), *3920*
- algorithms, gliding trajectory, numerical methods, optimal control, oscillations, Williamson (W.E.) Jr., *5061*
- interplanetary probes, optimization, orbit correction, orbit transfer, D'Amario (L.A.), Byrnes (D.V.), (et al.), *5707*
- optimal control, optimization, orbit transfer, Teschner (W.), *5708*
- artificial satellites, communication satellites, weather satellites, Contant (J.-M.), Winkels (H.-M.), (et al.), *7925*
- ballistics (exterior), launching, wind loads, Churchyard (J.N.), *7929*
- design, multivariable systems, time optimal systems, Frick (K.), *9178*
- asymptotic behavior, mathematical programming, optimal control, Feinstein (C.D.), Luenberger (D.G.), *11069*

transcendental equations, eigenvalues, matrix methods, stiffness matrix, Hopper (C.T.), Simpson (A.), (et al.), *3093*

transducers, calibration, dynamic response, shock, vibration, Bouche (R.R.), *1289, book*
- acoustics, wave absorbers, Cavanagh (E.), Cook (B.D.), *1809*
- acoustic measurements, diffraction, lasers, sound fields, sound propagation, Kleszczewski (Z.), *1827*
- acoustic measurements, acoustics, calibration, Rudnick (I.), *1828*
- nondestructive tests, Prudnikov (A.S.), Chernyshev (K.V.), *3511*
- thermal measurements, thermocouples, thin films, Godefroy (J.-C.), *3809*
- acoustic measurements, optical techniques, Rashleigh (S.C.), *3979*
- acoustic measurements, optical techniques, waveguides, Carome (E.F.), Koo (K.P), *3980*
- cylindrical waves, scattering, ultrasonics, Foster (F.S.), Arditi (M.), (et al.), *3982*
- acoustic measurements, ultrasonics, Widener (M.W.), *3983*
- acoustic emission, piezoelectrics, Hill (E.K.), Egle (D.M.), *3984*
- acoustic emission, acoustic measurements, Hill (R.), Adams (N.L.), *3985*
- drives, hydraulic machinery, optimal control, Karnopp (D.), *4554*
- impulse, sound fields, vibrators, Stephanishen (P.R.), *4762*
- helmholtz resonator, sound generation, underwater acoustics, Henriquez (T.A.), Young (A.M.), *4804*
- impedance, underwater acoustics, Clark (J.A.), *5737*
- acoustics, Tietjen (B.W.), *5739*
- ceramics, electromechanical components, piezoelectric devices, Aronov (B.S.), *6485*
- nondestructive tests, piezoelectric devices, ultrasonics, Panin (V.I.), *6483*
- half space, nondestructive tests, piezoelectric devices, ultrasonics, Kasatkin (B.A.), Pavin (N.Ya.), *6485*
- defects, flaw detection, nondestructive tests, Lange (Yu.V.), *6488*
- bearings (ball), eddy currents, hardness, heat treatment, inspection, Melnikov (I.V.), Savikovskii (L.A.), (et al.), *6491*
- nondestructive tests, stresses, surfaces, ultrasonics, Thompson (R.B.), *8426*
- acoustic measurements, acoustoelasticity, beams, residual stresses, rolling, Fukuoka (H.), Toda (H.), (et al.), *8428*
- dielectrics, dynamic testing, vibration, Vomel (M.), *9331*
- dynamic stresses, flow measurement, testing equipment, turbomachinery, Krause (L.N.), Fralick (G.C.), *10731*
- membranes, piezoelectrics, Lerch (R.), *11898*
- cylindrical bodies, sound generation, Guz (A.N.), Ryabukha (Yu.N.), (et al.), *11914*
- acoustic waves, arrays, interference, microphones, Carnes (T.N.), Reynolds (D.D.), (et al.), *11927*
- acoustic waves, focusing, oscillating bodies, Madsen (E.L.), Goodsitt (M.M.), (et al.), *11970*
- numerical methods, sound generation, Seyhi (M.N.), Ousset (Y.), (et al.), *12006*
- piezoelectric devices, underwater acoustics, Ricketts (D.), *12008*
- impulse, piezoelectric devices, Hazony (D.), *12009*
- calibration, underwater acoustics, velocity measurement, Ivanov (V.E.), Kirshov (V.A.), *12011*

transducers (displacement), dynamic behavior, dynamic testing, Wedzicha (B.L.), Miles (R.E.), *489*
- dynamic properties, pendulums, polymers, ropes, torsion, Rind (E.), Bryant (E.L.), *3510*

transducers (load), biomechanics, experimental mechanics, gait, Gola (M.M.), *1047*
- biomechanics, gait, Frost (R.B.), Cass (C.A.), *1948*
- calibration, data acquisition, force, measurements (dynamic), tension, Dalke (D.D.), *9426*
- calibration, force, measurements, thermoelasticity (transient), Pontius (P.E.), Mitchell (R.A.), *10313*
- beams (cantilever), measurements (dynamic), strain gages, tension, Haggstrom (R.P.), *10314*

transducers (pressure), biomaterials, dental prostheses, prosthetic devices, Turner (C.H.), Gross (M.J.), *1969*
- acoustic measurements, Rasmussen (G.), *3981*
- calibration, impulse, sound fields, ultrasonics, Jones (S.M.), Carson (P.L.), (et al.), *7946*

transducers (ultrasonic), nondestructive tests, response, transient, ultrasonics, Low (G.C.), *1417*
- attenuation, diffraction, ultrasonics, Chivers (R.C.), Rosselaar (L.), (et al.), *2952*
- arrays, diagnostics, piezoelectrics, ultrasonics, Sato (J.), Kawabuchi (M.), (et al.), *2955*
- acoustic waves, focusing, ocean bed, Ohgaki (M.), Shimizu (R.), (et al.), *5756*
- excitation, experimental methods, love waves, Gulyaev (Yu.V.), Kurach (T.N.), (et al.), *6332*
- laminates, nondestructive tests, testing equipment, ultrasonics, Crostack (H.A.), Deutsch (V.), (et al.), *7560*
- algorithms, flaw detection, frequency domain techniques, ultrasonics, Cleveland (D.), Mucciardi (A.N.), *7578*
- flaw detection, harmonic analysis, nondestructive tests, Pokrovskii (A.D.), *7581*
- far field radiation, transient, ultrasonics, Aulenbacher (U.), Langenberg (K.J.), *7585*
- arrays, transfer functions, Bardsley (B.G.), Christensen (D.A.), *10797*
- acoustic waves, anisotropic media, calibration, Brissaud (M.), Kleimann (H.), *11163*

transfer functions, columns, thermal diffusion, Rabinovich (G.D.), *2856*
- complex variables, distributed parameters, extended complex plane, linear systems, poles, zeros, Ferreira (P.M.G.), *4211*
- frequency domain techniques, mathematical models, model reduction, Shieh (L.S.), Datta-Barua (M.), (et al.), *4222*
- model reduction, optimization, Luus (R.), *4983*
- measurements (dynamic), noise (random), structural response, Aubourg (M.), Guesdon (M.), *6321*
- elliptical cracks, flaws, fracture mechanics, Chang (R.), *6460*
- axial compressors, transient effects, Fabri (J.), Paulon (J.), *6737*
- control, feedback, linear systems, spectral analysis, stability theory, Schober (J.), *9166*
- elastic constants, insulating materials (acoustical), materials properties, Pritz (T.), *9676*
- arrays, transducers (ultrasonic), Bardsley (B.G.), Christensen (D.A.), *10797*
- acoustics (architectural), reverberation, Davy (J.L.), *10799*
- matrix methods, poles, Pugh (A.C.), Ratcliffe (P.A.), *11044*
- explosions (underwater), impulse, underwater acoustics, Dicus (R.L.), *11906*

transformation, gravity waves (finite depth), integral methods, two dimensional waves, Nakamura (A.), Matsuno (Y.), *668*
- differential equations (ordinary), differential geometry, perturbation methods, Rapaport (M.), *873*
- three body problem, trajectories, Langlois (M.), *875*
- mathematical methods, oblateness, perturbation methods, Deprit (A.), *878*
- decoupling, nonlinear systems, Schrapel (H.D.), *1079*
- boundary layer, free jets, similarity methods, transition flow, Hunt (R.), Wilks (G.), *1532*
- backlund transformation, conduction (unsteady), group theory, nonlinear characteristics, Munier (A.), Burgan (J.R.), (et al.), *2004*
- backlund transformations, evolution equations, mathematical methods, Fokas (A.S.), Fuchssteiner (B.), *3103*
- equations of motion, hamiltonian equations, kepler orbits, mathematical methods, Leach (P.G.L.), *6064*
- earth, gravity, heat transfer, Hagiwara (Y.), *8012*
- artificial satellites, averaging, equations of motion, oblateness, Hoots (F.R.), *8942*
- elasticity, finite element methods (hybrid), stress analysis, Nath (B.), *9139*
- perturbation methods, two body problem, Sidlichovsky (M.), *9808*

transforms, entrance region, heat transfer, integral methods, pipe flow, Vick (B.), Ozisik (M.N.), (et al.), *734*
- mathematical methods, perturbation theory, series, Spirig (F.), *877*
- boundary conditions, channels (closed), conduits, convection (free), De Socio (L.M.), Misici (L.), *1683*
- computer programming, conduction (heat), numerical methods, Campo (A.), *1702*
- convection, fins, heat transfer, unsteady flow, Aziz (A.), Na (T.Y.), *1703*
- heat transfer (combined modes), thermophysical properties, transient effects, Dulnev (G.N.), Zavgorodnii (V.I.), (et al.), *2812*
- enthalpy, phase changes, Wood (A.S.), Ritchie (S.I.M.), (et al.), *3823*
- elastic waves, energy splitting, hyperbolic equations, radon transform, wave equations, Costa (D.G.), Strauss (W.A.), *4165*
- algorithms, computing techniques, fast fourier transform, hankel transform, Oppenheim (A.V.), Frisk (G.V.), (et al.), *4173*
- boundary value problems, laplace equation, mellin transform, singular integral equations, wedges, Chakrabarti (A.), *4979*
- integral methods, magneto plasma dynamics, two dimensional flow, viscid inviscid flow, Gorskii (V.B.), *5676*
- edge dislocations, elastodynamics, Markenscoff (X.), Clifton (R.J.), *6155*
- cylindrical bodies, magneto fluid dynamics, pressure gradient, suspensions, Gupta (S.C.), Agarwal (M.C.), *7896*
- crack branching, interface cracks, stress intensity factor, wiener-hopf technique, Kuliev (V.D.), *9417*
- integration, Apelblat (A.), *9107*
- crack opening displacement, griffith cracks, stress intensity factor, Tang (R.J.), Wang (K.), *9398*
- interaction, multiple cracks, stress intensity factor, Gecit (M.R.), *9401*
- decision theory, differential equations (partial), dynamic programming, smoothing of data, Angel (E.S.), *10023*

- eigenvalue problems, mathematical methods, operators, Sirovich (L.), Knight (B.W.), *10030*
- eigenvalue problems, group theory, mathematical methods, operators, Knight (B.W.), Sirovich (L.), *10035*
- convergence, series, Jones (B.), *10040*
- asymptotic methods, bessel functions, Wong (R.), *10041*
- algorithms, computing techniques, Candel (S.), *10042*
- fluid-structure interaction, hydraulic shock, plates, Kliko (I.A.), Nemkova (L.N.), *11666*
- jets, vortices, wakes, Ko (N.W.M.), Leung (K.C.), *11955*

transient effects, fluid mechanics, modeling, turbomachinery, Singh (R.), *698*
- fluid mechanics, modeling, turbomachinery, Singh (R.), *699*
- convection, heat transfer, Karvinen (R.), *732*
- buoyant flow, convection (free), laminar flow, stokes flow, Pop (I.), Soundalgekar (V.M.), *752*
- heat transfer, non newtonian flow, power law fluids, stagnation point, Goria (R.S.R.), *759*
- fins, heat exchangers, heat transfer, Senshu (T.), Hatada (T.), (et al.), *763*
- numerical methods, thermal diffusion, Yuen (W.W.), Wong (L.W.), *771*
- finite amplitude, korteweg de vries equation, separated flow, two phase flow, Banerjee (S.), Chan (A.M.C.), *940*
- asymptotic behavior, differential equations (ordinary), dynamic behavior, Friedman (C.N.), *1076*
- approximation methods, diffusion, singular perturbations, Mann-Nachbar (P.), *1105*
- differential equations (partial), integration, rotating shafts, Chu (F.H.), Pilkey (W.D.), *1114*
- impulsive loading, shells (cylindrical), vibration (forced), Ujihashi (S.), Okazaki (T.), (et al.), *1279*
- characteristic methods, compressional waves, pipelines, pneumatic components, Matsumoto (Y.), Ishibashi (K.), *1597*
- conduction (heat), thermal waves, Swenson (R.J.), *1698*
- diffusion, gas solid interface, Garcia (E.A.), *1739*
- catalyzed ignition, combustors, models, Tien (J.S.), *1754*
- oil wells, pressure change, transmission, unsteady flow, Hoberock (L.L.), Stanbery (S.R.), *2706*
- conductivity, density, gases, heat transfer, thermal measurements, Filippov (L.P.), Eldarov (F.G.), (et al.), *2780*
- convection (forced), heat transfer, laminar flow, plane flow, Hanawa (J.), *2788*
- closed conduit flow, convection (free), finite difference methods, heat transfer, laminar flow, Vasseur (P.), Robillard (L.), *2799*
- asymptotic methods, conduction (heat), mathematical models, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *2810*
- anisotropic media, conduction (heat), Tanaka (K.), Tanaka (M.), *2811*
- heat transfer (combined modes), thermophysical properties, transforms, Dulnev (G.N.), Zavgorodnii (V.I.), (et al.), *2812*
- conduction (heat), finite element techniques, variable thermal properties, Keramidas (G.A.), *2821*
- dynamics, modeling, nuclear reactors, Khatib-Rahbar (M.), Cady (K.B.), *2873*
- lyapunov's functions, power generation, stability theory, transient stability, Ohsawa (Y.), Hayashi (M.), *3170*
- beams, vibration (forced), Hirano (Y.), Nagaya (K.), *3353*
- dynamic response, plates, shock waves, vibration (forced), Coleby (J.R.), Mazumdar (J.), *3365*
- cavitation, closed conduit flow, piping systems, slurries, Chaudhry (M.H.) eds., Yevjevich (V.), *3596, book*
- boundary layer (thermal), boundary layer (turbulent), convection, heat transfer, plane flow, turbulent flow, Hanawa (J.), *3781*
- heat transfer, plates (vertical), thermal diffusion, Krishan (B.), *3797*
- convection (free), cylindrical bodies, laminar flow, Katagiri (M.), Pop (I.), *3800*
- fins, perturbation methods, Aziz (A.), Na (T.Y.), *3817*
- condensers, heat pipes, Shukla (K.N.), *3841*
- analytical methods, operational methods, time varying systems, Soloiev (L.G.), *4239*
- rotating bodies, vibration (forced), Yanabe (S.), *4432*
- evolution equations, two dimensional waves, Engelbrecht (J.), *4444*
- slug flow, two phase flow, Fukano (T.), Sekoguchi (K.), (et al.), *4825*
- viscoelastic materials, viscoelastic waves, Nakagawa (N.), Kawai (R.), *5238*
- channel flow, cooling, cryogenics, Gorbachev (S.P.), Krikunov (A.A.), (et al.), *5571*
- conduction (heat), conduction (unsteady), Baclic (B.S.), Gvozdenac (D.D.), *5572*
- conduction (steady), thermal instability, thermosyphons, Mertol (A.), Greif (R.), (et al.), *5598*
- geothermal reservoirs, two phase flow, Garg (S.K.), *5840*
- elastic waves, numerical methods, Gamby (D.), Lamy (R.), *6357*
- airfoils, oscillating bodies, three dimensional flow, transonic flow, two dimensional flow, Dowell (E.H.), *6718*
- axial compressors, transfer functions, Fabri (J.), Paulon (J.), *6737*
- convection (free), plates (vertical), thermal loading, Sammakia (B.), Gebhart (B.), *6763*
- flow reversal, heat transfer, transport mechanisms, Morrison (F.A.) Jr., Griffiths (S.K.), *6766*
- conduction (heat), mathematical models, transport properties, variable thermal properties, Maewal (A.), *6799*
- conduction (heat), mathematical methods, mathematical models, monte carlo analysis, Vorobeva (L.S.), Zheviakov (G.N.), *6803*
- dynamic analysis, oscillations, time invariant systems, Kononyuk (V.A.), *7234*
- beams (timoshenko), dynamic response, laplace transform, Huntley (E.), Zinober (A.S.I.), *7365*
- elastic foundations, plates (skew), vibration (free), Bhanderi (N.C.), Juneja (B.L.), (et al.), *7396*
- beams, elastic foundations, vibration (torsional), Wada (H.), *7410*
- cavities, elastic bodies, shells (spherical), transient loading, Duffey (T.A.), Johnson (J.N.), *7420*
- cavities, convection (free), cooling, heat transfer, laminar flow, water, Robillard (L.), Vasseur (P.), *7844*
- convection (forced), heat transfer, hot film, thermal measurements, Malcolm (D.G.), Verma (V.), *7846*
- pulsatile flow, thermal excitation, thermal loading, Goloveiko (A.G.), Martynikhina (V.I.), *7851*
- non newtonian flow, porous media, power law fluids, Ikoku (C.U.), Ramey (H.J.) Jr., *7977*
- half space, moving loads, Watanabe (K.), *8331*
- cellular motions, monte carlo analysis, rayleigh benard instability, thermal excitation, transition flow, Jhaveri (B.), Homsy (G.M.), *8709*
- channel flow, heat exchangers, thermal diffusion, Suvorov (A.V.), Rabinovich (G.D.), *8746*
- generators, mathematical models, nuclear power, steam, steam power plants, Van Tuyle (G.J.), Lee (J.C.), *8759*
- non newtonian flow, porous media, power law fluids, Ikoku (C.U.), Ramey (H.J.) Jr., *8926*
- boundary elements, groundwater, two dimensional flow, Banerjee (P.K.), Butterfield (R.), (et al.), *8948*
- acoustic emission, random media, Beltzer (A.I.), *9299*
- dynamic response, shock, Krupenin (V.L.), *9306*
- insulating materials (thermal), layered media, partition walls, thermal loading, Devisme (J.-M.), *9740*
- cooling, cooling ponds, energy storage, power generation, Adams (E.E.), Kousis (A.D.), *9741*
- prediction, two phase flow, void fraction, Sun (K.H.), Duffey (R.B.), (et al.), *9879*
- convection, energy storage, heat transfer (combined modes), hydrocarbons, reservoirs, storage, underground storage, Kazaryan (V.A.), Myznikova (B.I.), (et al.), *10586*
- conduction (heat), mathematical models, nonlinear materials, Galaktionov (V.A.), Kurdyumov (S.P.), (et al.), *10591*
- conduction (heat), cylindrical bodies, heat addition, Beck (J.V.), *10592*
- ignition, rockets, solid propellants, space shuttle, thrust, Caveny (L.H.), Kuo (K.K.), (et al.), *10723*
- dynamic analysis, shells, structural response, Malyshev (A.P.), *11139*
- fluid-structure interaction, pressure distribution, shells (spherical), submerged bodies, transient loading, Neilson (H.C.), Everstine (G.C.), (et al.), *11635*
- reverberation, sound fields, Lyle (C.D.), *11937*

transient loading, beams, dynamic response, impact, nonlinear structures, Meredith (D.), Morman (K.N.) Jr., (et al.), *514*
- conduction (heat), heat addition, slabs, Fhts (P.B.) Jr., De Witt (K.J.), *773*
- mathematical models, radiant interchange, radiation properties, Surkov (G.A.), *780*
- boundary integral method, conduction (heat), integral methods, Wrobel (L.C.), Brebbia (C.A.), *2817*
- annular flow, cooling, lasers, Dulnev (G.N.), Gurev (Yu.L.), (et al.), *5540*
- dynamic interaction, space vehicles, vibration (forced), Chen (J.C.), Zagzebski (K.P.), (et al.), *6314*
- bonded joints, composite materials, fracture, plastics, Suvorova (Yu.V.), Sorina (T.G.), (et al.), *7298*
- dynamic stability, imperfections, impulsive loading, shells (cylindrical), Zimcik (D.G.), Tennyson (R.C.), *7361*
- cavities, elastic bodies, shells (spherical), transient effects, Duffey (T.A.), Johnson (J.N.), *7420*
- evaporation, fins, heat exchangers (crossflow), otec evaporator, pressure drop, Chapman (M.C.), Heydt (G.T.), *7867*
- displacement, dynamic analysis, structural response, vibration, Popplewell (N.), Scarth (D.A.), (et al.), *8277*
- convection (forced), cylindrical bodies, integral methods, navier stokes equation, Lin (S.P.), *8683*
- dynamic properties, reinforced concrete, shells (thick), spherical bodies, Bak (G.), *9320*
- fluid-structure interaction, plasticity, submerged bodies, Krajcinovic (D.), *9630*
- energy storage, solar collectors, solar ponds, Sodha (M.S.), Bansal (P.K.), (et al.), *9737*
- solar collectors, thermal loading, unsteady flow, El-Refaie (M.F.), Hashish (M.A.), *9739*
- blast effects, explosions, impulsive loading, underground, Egorov (V.A.), Kolobashkin (V.M.), (et al.), *9833*
- compaction, explosions, impulsive loading, porous media, underground, Bovt (A.N.), Kobets (V.I.), (et al.), *9838*

- explosions, explosive loading, explosive solid interactions, impulsive propulsion, Ivanov (A.G.), Karpenko (G.Ya.), *9839*
- dynamic properties, mathematical methods, sensitivity, Ehle (P.E.), Haug (E.J.), *10008*
- shells (spherical), shells (thick), vibration (free), Gurkok (A.), Ertepinar (A.), *11132*
- fluid-structure interaction, pressure distribution, shells (spherical), submerged bodies, transient effects, Neilson (H.C.), Everstine (G.C.), (et al.), *11635*
- acoustic waves, fluid-structure interaction, shells (cylindrical), submerged bodies, Geers (T.L.), Yen (C.-L.), *11660*
- acoustic loading, fluid-structure interaction, shells (spherical), Podstrigach (Ya.S.), Galazyuk (V.A.), (et al.), *11678*

transition, combustion, flames, interaction, jets, schlieren methods, Yule (A.J.), Chigier (N.A.), (et al.), *841*

- liquid gas mixture, pipe flow, two phase flow, Barnea (D.), Shoham (O.), (et al.), *938*
- boundary layer, explosions, transition flow, Volodin (A.G.), Zelman (M.B.), *1538*
- boundary layer, reynolds number, shape factors, turbulence, Wazzan (A.R.), Gazley (C.) Jr., (et al.), *1540*
- boundary layer, corners, three dimensional flow, Nomura (Y.), Kotake (M.), *1542*
- liquid gas mixture, tubes, two phase flow, Taitel (Y.), Barnea (D.), (et al.), *1846*
- liquid gas mixture, pipelines, two phase flow, Weisman (J.), Duncan (D.), (et al.), *1850*
- friction factor, laminar flow, poiseuille flow, Barr (D.I.H.), *2643*
- ducts (curved), experimental results, secondary flow, Wolff (M.), Cognet (G.), *2651*
- alloys, brittle materials, ductility, fracture, Schulson (E.M.), *3264*
- bodies of revolution, boundary layer, flow measurement, separation, Meier (H.U.), Kreplin (H.-P.), *3651*
- blunt bodies, heat transfer, reattachment, separated flow, Ota (T.), Asano (Y.), (et al.), *3654*
- hydrodynamic stability, laminar flow, poiseuille flow, Scobelev (B.Yu.), Molorodov (Yu.I.), *3664*
- free shear layer, laminar flow, reynolds number, turbulence, Demetriades (A.), Ortwerth (P.J.), (et al.), *4605*
- axisymmetric flow, jets, Cantwell (B.J.), *4631*
- separation, three dimensional flow, two dimensional flow, visualization, Werle (H.), *4685*
- corners, fluid mechanics, Barclay (W.H.), Ridha (A.H.), *5427*
- boundary layer, fluid mechanics, reynolds number (high), Fraser (C.J.), Milne (J.S.), *5430*
- boundary layer, unsteady state, Pfeil (H.), Herbst (R.), *5433*
- annular flow, friction factor, moving surfaces, pipe flow, Shands (J.), Alfredsson (H.), (et al.), *6648*
- drag reduction, non newtonian flow, polymers, Tandon (P.N.), Kulshreshtha (A.K.), *6652*
- flow measurement, mach reflection, photography, reflection, shock waves, Ben-Dor (G.), Takayama (K.), *6714*
- correlation, fracture, stochastics, Puttick (K.E.), *7525*
- boundary layer, computing techniques, laminar flow, navier stokes equation, Dumitrescu (H.), Savulescu (S.N.), *7706*
- bubble dynamics, non newtonian flow, Kawase (Y.), Ulbrecht (J.J.), *7964*
- bodies of revolution, cavitation inception, separation, water tunnels, Huang (T.T.), *8516*
- boundary roughness, hypersonic flow, reynolds equation (turbulence), Boudreau (A.H.), *9565*
- couette flow, hydrodynamic stability, tollmien schlichting waves, waves (azimuthal), Lvov (V.S.), Predtechensky (A.A.), *11487*
- turbulence model, turbulent mixing, Bakal (A.S.), *11491*

transition (reverse), frost, reynolds number, transition flow, Lysenko (V.I.), Maslov (A.A.), *1539*

- ducts (variable area), experimental results, sudden expansion, Vallette (P.), Labouche (M.), (et al.), *2644*

transition boiling, boiling, cooling, thermal properties, unsteady flow, Berlin (I.I.), Kalinin (E.K.), (et al.), *1671*

- boiling, nucleate boiling, tube bundles, Gavrilin (A.I.), *1672*
- boiling, convection (forced), critical heat flux, heat transfer, helium, Petukhov (B.S.), Zhukov (V.M.), (et al.), *1673*
- boiling, critical heat flux, rupture, two phase flow, Borchevkin (Yu.S.), Korolkov (B.P.), *1675*
- cooling, nuclear reactors, rewetting, Kim (A.K.), Lee (Y.), *1714*
- convection (forced), leidenfrost phenomenon, water, Ragheb (H.S.), Chang (S.C.), (et al.), *5544*
- film boiling, nucleate boiling, pool boiling, thermal instability, Zhukov (S.A.), Barelko (V.V.), (et al.), *6772*

transition flow, boundary layer, free jets, similarity methods, transformation, Hunt (R.), Wilks (G.), *1532*

- boundary layer, explosions, transition, Volodin (A.G.), Zelman (M.B.), *1538*
- frost, reynolds number, transition (reverse), Lysenko (V.I.), Maslov (A.A.), *1539*
- bodies of revolution, boundary layer, laminar flow, water tunnels, Lauchle (G.C.), Eisenhuth (J.J.), (et al.), *1541*
- blood flow, blood vessels, cardiovascular system, Walburn (F.J.), Stein (P.D.), *1958*
- boundary layer, channel flow, reynolds number, sediment transport, Ramaprian (B.R.), Mueller (A.), *2632*
- boundary layer, pressure gradient, turbulence, Abu-Ghannam (B.J.), Shaw (R.), *2633*
- cylindrical bodies, pressure distribution, shear flow, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *5453*
- asymptotic behavior, porous media, Nilson (R.H.), *7004*
- cellular motions, monte carlo analysis, rayleigh benard instability, thermal excitation, transient effects, Jhaveri (B.), Homsy (G.M.), *8709*
- boundary layer, stability theory, suction, swept wings, Mack (L.M.), *9570*
- artificial satellites, convection (free), plates (vertical), turbulence (transport), turbulent flow, Doan-Kim-Son, Coutanceau (J.), *9695*
- buoyant flow, convection (free), hydrodynamic stability, thermal instability, Gebhart (B.), Mahajan (R.L.), *9701*
- channel flow, conduction (heat), hydrodynamic stability, thermal instability, Hassab (M.A.), Ozisik (M.N.), *9702*
- fluidized beds, multiphase flow, Didwania (A.K.), Homsy (G.M.), *9896*
- duct flow, ducts (variable area), heat transfer, laminar flow, nusselt number, turbulent flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- collision models, planetary theory, rarefied gases, two phase flow, Pai (S.I.), *11448*

transmission, measurements, microstructures, neutron, nondestructive tests, Palacios (J.), Schwahn (D.), (et al.), *1420*

- acoustic waves, layered media, reflection, Fokkema (J.T.), *2367*
- elastic waves, reflection, solid solid interface, Fokkema (J.T.), *2370*
- oil wells, pressure change, transient effects, unsteady flow, Hoberock (L.L.), Stanbery (S.R.), *2706*
- atmosphere, radiant interchange, radiation properties, scattering, spectral analysis, Arst (Kh.Yu.), Kostyanoy (G.N.), *2823*
- error, measurements, *3405*
- algorithms, design, force, kinematics, mechanisms, Sutherland (G.H.), *3569*
- acoustic waves, reflection, scattering, waveguides, Bostrom (A.), *3932*
- acoustic waves, barriers, diffraction, wave energy, Czarnecki (S.), Engel (Z.), (et al.), *3933*
- absorption, acoustics (architectural), sound propagation, Hurst (C.J.), *4776*
- acoustic waves, modes, reflection, resonance, viscoelastic materials, Madigosky (W.), Fiorito (R.), *4787*
- acoustic waves, acoustics (architectural), cavities, modes, panels, Guy (R.W.), *5774*
- junctions, slabs, sound propagation, stochastic processes, vibration, Wohle (W.), Beckmann (T.), (et al.), *6894*
- acoustic waves, elastic waves, joints, structural elements, Rosenhouse (G.), Ertel (H.), (et al.), *8857*
- acoustic waves, compressible flow, ducts (variable area), nozzles, Miles (J.H.), *8862*
- absorption, gases, radiant interchange, radiation, Yuen (W.W.), *10604*
- random media, reflection, Verheggen (T.), *11172*
- plates, submerged bodies, ultrasonics, Ng (K.W.), Ngoc (T.D.K.), (et al.), *11657*
- breakwater, floating bodies, gravity waves, Stiassnie (M.), *11673*
- panels, plates (sandwich), sound, Narayanan (S.), Shanbhag (R.L.), *11935*
- acoustic waves, layered media, reflection, viscoelasticity, waveguides, Stepanishen (P.R.), Strozeski (B.), *11966*
- rings, screens, sound propagation, De Smedt (R.), *11988*

transmissions, nonlinear characteristics, resonance, Hortel (M.), Schmidt (G.), *388*

- automatic transmission, shift mechanism, transmissions (planetary), Shindo (Y.), Ito (H.), (et al.), *538*
- friction drives, nutation, traction, Kemper (Y.), *1470*
- cams, gear trains, linkages, machine design, mechanisms, Kozhevnikov (S.N.) ed., *2549, book*
- bond graphs, mechanisms, torque, Stecki (J.S.), *2560*
- gears (spur), machine design, Anderson (N.E.), Loewenthal (S.H.), *2560*
- dynamic loads, gear teeth, gear trains, Birjukov (L.V.), Krusev (S.D.), *2563*
- friction (sliding), gears, lubrication (elastohydrodynamic), wear, Drozdov (Yu.N.), *3049*
- constant velocity couplings, kinematics, shafts, splines, Davoli (P.), *6556*
- gear trains, kinematics, Ferguson (R.J.), Kerr (J.H.), *6557*
- beams (timoshenko), deflections, design, dynamic loads, gear teeth, Nagaya (K.), Uematsu (S.), *10372*
- diagnostics, flaw detection, gear trains, vibration, Randall (R.B.), *11338*

transmissions (planetary), automatic transmission, shift mechanism, transmissions, Shindo (Y.), Ito (H.), (et al.), *538*

- bearings (journal), bearings (roller), friction, gear trains, Jarchow (F.), Theissen (J.), *2566*
- dynamic loads, gear trains, runge kutta method, Jarchow (F.), Vonderschmidt (R.), *3575*

transonic flow, airfoils, boundary layer (turbulent), laser doppler velocimeters, Johnson (D.A.), Bachalo (W.D.), (et al.), *684*

- airfoil characteristics, design criteria, two dimensional flow, Nakamura (M.), *695*
- inviscid fluid, numerical methods, unsteady flow, Larat (A.), Sides (J.), *697*

- aerodynamic interference, blockage, wind tunnels, Chan (Y.Y.), *714*
- numerical methods, porous walls, wind tunnels, Karlsson (K.R.), Sedin (Y.C.-J.), *1520*
- airfoils, compressible flow, numerical methods, Niyogi (P.), Dutta (S.), *1525*
- interference, porous walls, three dimensional flow, wall effects, wind tunnels, Parker (R.L.) Jr., Sickles (W.L.), *1647*
- airfoils, oscillating bodies, scale effects, Davis (S.S.), *1784*
- compressible flow, lifting line theory, lifting surfaces, numerical methods, swept wings, Cheng (H.K.), Meng (S.Y.), (et al.), *2612*
- compressible flow, corners, viscid inviscid flow, Diesperov (V.N.), *2613*
- axisymmetric bodies, compressible flow, finite difference methods, three dimensional flow, Chen (L.-T.), Caughey (D.A.), *2614*
- compressible flow, nozzles, numerical methods, shock waves, Wadia (A.R.), Payne (F.R.), *2615*
- compressible flow, differential equations (partial), numerical methods, Neuberger (J.W.), *2616*
- aerodynamics, compressible flow, inviscid fluid, perturbation methods, Seabass (A.R.), Yu (N.J.), (et al.), *2617*
- asymptotic methods, bodies of revolution, compressible flow, Brezhnev (A.L.), Chernov (I.A.), *2620*
- boundary conditions, compressible flow, unsteady flow, Engquist (B.), Majda (A.), *2622*
- wall jets, wings, Malmuth (N.D.), Murphy (W.D.), (et al.), *2658*
- panels, pressure distribution, wing body combinations, Jain (R.K.), Redeker (G.), (et al.), *2741*
- aerodynamics, computing techniques, wings, Ballhaus (W.F.), Bailey (F.R.), *2748*
- axial compressors, blades, cascades, viscous flow, Sator (F.G.), *2756*
- ludwig tubes, unsteady flow, wind tunnels, Takashima (K.), *2770*
- airfoils, oscillating bodies, pressure distribution, wind tunnels, Benetka (J.), Pernica (Z.), *2771*
- aerodynamics, airfoils, compressible flow, numerical methods, Haldar (K.), *3637*
- compressible flow, corners, discontinuities, Ivanov (V.A.), Chernov (I.A.), *3638*
- cascades, finite difference methods, Kozel (K.), Petrovsky (I.), *3678*
- airfoil theory, numerical methods, potential flow, Fort (J.), Kozel (K.), *3726*
- airfoils, finite element techniques, Marsh (J.E.), Eastep (F.E.), *3727*
- airplane performance, stability derivatives, wind tunnels, Langhans (R.A.), Flechner (S.G.), *3736*
- axial turbines, blades, cascades, visualization, Holliger (K.), *3740*
- cryogenics, injectors, wind tunnels, Mignosi (A.), Faulmann (D.), (et al.), *3763*
- airfoils, boundary layer, supercritical flow, wind tunnels, Spaid (F.W.), Stivers (L.S.) Jr., *3764*
- approximations (higher order), nozzles, throats, Dutton (J.C.), Addy (A.L.), *4624*
- cascades, compressible flow, three dimensional flow, turbomachinery, Spurr (A.), *5412*
- airfoils, compressible flow, finite difference methods, unsteady flow, Kerlick (G.D.), Nixon (D.), *5417*
- compressible flow, euler equations, finite difference methods, potential flow, Caughey (D.A.), *5420*
- boundary conditions, compressible flow, numerical methods, unsteady flow, Kwak (D.), *5421*
- experimental results, nozzles, particle fluid flow, Myshanov (A.I.), Shorokov (N.N.), *5447*
- airfoils, oscillating bodies, unsteady flow, Shivamoggi (B.K.), *5491*
- airfoils, drag, optimization, subsonic flow, Zhigulev (V.N.), *5493*
- finite difference methods, variational methods, Khosla (P.K.), Rubin (S.G.), *6084*
- compressible flow, finite difference methods, potential flow, Luo (S.J.), Zheng (Y.W.), (et al.), *6627*
- airfoils, compressible flow, porous walls, wind tunnels, Blynskaya (A.A.), Lifhits (Yu.B.), *6628*
- compressible flow, finite element techniques, stability (numerical), Wellford (L.C.) Jr., Hafez (M.M.), *6629*
- internal flow, shock waves, three dimensional flow, Brochet (J.), *6662*
- cascades, numerical methods, unsteady flow, Gnesin (V.I.), *6663*
- airfoils, flutter, one dimensional flow, oscillating bodies, unsteady flow, wakes, Mccroskey (W.J.), *6716*
- airfoils, oscillating bodies, three dimensional flow, transient effects, two dimensional flow, Dowell (E.H.), *6718*
- aerodynamic performance, missiles, stability derivatives, viscous effects, Ericsson (L.E.), *6727*
- axial compressors, rotors, shock waves, visualization, Strazisar (A.J.), Powell (J.A.), *6742*
- compressible flow, entropy, finite difference methods, stability (numerical), Engquist (B.), Osher (S.), *7686*
- cascades, finite difference methods, Daiguji (H.), Nozaki (A.), *7730*
- compressible flow, inviscid fluid, mathematical models, Oswatitsch (K.), *8546*
- compressible flow, separated flow, separation, shock waves, Carter (J.E.), *8547*
- compressible flow, numerical methods, shock waves, Niyogi (P.), Das (T.K.), *8548*
- aerodynamics, compressible flow, numerical methods, Belotserkovski (O.M.), *8549*
- compressible flow, numerical methods, supersonic flow, Ukeguchi (N.), Sakata (H.), (et al.), *8551*
- boundary layer, diffusers, oscillatory flow, Sajben (M.), Kroutil (J.C.), *8586*
- cascades, finite element techniques, Akay (H.U.), Ecer (A.), *8589*
- blades, cascades, finite element techniques, Deconinck (H.), Hirsch (C.), *8590*
- airplanes, design, optimization, supersonic flow, vortex flow, wings, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- airfoil theory, integral methods, numerical methods, Sachdev (P.L.), *8652*
- automatic control, flexible walls, two dimensional flow, wind tunnels, Goodyer (M.J.), Wolf (S.W.D.), *8670*
- airfoil theory, nonconservative systems, potential flow, Baker (T.J.), *9545*
- aerodynamics, compressible flow, Schneider (W.) eds., Platzer (M.), *9547, book*
- compressible flow, oscillatory flow, slender bodies, Otshanskii (V.Yu.), *9550*
- compressible flow, inviscid fluid, numerical methods, shock waves, Rizzi (A.) eds., Viviand (H.), *9556, book*
- design, potential flow, three dimensional flow, wings, Henne (P.A.), *9653*
- aerodynamic interference, propellers, wakes, wings, Rizk (M.H.), *9656*
- blades, helicopters, numerical methods, pressure distribution, unsteady flow, Chattot (J.-J.), Philippe (J.-J.), *9666*
- flexible walls, laser doppler velocimeters, wind tunnels, Davis (S.S.), *9680*
- airfoils, pressure distribution, separated flow, shock waves, unsteady flow, Roos (F.W.), *9805*
- airfoils, compressible flow, conformal mapping, numerical methods, Constantinescu (V.N.), Bucur (S.C.), *10419*
- airfoils, cascades, two dimensional flow, Messiter (A.F.), Adamson (T.C.) Jr., *10448*
- airfoils, finite difference methods, two dimensional flow, Chen (L.-T.), *10497*
- airplane performance, leading edge, stalling, visualization, wind tunnels, wings, Pavelka (J.), Tatum (K.E.), *10499*
- numerical analysis, swept wings, three dimensional flow, unsteady flow, Borland (C.J.), Rizzetta (D.P.), (et al.), *10521*
- axial compressors, laser doppler velocimeters, turbomachinery, velocity profiles, Powell (J.A.), Strazisar (A.J.), (et al.), *10537*
- cascades, compressible flow, finite element techniques, Ecer (A.), Akay (H.U.), *11353*
- blunt bodies, compressible flow, supersonic flow, Weiland (C.), *11394*
- airfoils, compressible flow, numerical methods, separated flow, viscous flow, wakes, Le Balleur (J.C.), *11395*
- bodies of revolution, compressible flow, drag, optimization, wave drag, Sigalov (G.F.), *11396*
- cascades, compressible flow, finite element techniques, Akay (H.U.), Ecer (A.), *11404*
- compressible flow, numerical methods, plane flow, Kozel (K.), Polasek (J.), (et al.), *11430*
- noncircular pipes, sudden expansion, unsteady flow, Anderson (J.S.), Meier (G.E.A.), *11493*
- finite difference methods, perturbation theory, slender wings, wings, Van Der Vooren (J.), Huizing (G.H.), (et al.), *11729*
- shock waves, sound generation, supersonic flow, Gusev (V.E.), Karabutov (A.A.), *11964*

transpiration, ablation, boundary layer (turbulent), heat transfer, mass transfer, space vehicles, Suzuki (K.), *3867*
- fluid injection, pipe flow, porous walls, turbulent flow, Eroshenko (V.M.), Ershov (A.V.), (et al.), *4622*

transpiration cooling, cooling, film cooling, injection, Crawford (M.E.), Kays (W.M.), (et al.), *726*
- boundary layer (turbulent), friction (skin), roughness, spherical bodies, stanton number, velocity profiles, Ligrani (P.M.), Kays (W.M.), (et al.), *7824*

transport, airplanes, design (optimum), subsonic flow, Torenbeek (E.), *688*
- boltzmann equation, conductivity, neutrons, nuclear radiation, radiant interchange, Mennig (J.), Ozisik (M.N.), (et al.), *776*
- graph theory, optimization, Korchemkin (M.), *2167*
- boltzmann equation, neutrons, nuclear fusion, scattering, statistical mechanics, Inonu (E.), Tezcan (C.), *2778*
- boundary layer, cylindrical bodies, differential equations (partial), magneto fluid dynamics, Venkatachala (B.J.), Nath (G.), *2886*
- conveyors, pneumatic transport, two phase flow, Kraus (M.N.), *2982, book*
- algorithms, distribution systems, optimization, two-stage optimization, Stewart (T.J.), Ittmann (H.W.), *3212*
- electrostatic precipitators, particulate flow, Leonard (G.), Mitchner (M.), (et al.), *4821*
- two phase flow, unsteady flow, Staub (F.W.), *9875*
- algorithms, numerical methods, three dimensional flow, Pepper (D.W.), Baker (A.J.), *10693*
- multiphase flow, reactors, safety, Vezirogiu (T.N.), *10819*
- multiphase flow, slurries, suspensions, Bajura (R.A.) ed., *10820*
- particle size, pipes, slurries, two phase flow, Parzonka (W.), Kenchington (J.M.), (et al.), *10823*
- boltzmann equation, collision models, particles, unsteady flow, Genapol (B.D.), Boffi (V.C.), *11436*
- rarefied gases, sound propagation, transport phenomena, ultrasonics, Woods (L.C.), Troughton (H.), *11438*

transport mechanisms, salt dissolution, soils, stefan problem, Klykov (V.E.), Kulagin (V.L.), (et al.), *4466*
- flow reversal, heat transfer, transient effects, Morrison (F.A.) Jr., Griffiths (S.K.), *6766*
- thermal instability, thermal waves, thermodynamics (nonequilibrium), unsteady flow, Sieniutycz (S.), *8708*
- granular media, gravity, hoppers, Savage (S.B.), Sayed (M.), *8915*
- coagulation, drops, evaporation, mathematical models, Novikov (V.S.), *10646*

transport phenomena, unsteady state, Mancha (B.L.), Al-Ali (B.M.A.), *833*
- moisture, porous media, Faghri (M.), Eckert (E.R.G.), *951*
- heat transfer, mass transfer, Mujumdar (A.S.), Mashelkar (R.A.), *1735, book*
- dispersions, models, particle dynamics, Grossman (A.G.), *2850*
- containment, energy transport, plasma, theory, D'Ambrogio (E.), Tesserotto (M.), *3899*
- energy transport, laser plasma interaction, lateral stability, wires, Ehler (A.W.), Begay (F.), (et al.), *3900*
- rocks, storage, water pollution, Hohlfelder (J.J.), Hadley (G.R.), *4030*
- drag, external flow, heat transfer, viscoelastic fluids, Mashelkar (R.A.), Marrucci (G.), *5383*
- density, interferometry, laser plasma interaction, measurements (dynamic), Benattar (R.), Popovics (C.), *5683*
- multiphase flow, porous media, Vaziroglu (T.N.) ed., *5827, book*
- adsorption, dispersion, porous media, rocks, Satter (A.), Shum (Y.M.), (et al.), *5834*
- chemical reactions, deflagration, kinetic theory, nonlinear waves, Abouseif (G.E.), Toong (T.Y.), *6708*
- hydrodynamics, multicomponent flow, statistical mechanics, thermodynamics (nonequilibrium), Bashkirov (A.G.), *6747*
- diffusion, mathematical methods, mathematical models, Mikhailov (M.D.), Ozisik (M.N.), *6828*
- group theory, hilbert space, integro differential equations, mathematical methods, wiener-hopf technique, Van Der Mee (C.V.M.), *8118*
- containers, particulate flow, rotating shafts, Abouzeid (A.-Z.M.), Fuerstenau (D.W.), (et al.), *8917*
- film flow, liquid metals, magneto fluid dynamics, stabilization, Bashtovoi (V.G.), Denisenko (T.D.), (et al.), *9785*
- interfaces, jet boundaries, layered media, magneto fluid dynamics, Bashtovoi (V.G.), Krakov (M.S.), *9794*
- aquifers, groundwater, Sauty (J.-P.), *10675*
- rarefied gases, sound propagation, transport, ultrasonics, Woods (L.C.), Troughton (H.), *11438*
- fickian model, layered media, porous media, Matheron (G.), De Marsily (G.), *11776*
- magneto fluid dynamics, spherical bodies, stokes flow, two phase flow, Miroshnikov (V.A.), *11825*

transport properties, steam, thermal properties, thermodynamic properties, water, Straub (J.) eds., Scheffler (K.), *723, book*
- mixtures, thermal effects, viscosity, Dymond (J.H.), Young (K.J.), (et al.), *1658*
- thermal properties, thermodynamic properties, thermophysical properties, Cezairliyan (A.) ed., *3770, book*
- conservation laws, mixtures, thermal diffusion, Zamskii (B.N.), Rabinovich (G.D.), *4134*
- high pressure, thermophysical properties, viscosity, Bimboim (M.H.), Weiss (H.), *5520*
- thermal measurements, thermal properties, Abdel-Wahed (R.M.), Bligh (T.P.), (et al.), *5526*
- experimental methods, soils, thermal measurements, Abdel-Wahed (R.M.), Pfender (E.), (et al.), *5527*
- critical region, steam, viscosity, Basu (R.S.), Sengers (J.V.), *5529*
- thermodynamic properties, thermodynamics, Brey (J.J.), Cruz (J.L.), (et al.), *6750*
- conduction (heat), mathematical models, transient effects, variable thermal properties, Maewal (A.), *6799*
- fluids, high pressure, low temperature, molecular theory, Chung (T.H.), Lee (L.L.), (et al.), *7821*

transportation devices, magnetic levitation, magnetic stabilization, simulation, vehicles, Cherches (D.B.), *211*
- swept wings, vehicles, wing-in-ground vehicles, Ollila (R.G.), *1617*
- automatic control, design, magnetic levitation, magnetic stabilization, vehicles, Braivi (W.), *10082*

Trapezon (A.G.), beams (variable cross section), bending, dynamic analysis, vibration (free), *3356*

Treskovskii (V.D.), see Karpman (I.M.), *7737*

Travassos (R.), algorithms, boundary value problems, numerical methods, optimal control, Kaufman (H.), *9185*

travelling waves, acoustic waves, acoustics, shock waves, turbulence, Chou (K.H.), Lee (P.S.), (et al.), *903*
- biomechanics, gallstones, hydroelastic waves, organs, wave generation, wave interactions, Wu (Y.P.), Wong (G.R.), (et al.), *1045*
- diffraction, flow irregularities, gravity waves, Hunt (J.N.), Baddour (R.E.), *1590*
- disks, piezoelectric devices, Vovkodav (I.F.), Talatynova (E.K.), *6328*
- asymptotic behavior, diffusion, nonlinear analysis, phase plane, Fife (P.C.), Mcleod (J.B.), *7167*
- diffusion, periodic orbits, reaction kinetics, reaction-diffusion systems, Maginu (K.), *7168*
- reaction kinetics, stability theory, Bell (J.), *9634*
- strings, wave energy, Benumof (R.), *10136*
- one dimensional flow, porous media, saturation, Nakano (Y.), *10834*
- porous media, two phase flow, Nakano (Y.), *12065*

Traven (F.), finite element techniques, nonlinear materials, stiffness matrix, *9145*

Trebinski (R.), compressional waves, detonation (two phase), explosives, layered media, liquid gas mixture, slurries, Trzcinski (W.), (et al.), *1595*

Treia (M.), coal, heat transfer, multiphase flow, prediction, slurries, *7962*
- condensation (dropwise), drops, external flow, film flow, laminar flow, mist flow, *9692*
- heat transfer, laminar flow, mass transfer, mist flow, plates, Kowalski (J.), *10852*

Trenev (M.G.), see Omelchenko (K.G.), *8774*

Trepp (C.), boiling, heat transfer, liquid nitrogen, nucleate boiling, pool boiling, V. Hoffmann (T.), *1670*

Tretyachenko (G.N.), bearing capacity, composite materials, plastics, shells (cylindrical), thermal effects, Dzyuba (V.S.), (et al.), *6265*
- combustion, environmental tests, materials properties, thermal fatigue, Kravchuk (L.V.), (et al.), *7474*

Trevena (D.H.), see Overton (G.D.N.), *12034*

Trevino (C.), boundary layer, catalyzed ignition, plates, Fernandez-Pello (A.C.), *11781*

Triantafyllidis (N.), see Abeyaratne (R.), *231*
- bifurcation, buckling (plastic), plates (orthotropic), wrinkling, Needleman (A.), *350*
- bending, plastic flow, plasticity, shear bands, Needleman (A.), (et al.), *10144*

Triantafyllou (M.S.), currents, irrotational flow, ship motion, slender bodies, *4101*

triaxial loading, fracture criteria, iron, Igaki (H.), Ikeda (K.), *1370*
- composite materials, data analysis, failure, reliability, Wetherhold (R.C.), *2245*
- fractographic tests, high temperature, low cycle fatigue, notch tests, steel, Marioff (R.H.), Johnson (R.L.), *2411*
- concrete, strain measurement, strength, stress analysis, Gerstle (K.H.), Ashchi (H.), (et al.), *2486*
- ductile fracture, steel, Beremin (F.M.), *5306*
- acoustic emission, ductile fracture, Shoji (T.), Khan (M.A.), (et al.), *5307*
- inclusions, iron, stress strain relationships, yield condition, Igaki (H.), Ikeda (K.), (et al.), *5325*
- fracture mechanics, stability theory, tensor methods, Volkov (S.D.), Dubrovine (G.I.), *10292*

triaxial tests, fracture angle, rocks, Seya (K.), *427*
- acoustic emission, rocks, yield condition, Gowd (T.N.), *433*
- elastic constants, sand, saturation, strength, Ricceri (G.), Sorenzo (M.), *3399*
- cyclic testing, soils, Kokusho (T.), *6391*
- bolts, rocks, roof bolts, strain gages, Haas (C.J.), *6405*

Tribillo (R.), see Syczewski (M.), *9125*

tribology, internal combustion engines, piston rings, Furuhama (S.), Hirume (M.), (et al.), *5650*
- abrasion, finishing, grinding, materials processing, Kunz (P.), *6411*
- energy conservation, friction, lubrication, wear, Jost (H.P.), Schofield (J.), *9980*
- biological joints, friction, prosthetic devices, wear, Dumbleton (J.H.), *10882*

Tricamo (S.J.), balancing, four bar linkage, kinematics, kinetics, mechanisms (planes), Lowen (G.G.), *8475*
- balancing, four bar linkage, linkages, mechanisms (planes), Lowen (G.G.), *9478*

Trifunac (M.D.), see Dravinski (M.), *5864*

Trimble (R.H.), finite difference methods, mathematical models, reservoirs, three dimensional formulation, wells, Mcdonald (A.E.), *10059*

Trinker (F.H.), see Tabaczynski (R.J.), *10700*

Tripathi (P.K.), see Kumar (S.), *3957*

Trischka (J.W.), atmospheric circulation, vortex shedding, vortices, *5931*

Trivailo (P.M.), see Platonov (A.D.), *8134*

Trivett (D.H.), echos, panels, reflection, ultrasonics, *11973*

Trnka (J.), see Brepta (R.), *7386*

Troesch (A.W.), asymptotic methods, free boundary, ship motion, slender bodies, *9006*
- see Beck (R.F.), *9012*
- heaving, pitching, rolling motion, ship motion, virtual mass, yawing, *10878*

Trofimchuk (A.N.), see Selmov (V.M.), *7039*

Trofimchuk (E.G.), see Zinchenko (V.I.), *10682*

Trofimov (A.I.), see Sedunov (E.V.), *4290*

Trofimov (N.G.), see Kravchenko (B.A.), *5801*

Trofimov (V.V.), fatigue, residual stresses, surface effect, work hardening, Radeeva (E.N.), *7293*

Trogdon (S.A.), jets, laminar flow, stick-slip, swell, velocity profiles, Joseph (D.D.), *6660*

Trollope (D.H.), discontinuities, discrete systems, granular media, wedges, Burman (B.C.), *11330*

Trombski (M.), plates (annular), structural stability, thermoelasticity (transient), Wojciech (S.), *930*

Trommer (W.), see Scheithe (W.), *3389*
Trompette (P.), see Quesu (J.P.), *1425*
• see Boyer (J.C.), *6171*
Tropper (R.), see Oosterbroek (M.), *2602*
Troshchenko (V.T.), cyclic loading, fracture mechanics, fracture toughness, steel, Prokopenko (A.V.), (et al.), *2421*
• beams, bending, cyclic loading, residual stresses, strain measurement, Zhabko (N.I.), *4512*
• biaxial loading, fatigue, fracture, stochastic systems, Sosnovskii (L.A.), *7485*
• cyclic loading, fracture, stochastics, Sosnovskii (L.A.), *7537*
• see Pisarenko (G.S.), *8213*
• crack growth, cyclic testing, fracture toughness, steel, Pokrovskii (V.V.), (et al.), *9431*
Troshin (V.G.), see Kolesnik (I.A.), *4372*
Troth (D.L.), see Novick (A.S.), *10712*
Trotsenko (V.V.), see Yampolskiy (L.S.), *2191*
Troughton (H.), see Woods (L.C.), *11438*
Troutman (B.M.), particle size, particles, sediment transport, stochastics, streams, *6965*
• see Nordin (C.F.) Jr., *10673*
Trubitsin (O.N.), see Evlanov (L.G.), *4309*
Trubitsyn (A.P.), density boundaries, earth, elastic behavior, stress analysis, Karasev (A.A.), *8007*
Trubitsyn (V.P.), compressibility, earth, phase changes, thermal expansion, *964*
• convection, earth, mantle, Vasilyev (P.P.), (et al.), *5882*
• hydrostatics, tides, *5910*
trucks, aerodynamics, drag coefficient, spoilers, vehicles, wind tunnels, Menneron (J.-C.), *3732*
• dynamic properties, measurements (dynamic), Krisper (G.), Reichweger (J.), (et al.), *4145*
• cranes, structural stability, Kato (Y.), Ito (H.), *6545*
• design (optimum), drag, geometrical properties, Garry (K.P.), *10607*
Truesdell (C.), clausius-planck inequality, continuum mechanics, thermodynamic functions, thermodynamics, *11757*
Trujillo (D.M.), dynamic analysis, stability theory, vibration (nonlinear), *10188*
Truman (C.R.), see Florschuetz (L.W.), *762*
Trunzo (R.), noise, rotors, turbines, turbulence, Lakshminarayana (B.), (et al.), *4839*
Truss (R.W.), fracture, notch tests, polymers, torsion, yield condition, Duckett (R.A.), (et al.), *7564*
trusses, buckling, combined loading, lattices, Holzer (S.M.), Plaut (R.H.), (et al.), *341*
• design (optimum), monte carlo analysis, Jackiewicz (M.), *506*
• design (optimum), imperfections, Rosen (A.), Schmit (L.A.) Jr., *507*
• design (optimum), pareto optima, Carmichael (D.G.), *1427*
• design (minimum weight), shape factors, steel, Spillers (W.R.), Kountouris (G.E.), *1429*
• buckling, ductility, force limiting devices, Hanaor (A.), Schmidt (L.C.), *1448*
• antennas, space vehicle structures, Bush (H.G.), Heard (W.L.) Jr., *1461*
• shear transfer, torsion, Schmidt (L.C.), *2537*
• collapse, structural analysis, ultimate strength, Schmidt (L.C.), Morgan (P.R.), (et al.), *3550*
• lattices, minimization, structural optimization, Bauer (J.), Gutkowski (W.), (et al.), *4522*
• elastoplasticity, uniqueness, White (D.L.), Hodge (P.G.) Jr., *4541*
• design (optimum), optimization, tubes, Felton (L.P.), Fuchs (M.B.), *5343*
• design (minimum weight), Lagache (J.-M.), *5346*
• constraints, optimization, penalty function, thermal loading, Bellagamba (L.), Yang (T.Y.), *6503*
• design (optimum), minimization, Lagache (J.-M.), *6509*
• design (optimum), linear programming, Kirsch (U.), *6512*
• collapse, imperfections, rods, Badala (A.), Marinetti (A.), (et al.), *7353*
• design (minimum weight), Fuchs (M.B.), *7590*
• convex programming, design (minimum weight), shape factors, Svanberg (K.), *7593*
• design (optimum), move limits, Fuchs (M.B.), *7595*
• optimization, shape factors, Saka (M.P.), *7598*
• design (optimum), Fuchs (M.B.), *8442*
• failure, matrix methods, probability theory, reliability analysis, Murotsu (Y.), Okada (H.), (et al.), *8448*
• design (minimum weight), design (optimum), optimization, Somekh (E.), Kirsch (U.), *9439*
• cables, optimization, Braga (F.), D'Asdia (P.), *9443*
• buckling (nonlinear), columns, elastoplasticity, imperfection sensitivity, Byskov (E.), *10167*
• constraints, design (minimum weight), optimization, Levy (R.), Perzynski (W.), *10342*
• design (minimum weight), Yates (D.F.), Templeman (A.B.), (et al.), *10345*
Trzcinski (W.), see Trebinski (R.), *1595*
Trzesowski (A.), diffusion, inclusions, metals, nonhomogeneous media, *4138*
Tsabek (L.K.), absorption, mixed flow, porous media, *7974*
Tsach (U.), bending, finite element techniques, interpolation, locking, matrix methods, mindlin plates, plates, shells, *2070*
Tsai (N.T.), see Browne (A.L.) eds., *1454, book*
Tsai (S.-D.), composite materials, residual stresses, x ray techniques, Mahulikar (D.), (et al.), *9255*
Tsai (S.-T.), drag, mechanical properties, slurries, spherical bodies, *12018*
Tsai (Y.C.), cams, design, kinematics, robotics, synthesis, Soni (A.H.), *8479*
Tsai (Y.M.), dynamic fracture, fracture, plastics, plates, polymethyl-methacrylate, strength, Chen (Y.T.), *4499*
• computing techniques, crack propagation, viscoelasticity, *8412*
Tsakalakos (T.), anisotropic media, nonhomogeneous media, phase changes, strain energy, *8091*
Tsakonas (S.), see Kim (C.H.), *9014*
Tsamasphyros (G.), collocation, convergence, numerical methods, singular integral equations, Theocaris (P.S.), *45*
• convergence, integration, singular integral equations, Theocaris (P.S.), *2052*
Tsamasphyros (G.J.), boundary value problems, differential equations (partial), elastic foundations, strips, Theocaris (P.S.), *1186*
Tsangaris (S.), calibration, electromagnetic loading, flow measurement, meters, velocity profiles, Leiter (E.), *10535*
Tsareva (T.I.), see Kuzminskaya (G.G.), *5940*
Tschegg (E.), aluminum alloys, cracks, fatigue, high cycle fatigue, ultrasonics, Stanzl (S.), *7473*
Tschierske (N.), clay, clay hills, flow, subsidence, *7443*
Tschoke (H.), dynamic testing, internal combustion engines, measurements (dynamic), noise, *4741*
Tse (E.), see Arbel (A.), *100*
• see Arbel (A.), *2084*
Tsebers (A.O.), liquid metals, magneto fluid dynamics, stability theory, theory, thin films, Maiorov (M.M.), *9792*
• electro fluid dynamics, elliptical bodies, particles, stability theory, suspensions, *9796*
• bubble dynamics, experimental results, interfaces, magneto fluid dynamics, stability theory, Maiorov (M.M.), *11823*
Tseng (A.A.), crack opening displacement, finite element techniques, stress intensity factor, three dimensional formulation, *90*
• finite element techniques, fracture mechanics, stress intensity factor, three dimensional formulation, torsion, wedges, Berry (J.T.), *3477*
Tsicnias (T.G.), buildings, coupled buildings, seismic loading, torsion, vibration, Hutchinson (G.L.), *10650*
Tsirel (V.S.), see Skutskin (M.A.), *9916*
Tsirulskiy (A.V.), see Fedorova (N.V.), *5876*
Tsoi (N.G.), mine shafts, mines, pipes, reinforced bodies, stress analysis, thin walled structures, Kolesnikov (A.V.), (et al.), *7621*
Tsoi (P.A.), dynamic properties, high temperature, hopkinson bar, metals, shock waves, Novikov (S.A.), (et al.), *8890*
Tsolkovskii (T.I.), ethylene, mixtures, propylene, self ignition, Mulyava (M.P.), (et al.), *10696*
Tsopa (M.P.), dynamic analysis, gyrodynamics, hamiltonian equations, kinematics, *3088*
Tsubaki (T.), see Bazant (Z.P.), *1334*
• see Bazant (Z.P.), *2519*
• see Bazant (Z.P.), *6269*
Tsuchida (E.), see Fujita (T.), *1177*
• see Fujita (T.), *3235*
Tsuchiya (M.), earthquake effects, lifeline systems, reliability analysis, Shibata (H.), *1885*
Tsuda (O.), see Mizuta (A.), *1379*
Tsuda (S.), composite structures, reinforced bodies, rotating disks, Shiratori (E.), (et al.), *5129*
Tsuda (Y.), see Tamura (H.), *8474*
Tsui (C.C.), see Tsui (Y.T.), *4752*
Tsui (Y.T.), aerodynamic interference, cylindrical bodies, flutter, wakes, Tsui (C.C.), *4752*
Tsujimoto (T.), see Nakagawa (H.), *3904*
Tsujimoto (Y.), see Imaichi (K.), *10790*
Tsujino (T.), blood, bubble dynamics, oscillatory flow, pressure change, Shima (A.), *7119*
Tsukamoto (T.), see Miyoshi (M.), *6390*
Tsukijihara (M.), see Wada (S.), *3045*
Tsukizoe (T.), see Ohmae (N.), *7089*
tsunami, finite element techniques, harbors, nonlinear waves, shallow water, Lapelletier (T.G.), *6609*
• bottom irregularities, internal waves, roughness, stratification, surface waves, Yermakov (S.A.), Pelinovskiy (Ye.N.), *8962*
tsunamis generation, computing techniques, ocean bed, seismic waves, upthrust, Lee (J.-J.), Chang (J.-J.), *974*
• hydrostatics, ocean waves, oceanography, Zhak (V.M.), Kulikov (E.A.), *1892*
• modeling, Ward (S.N.), *4850*
• modeling, Ward (S.N.), *5897*
• deformation, ocean bed, Voyt (S.S.), Lebedev (A.N.), (et al.), *10854*
Tsurilskiy (A.V.), see Nikonova (F.I.), *5879*
Tsurkov (V.I.), elliptic equations, iterative methods, optimization, *10025*
Tsurui (A.), crack growth, fatigue, probabilistic design, Igarashi (A.), *2415*
Tsuruno (S.), convection, fluid injection, heat transfer (combined modes), injection, plates (vertical), Iguchi (I.), *9697*

Tsushima (N.), see Maeda (K.), *2410*
Tsuzuki (M.), see Yokoyama (T.), *4446*
Tsvelodub (O.Yu.), film flow, nonlinear analysis, solitary waves, surface waves, *7762*
Tsvilyuk (I.S.), creep, data analysis, data extrapolation, refractories, Baumshtein (M.V.), *3254*
Tsybenko (A.S.), elasticity (nonhomogeneous), finite element methods, plates (nonhomogeneous), variational methods, Vashchenko (N.G.), (et al.), *3250*
Tsybizov (Yu.I.), geometrical properties, nozzles, reversers, thrust, Salmanova (N.G.), *5669*
Tsybulenko (E.V.), see Nikitenko (N.I.), *2829*
Tsygankova (L.A.), boundary value problems, linear systems, optimization, regulator problem, stability theory, *4253*
Tsyganovskii (N.S.), see Martynyuk (D.I.), *4154*
Tsynkova (O.E.), see Tokareva (N.A.), *5842*
Tsypkin (A.G.), see Egorushkin (S.A.), *1578*
Tsypkin (Y.Z.), algorithms, convergence, identification, iterative methods, linear systems, Avedyan (E.D.), (et al.), *11098*
Tsypkin (Ya.Z.), see Avedyan (E.D.), *190*
• see Polyak (B.T.), *4325*
Tsypulev (Yu.V.), see Polyakov (A.F.), *9606*
Tsyrulnikov (I.M.), see Buevich (Yu.A., *7010*
tube bundles, molecular beams, rarefied gases, Barashkin (S.T.), Neudachin (I.G.), (et al.), *591*
• convection (free), heat exchangers (crossflow), heat transfer, mass transfer, El-Riedy (M.K.), *728*
• axial flow, heat transfer, Seale (W.J.), *736*
• convection (free), critical heat flux, Fokin (B.S.), Goldberg (Ye.N.), *749*
• computer programming, heat transfer (combined modes), nuclear reactors, slug flow, Yeung (M.R.), Wolf (L.), *789*
• boiling, nucleate boiling, transition boiling, Gavrilin (A.I.), *1672*
• damping, vibration (flow induced), virtual mass, Weaver (D.S.), El-Kashlan (M.), *2712*
• condensers, mass transfer, porous surfaces, Aly (S.), Cunningham (J.), *2857*
• acoustic waves, cavities, eigenvalues, resonance, Planchard (J.), *2948*
• creep buckling, experimental methods, vibration (flow induced), Weaver (D.S.), El-Kashlan (M.), *3715*
• crossflow, drag coefficient, virtual mass, Chakrabarti (S.K.), *3716*
• condensers, heat exchangers, thermal loading, Schrey (H.-G.), Kern (J.), *3840*
• crossflow, damping, Chen (S.S.), Jendrzejczyk (J.A.), *4662*
• condensers, heat exchanger (folded-tube), heat exchangers, stratified flow, Pandolfini (P.P.), Dugger (G.L.), (et al.), *4716*
• extended surfaces, fins, heat exchangers, pressure drop, Rabas (T.J.), Eckels (P.W.), (et al.), *4719*
• filtration, laminar flow, porous media, resistance, Kolodziej (J.A.), *5437*
• heat exchangers, two phase flow, vibration (flow induced), vibration (forced), Heilker (W.J.), Vincent (R.Q.), *6289*
• cylindrical bodies, fluid-structure interaction, submerged bodies, Westermo (B.D.), *6703*
• crossflow, spectra, vortex shedding, Katinas (V.I.), Markevicius (A.A.), (et al.), *6706*
• annular flow, convection (forced), cooling, critical heat flux, Katto (Y.), *7833*
• axial flow, density, fluid-structure interaction, vibration (flow induced), Paidoussis (M.P.), Besancon (P.), *8624*
• boiling, convection (free), critical heat flux, porous walls, Fokin (B.S.), Goldberg (E.N.), *8694*
• jets, nuclear reactors, pipe flow, Krebs (L.), Bremhorst (K.), (et al.), *8725*
• fluid-structure interaction, heat transfer (combined modes), nuclear reactors, thermal effects, Bennett (J.G.), Ju (F.), *8747*
• augmentation, extended surfaces, fins, turbulent flow, Carnavos (T.C.), *8758*
• interaction, two phase flow, Coeffe (Y.), Todreas (N.), *8900*
• cylindrical bodies, damping, heat exchangers, Chen (S.-S.), *10490*
• condensation, critical flow, heat exchangers (crossflow), Rabas (T.J.), *10578*
• convection (free), heat transfer, laminar flow, Magallon (D.), *10587*
• heat exchangers, heat exchangers (rod baffle), vibration isolation, Smyth (R.), *10616*
• condensation, convection, heat transfer, turbulent flow, Kutateladze (S.S.), Gogonin (I.I.), (et al.), *10622*
• condensation, freezing, heat exchangers, pressure drop, Berg (W.F.), Berg (J.L.), *10626*
• crossflow, elastic behavior, vibration (flow induced), Tangemann (H.), *10766*
• crossflow, statistical design, vibration (flow induced), viscous flow, Katinas (V.I.), Lukosevicius (K.K.), (et al.), *10767*
• channel flow, internal flow, Aly (A.M.M.), *10824*
• fretting, heat exchangers, vibration (flow induced), Ko (P.L.), Rogers (R.J.), *11624*
• acoustic loading, oscillating bodies, Lin (W.H.), *11641*
• crossflow, dynamic stability, vibration (flow induced), Chen (S.S.), Jendrzejczyk (J.A.), *11647*
• seismic loading, submerged bodies, vibration, Shinohara (Y.), Shimogo (T.), *11653*
• crossflow, dynamic stability, fluid-structure interaction, vibration (flow induced), Tanaka (H.), Takahara (S.), *11655*
• augmentation, heat exchangers, heat transfer, viscous effects, Dzyubenko (B.V.), levlev (V.M.), *11768*
• dispersed flow, hydrodynamics, rods, two phase flow, Kroshilin (A.E.), Kroshilin (V.E.), (et al.), *12028*
tube sheets, prediction, pressure drop, two phase flow, Ishihara (K.), Palen (J.W.), (et al.), *1849*
• mixtures, pressure drop, two phase flow, Grant (I.D.R.), Chisholm (D.), *4021*
tubes, drawing, plastic flow, Durban (D.), *276*
• asymptotic behavior, layered media, shells, Widera (G.E.O.), Johnson (M.W.), (et al.), *289*
• bending, curved tubes, finite pure bending, large displacement, shells (nonhomogeneous), Reissner (E.), *293*
• damping, dynamic response, two phase flow, virtual mass, Carlucci (L.N.), *391*
• boiling, heat transfer, Andrizhiyevskiy (A.A.), Dolzhenkova (G.G.), (et al.), *805*
• choked flow, discharges, pipes, Tikhonenko (L.K.), Kevorkov (L.R.), (et al.), *941*
• bending, bends, pipes, shells (cylindrical), Kitching (R.), Zarrabi (K.), (et al.), *1241*
• beam columns, postbuckling behavior, Supple (W.J.), Collins (I.), *1246*
• beam columns, beams (thin section), collapse, Graves Smith (T.R.), Sridharan (S.), *1248*
• dynamic analysis, vibration (forced), Ertepinar (A.), Gurkok (A.), *1259*
• dynamic response, elastodynamics, hyperelastic materials, vibration (forced), vibration (free), Rogers (C.), Baker (J.A.), *1262*
• dynamic plasticity, radial loading, Nakazawa (Y.), Yaji (S.), (et al.), *1302*
• joints, offshore structures, photoelasticity, Fessler (H.), Little (W.J.G.), *1390*
• elastic constants, fibers, graphite, Bauchau (O.A.), *1402*
• boilers, critical heat flux, dryout, helical flow, pipe flow, pressure drop, two phase flow, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
• condensation (filmwise), heat transfer, Volodin (V.I.), Mikhalevich (A.A.), (et al.), *1725*
• catalyzed ignition, combustion, reactors, Harrison (B.K.), Ernst (W.R.), *1743*
• elliptical bodies, magneto fluid dynamics, porous media, pressure gradient, Gupta (G.D.), *1773*
• liquid gas mixture, two phase flow, Wallis (G.B.), Karlin (A.S.), (et al.), *1843*
• helical flow, liquid gas mixture, two phase flow, Whalley (P.B.), *1845*
• liquid gas mixture, transition, two phase flow, Taitel (Y.), Bornea (D.), (et al.), *1848*
• heat transfer, two phase flow, Nejat (Z.), *1855*
• incompressible flow, laminar flow, noncircular pipes, Lal (K.), *2601*
• boundary layer, nonlinear waves, Keller (J.J.), *2722*
• condensation, fins, heat exchangers, Rifert (V.G.), *2943*
• chemical reactions, dielectrics, electro fluid dynamics, liquids, Pribylov (V.N.), Chernyi (L.T.), *2979*
• large displacement, thin walled structures, viscoplasticity, Murase (K.), Nishimura (T.), *3291*
• coatings, damping, dynamic response, vibration (free), Vinogradov (B.D.), Chernoberovskii (V.V.), *3388*
• axial loading, damage, imperfections, offshore structures, Taby (J.), Moan (T.), (et al.), *3557*
• augmentation, convection, fins, heat transfer, laminar flow, Soliman (H.M.), Chau (T.S.), (et al.), *3786*
• drawing, thermal effects, thermoelasticity, wires, Asada (Y.), Mori (K.-I.), (et al.), *4004*
• counterflow, two phase flow, Kalb (C.E.), Smith (J.K.) Jr., *4012*
• turbulent flow, two phase flow, Elin (N.N.), Klapchuk (O.V.), *4013*
• explosive forming, materials processing, sheet metal, Berman (I.), Schroeder (J.W.), *4473*
• cylindrical bodies, heat transfer, laminar flow, rotating cylinders, Woods (J.L.), Morris (W.D.), *4711*
• design (minimum weight), laminates, multilayer, optimization, Doroginin (V.V.), *5164*
• coatings, damping, experimental mechanics, vibration, Zainetdinova (R.Z.), Naumkina (N.I.), (et al.), *5194*
• design (optimum), optimization, trusses, Felton (L.P.), Fuchs (M.B.), *5343*
• combustion, detonation, reaction kinetics, shock waves, Gendugov (V.M.), *5630*
• fluidized beds, heat transfer, Tabatabaie-Farashahi (M.), Upadhyay (S.N.), (et al.), *5852*
• composite pressure vessels, hose, hydraulics, pressurized pipes, Entwistle (K.M.), *6205*
• bending, buckling (plastic), elastoplasticity, pressurized pipes, Fabian (O.), *6256*
• dynamic response, viscoelastic waves, Moodie (T.B.), Haddow (J.B.), (et al.), *6339*
• bond number, critical heat flux, pipe flow, Nejat (Z.), Mottaghian (R.), *6774*
• conduction (heat), cylindrical bodies, linear theory, materials possessing memory, Fetecau (C.), *6797*
• dispersion, fast fourier transform, pressure change, waves, Moodie (T.B.), Haddow (J.B.), *6913*
• deposition, entrance region, suspensions, Chen (R.Y.), Gelber (M.W.), *6957*
• creep, experimental results, tensor methods, Anisimowicz (M.), Sawczuk (A.), *7275*
• convection, friction (skin), heat transfer, reynolds number (critical), viscous flow, Addiesse (A.J.), *7671*

- convection, dispersed flow, drops, entrance region, heat transfer, two phase flow, Rane (A.G.), Yao (S.-C.), *7825*
- boiling, critical heat flux, film cooling, film flow, Ueda (T.), Isayama (Y.), *7832*
- condensation, mass transfer, multicomponent flow, Webb (D.R.), Sardesai (R.G.), *7870*
- detonation, explosive loading, Mogilev (V.A.), Ivanov (A.G.), (et al.), *8346*
- annular flow, condensation (filmwise), tubes (horizontal), Nishiyama (E.), *8699*
- buckling (local), buckling (plastic), plastic flow, shear spinning, spinning bodies, Gur (M.), Tirosh (J.), *9295*
- piercing, punch problems, Johnson (W.), Reid (S.R.), (et al.), *9429*
- circulation, convection, steam gas power plants, thermal instability, thermal waves, Unal (H.C.), *9705*
- compression, elastomers, fibers, material testing, Farris (R.), Filippov (A.), *10324*
- anisotropic structures, axial loading, pressure, reinforced bodies, Highton (J.), Soden (P.D.W.), *10325*
- film flow, heat transfer, integral methods, laminar flow, nuclear reactors, Rogers (J.T.), *10565*
- crossflow, darcy flow, freezing, packed beds, porous media, Okada (M.), *10597*
- hydraulics, rewetting, unsteady flow, Chan (A.M.C.), Banerjee (S.), *10825*
- free jets, shape, Dvoinishnikov (V.A.), Laryushkin (M.A.), *11524*
- radiation, resonance, sound, Zuckerwar (A.J.), Meredith (R.W.), *11975*
- bubble dynamics, fluidized beds, particle dynamics, potential flow, unsteady flow, Adams (R.L.), *12036*
- drops, drying, two phase flow, Madejski (J.), *12037*

Tubin (A.A.), non newtonian flow, power law fluids, separation, thermal diffusion, Sorokin (Yu.S.), *822*

Tuck (E.O.), see Mei (C.C.), *4967*

- fredholm equations, linear theory, planing surfaces, surface tension, *7076*
- airfoil theory, flow reversal, heart, moment coefficient, optimization, valves, *9513*
- annular flow, exit, gravity, jets, nozzles, *11484*

Tudor (A.), film thickness, gears, oil films, roughness, surfaces, *3050*

Tudose (C.), acoustics, noise, noise abatement, Culea (D.), (et al.), *1819*

Tuft (D.B.), energy, explosive loading, finite element techniques, penetration, Murphy (M.J.), *1312*

Tugai (O.V.), see Pochtman (Yu.M.), *11324*

Tugnait (J.K.), adaptive systems, algorithms, estimation, *2136*

- adaptive systems, estimation, optimization, Haddad (A.H.), *4320*

Tulapurkara (E.G.), axisymmetric flow, contraction, nozzles, wind tunnels, *2768*

Tulczyjew (W.M.), see Benenti (S.), *1*

Tumanov (Yu.A.), dynamic response, impulsive loading, nonlinear systems, Lavrov (V.Yu.), (et al.), *11332*

Tunc (C.Y.), see Mas (J.R.), *3791*

Tung (C.C.), earthquake effects, hydrodynamic pressure, ocean bed, submerged bodies, tanks, *3011*

- drag, offshore structures, random loading, wave loads, *6538*

Tung (H.), see Tuteur (F.B.), *1646*

Tung (T.C.), eddies, nonlinear theory, spectra, turbulence (isotropic), turbulence (structure), vortex rings, Adrian (R.J.), *2687*

Tung (Y.-K.), design criteria, hydraulic structures, probabilistic design, risk, Mays (L.W.), *4530*

Tunitskii (N.N.), see Druzhinin (A.A.), *10654*

tunneling, rocks, Nazir (C.P.), *5269*

- freezing, soils, Miyoshi (M.), Tsukamoto (T.), (et al.), *6390*

tunnels, soil grouting, soil stability, Tan (D.Y.), Clough (G.W.), *1333*

- excavation, mining, numerical methods, stress analysis, Diering (J.A.C.), *1335*
- cavitation flow, discharges, gates, hydroelectric power, vibration (flow induced), Giezendanner (W.), Henry (P.), *2582*
- compressible flow, trains (railroad), unsteady flow, velocity profiles, Woods (W.A.), Pope (C.W.), *3629*
- arches, design, structural support, Matsumoto (Y.), Sakamoto (S.), (et al.), *4538*
- drag, trains (railroad), turbulent flow, Sud (I.), Chaddock (J.B.), *5497*
- clay, excavation, soil mechanics, structural stability, Davis (E.H.), Gunn (M.J.), (et al.), *6526*
- gravity, half space, holes, stress analysis, Spencer (S.E.), Sinclair (G.B.), *7264*
- failure, holes, mining, plastic behavior, Kaczmarek (J.), *8155*
- cavities, elastoviscoplasticity, excavation, Nonaka (T.), *8199*
- elastoplasticity, inverse problems, rocks, Gioda (G.), Maier (G.), *9369*
- creep, deformation, rock mechanics, time dependence, Kaiser (P.K.), Morgenstern (N.R.), *10365*
- elastoplasticity, rock mechanics, strain softening, structural support, Tanimoto (C.), Hata (S.), *10366*
- groundwater, infiltration, leaks, unsteady flow, Bouvard (M.), Niquet (J.-J.), *10638*

Tuomala (M.), see Mikkola (M.J.), *11175*

Tupitsyn (V.S.), see Cheshechkin (Yu.D.), *1684*

- convection (free), heat sources, stratified flow, Cheshechkin (Yu.D.), *11514*

Tur (A.V.), see Moiseev (S.S.), *11544*

Turbe (N.), averaging, integro differential equations, nonlinear theory, viscoelasticity, *2015*

turbines, disks, endurance limit, thermal loading, Getsov (L.B.), Nigin (A.A.), (et al.), *516*

- alloys, crack initiation, crack propagation, cyclic testing, fatigue, high temperature, Cowles (B.A.), Sims (D.L.), (et al.), *2494*
- aerodynamic performance, cascades, endwall profiling, pressure distribution, Kopper (F.C.), Milano (R.), (et al.), *2655*
- blades, design, performance, Whitney (W.J.), Moffitt (T.P.), (et al.), *3742*
- finite element methods, stress analysis, wheels, Goiovin (O.A.), Matveev (A.P.), (et al.), *4384*
- damping, vibration (forced), Matveev (V.V.), *4407*
- fatigue, shafts, stress concentration, Jackson (M.C.), Umans (S.D.), *4483*
- bearings (tilted pad), helium, labyrinth seals, Franck (D.), Noack (G.), (et al.), *4556*
- aerodynamic performance, annuli, conical flow, diffusers, Kruse (H.), Quest (J.), *4629*
- airfoil characteristics, blades, cascades, two dimensional flow, Pimsner (V.), Baran (N.), *4740*
- noise, rotors, turbulence, Trunzo (R.), Lakshminarayana (B.), (et al.), *4809*
- blades, spectral analysis, vibration, Egorov (I.V.), *5215*
- creep, cyclic testing, fatigue, low cycle fatigue, Kloos (K.H.), Granacher (J.), (et al.), *5282*
- blades, cavities, hardening, Kravchenko (B.A.), Trofimov (N.G.), (et al.), *5801*
- failure, finite element techniques, nonlinear analysis, nonlinear materials, rotors, Nyssen (C.), *6118*
- rotors, stress analysis, thermal stresses, Strunkin (V.A.), Sagadeev (R.G.), (et al.), *6950*
- blades, finite element methods, friction (sliding), vibration (forced), vibration (free), Zmitrowicz (A.), *7397*
- blades, experimental mechanics, frequencies, rotating bodies, vibration (free), Beckmann (J.), Wachter (J.), *7399*
- blades, vibration (self excited), Borishanskii (K.N.), Naumov (A.V.), *8312*
- blades, compliance, cutting, Mamaev (V.S.), Dmitriev (S.N.), (et al.), *8364*
- blades, impact, strain rate, Gordon (J.T.) Jr., Reaugh (J.E.), *10244*
- film cooling, rotors, Dring (R.P.), Blair (M.F.), (et al.), *10687*

turbofan engines, control, design, jet engines, multivariable systems, Taiwo (O.), *2179*

- jet engines, noise, noise abatement, Fujii (S.), Nishiwaki (H.), (et al.), *3961*
- design (optimum), ducted fans, gas turbines, Kozhevnikov (Yu.V.), Borovik (V.O.), (et al.), *5660*
- afterburners, injection, oxygen, Fishbein (B.D.), *5662*
- aerodynamic interference, axial fans, noise (aerodynamic), wakes, Shaw (L.M.), Glaser (F.W.), *7894*
- internal flow, pressure distribution, temperature, Braithwaite (W.M.), Soeder (R.H.), *10730*
- aeroelasticity, blades, flutter, Ford (R.A.J.), *10762*
- airplane performance, design, propulsion, stol, vtol, Glasgow (E.R.), Skarshaug (R.E.), *11742*

turbojet engines, noise, Zhvalov (V.P.), Zhukov (E.N.), (et al.), *2943*

- combustors, design, wind loads, Shou (Z.Q.), *3748*
- dimensional analysis, landing devices, Khabibullin (M.G.), Nesterov (E.D.), (et al.), *5661*
- airplane structures, noise (random), Magliozzi (B.), *10803*

turbomachinery, periodic problems, plates (circular), thermal stresses, viscoelastic materials, Raous (M.), *263*

- corners, turbulent flow, velocity measurement, Mojola (O.O.), *607*
- fluid mechanics, modeling, transient effects, Singh (R.), *698*
- fluid mechanics, modeling, transient effects, Singh (R.), *699*
- centrifugation, gases, thin wing theory, Sakurai (T.), *702*
- aerodynamics, centrifugal compressors, superchargers, Kyrtatos (N.), Watson (N.), *703*
- gyrodynamics, measurements (dynamic), pumps, Godde (E.), *709*
- cooling, heat transfer, impact jets, impingement cooling, jets, Hrycak (P.), *729*
- blades, creep, thermal fatigue, Peschel (W.), Schreieck (R.), *1835*
- cascades, fluid mechanics, potential flow, Keck (H.), *2077*
- dynamic analysis, vibration (forced), Sidorenko (M.K.), *2365*
- design, helium, nuclear reactors, power plants, Mcdonald (C.F.), Smith (M.J.), *2750*
- conformal mapping, mixed flow compressors, vorticity, Lewis (R.I.), Fairbairn (G.W.), *2754*
- laser doppler velocimeters, rotors, velocity measurement, Schodl (R.), *2766*
- blades, layered media, multilayer, porous surfaces, temperature, Lokai (V.I.), Zhulkov (V.V.), (et al.), *2822*
- bearings (journal), lubrication (hydrodynamic), rotating shafts, vibration, Ruddy (A.V.), Summers-Smith (D.), *3051*
- control, design, power generation, regulator problem, Taiwo (O.), *3217*
- blades, dynamic response, vibration (forced), vibration (random), Huang (W.-H.), *3368*
- control, vibration isolation, Scheithe (W.), Trommer (W.), *3389*
- compressible flow, design, incompressible flow, Balje (O.E.), *3739, book*
- blades, heat transfer, rotating fluids, similarity methods, simulation, Eckert (E.R.G.), *3802*
- blades, conformal mapping, potential flow, three dimensional flow, Agarwal (P.K.), Viktorov (G.V.), *4677*
- lasers, optical techniques, rotors, velocity measurement, Smart (A.E.), Wisler (D.C.), (et al.), *4687*

- boundary layer, modeling, reynolds number (high), wind tunnels, Blair (M.F.), Bailey (D.A.), (et al.), *4688*
- aerothermodynamics, elliptic equations, finite volume method, fluid mechanics, Dutoya (D.), Michard (P.-J.), *5014*
- cascades, compressible flow, three dimensional flow, transonic flow, Spurr (A.), *5412*
- blades, cooling, high pressure, Holland (M.J.), Thake (T.F.), *5560*
- cycles, helium, power generation, solar energy, Duban (P.), *5603*
- blades, composite structures, laminates, Gorlyshkin (V.T.), *6139*
- blades, design, lifting surfaces, mathematical models, propellers, Brockett (T.E.), *6738*
- dynamic effects, vibration (forced), Busse (L.), Heiberger (D.), *7405*
- finite element techniques, three dimensional flow, Haas (W.), Keck (H.), *7801*
- blades, heat transfer, rotating bodies, slots, Kogan (G.A.), Dergach (A.A.), *7842*
- coal, combustion products, particulate flow, three dimensional flow, trajectories, Beacher (B.), Tabakoff (W.), (et al.), *7889*
- bearings, dynamics, rotors, Fleming (D.P.), *8068*
- fans, hot wire, incompressible flow, rotors, wakes, Lakshminarayana (B.), Govindan (T.R.), (et al.), *8653*
- compressors, pumps, surge, Horvath (A.J.T.), *8654*
- centrifugal compressors, stalling, surge, Wachter (J.), Kohn (E.), (et al.), *8658*
- blades, incompressible flow, modeling, three dimensional flow, Buisine (D.), *8659*
- cavitation, modeling, vortices, Billet (M.L.), *8660*
- aerodynamic interference, blades, cascades, damping, oscillating bodies, separated flow, Kaminer (A.A.), Dunaev (A.V.), (et al.), *8833*
- boundary layer (turbulent), cascades, integral methods, rotors, Lakshminarayana (B.), Govindan (T.R.), *10449*
- axial flow, cascades, choked flow, subsonic flow, three dimensional flow, Horlock (J.H.), *10526*
- numerical methods, three dimensional flow, Kremenetskii (M.D.), Leonteva (N.V.), (et al.), *10534*
- axial compressors, laser doppler velocimeters, transonic flow, velocity profiles, Powell (J.A.), Strazisar (A.J.), (et al.), *10637*
- dynamic stresses, flow measurement, testing equipment, transducers, Krause (L.N.), Fralick (G.C.), *10731*
- bearings (journal), damping, vibration (forced), vibration isolation, Beskletnyi (M.E.), Igumentsev (E.A.), *11147*
- boundary layer (turbulent), rotating bodies, separation, three dimensional flow, Ugryumov (M.L.), *11551*

turbulence, channels, mixing layers, screens, wind, Kit (E.), Berent (E.), (et al.), *559*

- mathematical models, navier stokes equation, statistical theory, Foias (C.), Temam (R.), *641*
- navier stokes equation, turbulence (structure), Larisch (E.), *642*
- experimental results, mixing layers, turbulence (structure), Dimotakis (P.E.), Debussy (S.D.), (et al.), *643*
- experimental results, spectra, turbulence (geophysical), turbulence (structure), Newberger (P.A.), Caldwell (D.R.), *644*
- boundary layer, mesolayer, shear flow, turbulence model, Long (R.R.), Chen (T.-C.), *645*
- aerodynamics, boundary layer (three dimensional), numerical methods, wings, Humphreys (D.A.), *646*
- turbulence (correlations), turbulence model, Derksen (R.W.), Azad (R.S.), *647*
- axisymmetric flow, boundary layer (turbulent), hot wire, Adomaitis (E.I.), *649*
- duct flow, turbulence (structure), two dimensional flow, Rajagopalan (S.), Antonia (R.A.), *650*
- spectra, statistical theory, stratified flow, Sazontov (A.G.), *651*
- stratified flow, turbulence (geophysical), turbulent flow, Mellor (G.), Strub (P.T.), *652*
- injection, mixing, turbulent flow, Schetz (J.A.), *653, book*
- decay, grids, mixing, temperature, Sreenivasan (K.R.), Tavoularis (S.), (et al.), *654*
- boundary layer (turbulent), fluid injection, heat transfer, porous media, Mamonov (V.N.), *655*
- flow measurement, heat transfer, hot wire, Lecordier (J.C.), Petit (C.), (et al.), *656*
- flow measurement, shear flow, turbulent flow, velocity profiles, Harris (S.D.), Williamson (J.W.), (et al.), *660*
- acoustic waves, acoustics, shock waves, travelling waves, Chou (K.H.), Lee (P.S.), (et al.), *903*
- boundary layer, reynolds number, shape factors, transition, Wazzan (A.R.), Gazley (C.) Jr., (et al.), *1540*
- coherent structure, compressible flow, experimental results, jets, noise (aerodynamic), Armstrong (R.R.) Jr., *1580*
- finite difference methods, jets, turbulence model, Leschziner (M.A.), Rodi (W.), *1581*
- experimental results, jets, shear flow, suppression, Zaman (K.B.M.Q.), Hussain (A.K.M.F.), *1582*
- convection, pipe flow, spectra, turbulence (correlations), Mcconachie (P.J.), *1584*
- diffusion, mass transfer, Krishna (R.), *1585*
- diffusion, particle dynamics, statistical theory, turbulence model, Lamb (R.G.), *1586*
- flame propagation, flow obstructions, methane, Moen (I.O.), Donato (M.), (et al.), *1745*
- gravity waves, internal waves, ocean air interaction, ocean waves, surface waves, thermocline, turbulence (geophysical), Phillips (O.M.), *1888, book*
- bearings (journal), non newtonian flow, polymers, Fukayama (H.), Tanaka (M.), (et al.), *1938*
- boundary layer, pressure gradient, transition flow, Abu-Ghannam (B.J.), Shaw (R.), *2633*
- mixing layers, Voropayev (S.I.), Gavriilin (B.L.), (et al.), *2668*
- jets, temperature, Lau (J.C.), *2672*
- inhomogeneities, spectra, turbulence (correlations), turbulence model, Gurvich (A.S.), *2689*
- jets, turbulence (structure), turbulence model, Goldschmidt (V.W.), Young (M.F.), (et al.), *2690*
- closure, curvature, mixing layers, reynolds stresses, turbulence model, Gibson (M.M.), Rodi (W.), *2691*
- blunt bodies, fluctuations, pressure, surfaces, Durbin (P.A.), Hunt (J.C.R.), *2694*
- oscillatory flow, spectra, tides, Anwar (H.O.), Atkins (R.), *2695*
- diffusion, jets, stratified flow, Hofer (K.), Hutter (K.), *2696*
- diffusion, turbulence model, Shirakashi (M.), Tomita (Y.), *2697*
- heat transfer, turbulence model, turbulent flow, Lam (C.K.G.), Bremhorst (K.), *2700*
- measurements, sampling, Antonia (R.A.), *2701*
- jets, laser doppler velocimeters, three dimensional flow, Hjertager (B.H.), Magnussen (B.F.), *2765*
- laser doppler velocimeters, liquids, refraction, stratified flow, Mcdougall (T.J.), *2767*
- cylindrical bodies, liquid metals, magneto fluid dynamics, two dimensional flow, Alemany (A.), Moreau (R.), (et al.), *2893*
- aerodynamic excitation, eddies, jets, noise (aerodynamic), shear flow, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- air, energy dissipation, entrainment, hydraulic structures, Binder, Duport, (et al.), *3603*
- corners, subsonic flow, Arnal (D.), Cousteix (J.), *3647*
- bottom irregularities, channel flow, free boundary, particle fluid flow, Sumer (B.M.), Deigaard (R.), *4572*
- free shear layer, laminar flow, reynolds number, transition, Demetriades (A.), Ortwerth (P.J.), (et al.), *4605*
- afterbodies, pressure gradient, separation, trailing edge, Solignac (J.-L.), *4610*
- afterbodies, pressure gradient, separation, trailing edge, Solignac (J.-L.), *4611*
- diffusion, spectra, Moffatt (H.K.), *4643*
- closure, reynolds stresses, statistical theory, Yoshizawa (A.), *4644*
- boundary layer, pipe flow, turbulence model, Lam (C.K.G.), Bremhorst (K.), *4646*
- suppression, vortex rings, Vladimirov (V.A.), Lugovtsov (B.A.), (et al.), *4647*
- mathematical models, turbulence model, Legendre (R.), *4649*
- mixing layers, turbulence model, vortices, Kiya (M.), Arie (M.), (et al.), *4651*
- noise, rotors, turbines, Trunzo (R.), Lakshminarayana (B.), (et al.), *4909*
- arrays, imaging systems, ultrasonics, Sato (T.), Linzer (M.), (et al.), *4910*
- probability theory, reynolds number (high), stochastic processes, Barndorff-Nielsen (O.), *4986*
- mixing layers, reattachment, steps, turbulence (structure), Chandrsuda (C.), Bradshaw (P.), *5464*
- shear flow, swirl flow, turbulence model, Naot (D.), *5466*
- duct flow, heat transfer, turbulence model, Malik (M.R.), Pletcher (R.H.), *5467*
- channel flow, experimental results, turbulence (structure), Nakagawa (H.), Nezu (I.), (et al.), *5468*
- bubble dynamics, experimental results, reattachment, separated flow, separation, Hillier (R.), Cherry (N.J.), *5470*
- combustion (turbulent), lasers, stokes flow, thermal measurements, Eckbreth (A.C.), *5632*
- anisotropic media, magneto fluid dynamics, models, perturbation theory, Montgomery (D.), Turner (L.), *5679*
- sound propagation, underwater acoustics, Unni (S.), Kaufman (C.), *5741*
- turbulence model, two dimensional flow, Tatsumi (T.), Yanase (S.), *6679*
- spectra, turbulence model, Yanase (S.), Tatsumi (T.), *6680*
- turbulence (homogeneous), turbulence model, Tatsumi (T.), *6681*
- cascades, spectra, turbulence model, Gledzer (Ye.B.), Makarov (A.L.), *6682*
- pressure gradient, turbulence (structure), turbulent flow, Azad (R.S.), Hummel (R.H.), *6683*
- navier stokes equation, spectra, turbulence (structure), Deissler (R.G.), *6684*
- boundary layer, entrainment, hydrodynamic stability, Gad-El-Hak (M.), Blackwelder (R.F.), (et al.), *6686*
- mathematical models, turbulence model, turbulent flow, variational methods, Stern (M.E.), *6687*
- heat transfer, liquid metals, turbulence model, Grotzbach (G.), *6688*
- duct flow, experimental results, flow obstructions, heat transfer, turbulent flow, Sparrow (E.M.), Molki (M.), (et al.), *6689*
- mixing, turbulence model, Fournier (J.L.), Gence (J.N.), (et al.), *6690*
- generation, vorticity, Vishnyakov (A.A.), *6691*
- airplanes, fluidics, Taylor (D.L.), *6693*
- hot wire, reynolds stresses, De Grande (G.), Kool (P.), *6694*

- boundary layer (turbulent), length-scale, turbulence model, El-Hawary (M.A.), Nicoll (W.B.), *7749*
- coherent structure, jets, multiple scales, Mankbadi (R.), Liu (J.T.C.), *7752*
- free shear layer, jets, turbulence model, Ahmadi (G.), *7753*
- experimental methods, hot wire, Kukes (V.I.), Ufimtsev (A.A.), (et al.), *7755*
- cold wire, conduction (heat), hot wire, thermal measurements, Lecordier (J.C.), Petit (C.), (et al.), *7757*
- helical flow, inviscid fluid, modeling, Yamamoto (K.), Hosokawa (I.), *8610*
- closure, dispersion, statistical theory, Larcheveque (M.), Lesieur (M.), *8614*
- buoyancy, jets, plumes, Bruyatsku (E.V.), *8616*
- mathematical models, navier stokes equation, reynolds number (high), Deissler (R.G.), *8617*
- experimental methods, waterways, Griffith (O.F.) III, Grimwood (C.), *8618*
- grids, laser doppler velocimeters, turbulence (structure), Canedese (A.), Iannetta (S.), (et al.), *8619*
- compressible flow, contraction, velocity profiles, wind tunnels, Winter (K.G.), Boyd (C.), *8571*
- combustion (turbulent), explosions, heat transfer, ignition, Liu (V.C.), *8788*
- bearings (thrust), lubrication (hydrodynamic), lubrication (hydrostatic), Wilcock (D.F.), *9029*
- channels (closed), diffusers, ducts (variable area), stratified flow, Mehta (P.R.), *9502*
- boundary layer (three dimensional), cylindrical bodies, measurements, pressure gradient, Fernholz (H.H.), Vagt (J.-D.), *9563*
- shear flow, turbulence (anisotropic), turbulence model, Cambon (C.), Jeandel (D.), (et al.), *9604*
- axisymmetric flow, jets, turbulent mixing, Long (M.B.), Chu (B.T.), *9605*
- boundary layer (turbulent), experimental methods, turbulence (structure), Polyakov (A.F.), Tsypulev (Yu.V.), (et al.), *9606*
- channel flow, dispersion, shear flow, turbulence (transport), Durbin (P.A.), *9609*
- heat transfer, pipe flow, Ibrahim (M.B.), Walker (V.), *9611*
- closure, continuum mechanics, reynolds stresses, Speziale (C.G.), *9612*
- dimensional analysis, spectra, turbulence (isotropic), Szablewski (W.), *9613*
- diffusion, particle dynamics, turbulence (transport), Mailliat (A.), Duhamel (P.), *9614*
- numerical methods, turbulent flow, Zuber (I.), *9615*
- honeycomb structures, reduction, screens, turbulent flow, Scheiman (J.), Brooks (J.D.), *9616*
- hydrodynamic stability, temperature, turbulence (structure), velocity measurement, Antonia (R.A.), Chambers (A.J.), (et al.), *9617*
- adiabatic processes, two phase flow, viscosity, Van Der Welle (R.), *9676*
- empirical methods, turbulence model, viscosity, Movchan (V.T.), *10469*
- coherent structure, shear flow, sound flow interaction, turbulence (structure), Kleis (S.J.), Hussain (A.K.M.F.), (et al.), *10470*
- boundary layer, hydrodynamic stability, potential flow, Van Atta (C.W.), Sokolov (M.), (et al.), *10471*
- boundary layer (turbulent), convection (forced), heat transfer, shear flow, Thomas (L.C.), Ibrahim (M.B.), *10472*
- heat transfer, jets, mass transfer, turbulent flow, Mills (A.F.), Kim (S.), (et al.), *10473*
- grids, mixing layers, thermal diffusion, turbulent mixing, Larue (J.C.), Libby (P.A.), (et al.), *10474*
- diffusion, turbulence (geophysical), Mikhaylov (G.A.), Sabelfeld (K.K.), *10480*
- experimental methods, heat transfer, hot wire, Smits (A.J.), Perry (A.E.), *10481*
- axisymmetric flow, bodies of revolution, cavitation flow, sound generation, ultrasonics, Murai (H.), Ihara (A.), *10532*
- similarity methods, spectra, turbulence model, velocity profiles, Driscoll (R.J.), Kennedy (L.A.), *11542*
- compressible flow, spectra, vorticity, Moiseev (S.S.), Tur (A.V.), (et al.), *11544*
- buoyancy, spectra, stratified flow, Ogino (F.), Komori (S.), (et al.), *11550*
- blades, rotors, turbulence (structure), wakes, Lakshminarayana (B.), Reynolds (B.), *11553*
- aerosols, luminous energy, particulate damping, turbulence (geophysical), Kolosov (V.V.), Kuzikovskiy (A.V.), *11555*
- diffusion, particle dynamics, turbulence (geophysical), Middleton (J.F.), *11557*
- mass transfer, molecular diffusion, pipe flow, Von Alfthan (C.), Rantapuska (S.), *11558*

turbulence (anisotropic), shear flow, turbulence, turbulence model, Cambon (C.), Jeandel (D.), (et al.), *9604*

turbulence (correlations), turbulence, turbulence model, Derksen (R.W.), Azad (R.S.), *647*

- convection, pipe flow, spectra, turbulence, Mcconachie (P.J.), *1594*
- inhomogeneities, spectra, turbulence, turbulence model, Gurvich (A.S.), *2689*
- boundary layer, experimental results, time delay systems, Legendre (R.), *2693*

turbulence (free), two dimensional flow, wakes, Pal (S.), Raj (R.), *8597*

turbulence (freestream), boundary layer (turbulent), friction (skin), Prihoda (J.), *597*

- rotors, wakes, Hah (C.), Lakshminarayana (B.), *2663*
- boundary layer (thermal), boundary layer (turbulent), nozzles, turbulent flow, Bauer (K.), Straub (J.), (et al.), *2787*
- galloping, towers, wind loads, wind tunnels, Kwok (K.C.S.), Melbourne (W.H.), *3907*
- aerodynamic performance, diffusers, Hoffmann (J.A.), *5445*
- axial turbines, blades, cascades, heat transfer, Bayley (F.J.), Priddy (W.J.), *5504*
- bodies of revolution, cavitation inception, reynolds number, water tunnels, Murai (H.), Ihara (A.), *10397*
- honeycomb structures, wind tunnels, Wigeland (R.A.), Tan-Atichat (J.), *10540*
- film cooling, fluid injection, mass transfer, porous media, Mironov (B.P.), Lugovskiy (P.P.), (et al.), *11778*

turbulence (geophysical), experimental results, spectra, turbulence, turbulence (structure), Newberger (P.A.), Caldwell (D.R.), *644*

- stratified flow, turbulence, turbulent flow, Mellor (G.), Strub (P.T.), *652*
- reynolds number, turbulence (structure), Antonia (R.A.), Chambers (A.J.), *1583*
- gravity waves, internal waves, ocean air interaction, ocean waves, surface waves, thermocline, turbulence, Phillips (O.M.), *1898, book*
- boundary layer (atmospheric), energy dissipation, Tamopolskii (A.G.), Shnaidman (V.A.), *2959*
- buildings, wakes, Steely (S.L.) Jr., Frost (W.), *3707*
- aerosols, laser velocimeter, velocimeters, velocity measurement, wind, Matvienko (G.G.), Samokhvalov (I.V.), *4093*
- numerical methods, wind-wave interaction, Chalikov (D.V.), *4657*
- currents, ocean air interaction, oceanography, Nihoul (J.C.J.), *4852, book*
- bottom irregularities, eddies, spectra, Holloway (G.), *4876*
- acoustic waves, impedance, interface phenomena, jets, sound propagation, Daigle (G.A.), *5784*
- currents, dispersion, surface waves, water pollution, Ergin (A.), *5903*
- oceanography, turbulence (isotropic), Chigrakov (K.I.), *5923*
- mixing layers, oceanography, stratified flow, Kundu (P.K.), *5926*
- atmospheric circulation, jet streams, kelvin-helmholtz instability, Klostermeyer (J.), Ruster (R.), *5933*
- boundary layer (atmospheric), convection, mixing layers, Coulman (C.E.), *5944*
- boundary layer (atmospheric), dissipation, Fairall (C.W.), Markson (R.), (et al.), *5945*
- eddy diffusivity, heat transfer (atmospheric), radiation, Gay (C.), Thomas (G.E.), *5947*
- boundary layer (atmospheric), heat transfer (atmospheric), mass transfer, Reinking (R.F.), *5949*
- boundary layer (atmospheric), heat transfer (atmospheric), mass transfer, ocean air interaction, Pedersen (K.), Boyum (G.), *5951*
- microstructures, oceanography, thermocline, Gregg (M.C.), *7057*
- entrainment, heat transfer, mass transfer, mixing layers, oceanography, thermocline, Shapiro (G.I.), *7059*
- boundary layer (atmospheric), clouds, diffusion, shear flow, wind, Sikhirtsdze (G.I.), Yurchak (B.S.), *7061*
- balloons, boundary layer (atmospheric), Asimakopoulos (D.N.), Lalas (D.P.), (et al.), *7062*
- anemometers, boundary layer (atmospheric), velocimeters, velocity measurement, Wyngaard (J.C.), *7070*
- closure, sensitivity analysis, turbulent flow, Dwyer (H.A.), Peterson (T.), *7754*
- air pollution, boundary layer (atmospheric), plumes, smoke stacks, Ooms (G.), Mahieu (A.P.), *8028*
- boundary layer (atmospheric), shear flow, wind-wave interaction, Chao (S.P.), *8034*
- boundary layer (atmospheric), drag coefficient, friction coefficient, friction velocity, ocean air interaction, reynolds stresses, roughness, Wu (J.), *8980*
- dissipation, ocean air interaction, Joyce (T.M.), *8983*
- convection (free), Gostintsev (Yu.A.), Sukhanov (L.A.), (et al.), *8992*
- clouds, meteorology (physical), Coulman (C.E.), *8994*
- boundary layer (atmospheric), friction coefficient, friction velocity, heat transfer (atmospheric), ocean air interaction, reynolds stresses, Smith (S.D.), *8997*
- anemometers, hot wire, thin films, Otten (L.J.), Pavel (A.L.), (et al.), *9003*
- eddy diffusivity, rotating fluids, vorticity, Haidvogel (D.B.), Held (I.M.), *9004*
- atmosphere, shear flow, spectra, stratified flow, Weinstock (J.), *9007*
- boundary layer (turbulent), heat transfer, Subramanian (C.S.), Antonia (R.A.), *9609*
- blades, helicopters, lift, rotors, turbulent flow, Fijimori (Y.), *9994*
- boundary layer (atmospheric), spectra, wind-wave interaction, Antonia (R.A.), Chambers (A.J.), *9939*
- richardson number, shear layer, turbulence (clear air), Keller (J.L.), Haines (P.A.), *10478*
- diffusion, turbulence, Mikhaylov (G.A.), Sabelfeld (K.K.), *10480*
- internal waves, oceanography, Holloway (G.), *10962*
- buoyancy, ocean, stratification, turbulent mixing, Gibson (C.H.), *11548*
- buoyancy, ocean, stratification, turbulence model, Fu (L.-L.), Flierl (G.R.), *11549*
- boundary layer (atmospheric), turbulence (structure), Raupach (M.R.), Thom (A.S.), *11554*
- aerosols, luminous energy, particulate damping, turbulence, Kolosov (V.V.), Kuzikovskiy (A.V.), *11555*
- diffusion, particle dynamics, turbulence, Middleton (J.F.), *11557*
- atmospheric circulation, meteorology (physical), Dutton (J.A.), *12075*
- gravity waves (surface), ocean air interaction, pressure, surface waves, Snyder (R.L.), Dobson (F.W.), (et al.), *12090*

turbulence (homogeneous), orr sommerfeld equation, shear flow, Kambe (R.), Doi (M.), (et al.), *648*
- turbulence, turbulence model, Tatsumi (T.), *6681*
- decay, dispersion, simulation, Kowalski (A.D.), Peskin (R.L.), *9609*

turbulence (isotropic), eddies, nonlinear theory, spectra, turbulence (structure), vortex rings, Tung (T.C.), Adrian (R.J.), *2687*
- numerical methods, turbulence model, two dimensional flow, Siggia (E.D.), Aref (H.), *2698*
- decay, turbulent flow, Nelkin (M.), Kerr (R.M.), *5469*
- oceanography, turbulence (geophysical), Chigrakov (K.I.), *5923*
- decay, diffusion, Sreenivasan (K.R.), *7748*
- dimensional analysis, spectra, turbulence, Szablewski (W.), *9613*
- reynolds stresses, strain rate, turbulence model, vorticity, Siggia (E.D.), *11541*

turbulence (mechanisms), electron beams, modes, numerical methods, plasma, Kirk (J.), Weiland (J.), *865*
- heating, macroscopic characterization, plasma (toroidal), tokamak, Mitarai (O.), *3902*
- alfven number, plasma, stability theory, tokamak, Hatakeyama (R.), Inutake (M.), (et al.), *4749*
- approximations, coalescence, electro fluid dynamics, particles, Lapiga (E.Ya.), Loginov (V.I.), *6862*

turbulence (structure), navier stokes equation, turbulence, Larisch (E.), *642*
- experimental results, mixing layers, turbulence, Dimotakis (P.E.), Debussy (F.D.), (et al.), *643*
- experimental results, spectra, turbulence, turbulence (geophysical), Newberger (P.A.), Caldwell (D.R.), *644*
- duct flow, turbulence, two dimensional flow, Rajagopalan (S.), Antonia (R.A.), *650*
- mercury, pipe flow, prandtl number, prandtl number (low), Eyler (L.L.), Sesonske (A.), *1556*
- reynolds number, turbulence (geophysical), Antonia (R.A.), Chambers (A.J.), *1583*
- eddies, nonlinear theory, spectra, turbulence (isotropic), vortex rings, Tung (T.C.), Adrian (R.J.), *2687*
- boundary layer, coherent structure, jets, pipe flow, Cantwell (B.J.), *2688*
- jets, turbulence, turbulence model, Goldschmidt (V.W.), Young (M.F.), (et al.), *2690*
- boundary layer, shear layer, stability theory, wakes, Taneda (S.), *2692*
- curved surfaces, shear flow, Townsend (A.A.), *2699*
- navier stokes equation, rheology, statistical continuum mechanics, viscous flow, Enz (C.P.), *4126*
- excitation, experimental results, hydrodynamic stability, jets, Hussain (A.K.M.F.), Zaman (K.B.M.Q.), *5461*
- mixing layers, reattachment, steps, turbulence, Chandrsuda (C.), Bradshaw (P.), *5464*
- channel flow, experimental results, turbulence, Nakagawa (H.), Nezu (I.), (et al.), *5468*
- pressure gradient, turbulence, turbulent flow, Azad (R.S.), Hummel (R.H.), *6681*
- navier stokes equation, spectra, turbulence, Deissler (R.G.), *6684*
- pipe flow, turbulent flow, Langeheineken (T.), *7718*
- flotation, turbulent flow, Costes (J.), Akran (C.), (et al.), *7750*
- chemical reactions, experimental methods, mixing layers, wakes, Breidenthal (R.), *7756*
- axisymmetric flow, turbulent flow, Durbin (P.A.), *8612*
- grids, laser doppler velocimeters, turbulence, Canedese (A.), Iannetta (S.), (et al.), *8619*
- boundary layer (turbulent), integral methods, oscillatory flow, perturbation methods, Patel (M.H.), *9562*
- trailing edge, velocity profiles, wakes, Hah (C.), Lakshminarayana (B.), *9596*
- boundary layer (turbulent), experimental methods, turbulence, Polyakov (A.F.), Taypulev (Yu.V.), (et al.), *9606*
- hydrodynamic stability, temperature, turbulence, velocity measurement, Antonia (R.A.), Chambers (A.J.), (et al.), *9617*
- coherent structure, shear flow, sound flow interaction, turbulence, Kleis (S.J.), Hussain (A.K.M.F.), (et al.), *10470*
- eddies, experimental methods, jets, shear flow, turbulent flow, Mumford (J.C.), *11545*
- reynolds number, shear flow, turbulent flow, velocity profiles, Antonia (R.A.), Satyaprakash (B.R.), (et al.), *11546*
- boundary layer (turbulent), channel flow, swirl flow, velocity profiles, Shchukin (V.K.), Khalatov (A.A.), (et al.), *11547*
- blades, rotors, turbulence, wakes, Lakshminarayana (B.), Reynolds (B.), *11553*
- boundary layer (atmospheric), turbulence (geophysical), Raupach (M.R.), Thom (A.S.), *11554*

turbulence (transport), diffusion, mass transfer, plumes, Chatwin (P.C.), Sullivan (P.J.), *656*
- particulate flow, suspensions, two phase flow, Genchev (Zh.D.), Karpuzov (D.S.), *657*
- anemometers, heat transfer (atmospheric), scale effects, Test (F.L.), Lessmann (R.C.), (et al.), *1662*
- implosion, laser plasma interaction, nuclear fusion, shells (spherical), Lykov (V.A.), Murashkina (V.A.), (et al.), *1782*
- boundary layer, laminar flow, similarity methods, Sokolov (M.), Antonia (R.A.), (et al.), *3648*
- blunt bodies, prandtl number, reattachment, separated flow, Ota (T.), Kon (N.), *4602*
- electrochemical mass transfer, reaction rates, Storck (A.), Hutin (D.), *5621*
- arcs, energy transport, numerical methods, plasma, Galeev (Z.M.), Ziganshin (R.R.), (et al.), *6886*
- boundary layer (atmospheric), boundary layer (turbulent), mass transfer, surface flow, surface flow, Dawkins (R.A.), Davies (D.R.), *7699*
- channel flow, dispersion, shear flow, turbulence, Durbin (P.A.), *9609*
- diffusion, particle dynamics, turbulence, Mailliat (A.), Duhamel (P.), *9614*
- artificial satellites, convection (free), plates (vertical), transition flow, turbulent flow, Doan-Kim-Son, Coutanceau (J.), *9695*
- hall effect, korteweg de vries equation, plasma, waves, Granik (A.T.), *10758*
- discharges, electrical properties, plasma, theory, Ziganshin (R.R.), Ismagilov (R.Kh.), (et al.), *11831*

turbulence model, boundary layer, mesolayer, shear flow, turbulence, Long (R.R.), Chen (T.C.), *645*
- turbulence, turbulence (correlations), Derksen (R.W.), Azad (R.S.), *647*
- burgers equation, eddies, Love (M.D.) 47034, *658*
- finite difference methods, jets, turbulence, Leschziner (M.A.), Rodi (W.), *1581*
- diffusion, particle dynamics, statistical theory, turbulence, Lamb (R.G.), *1586*
- inhomogeneities, spectra, turbulence, turbulence (correlations), Gurvich (A.S.), *2689*
- jets, turbulence, turbulence (structure), Goldschmidt (V.W.), Young (M.F.), (et al.), *2690*
- closure, curvature, mixing layers, reynolds stresses, turbulence, Gibson (M.M.), Rodi (W.), *2691*
- diffusion, turbulence, Shirakashi (M.), Tomita (Y.), *2697*
- numerical methods, turbulence (isotropic), two dimensional flow, Siggia (E.D.), Aref (H.), *2698*
- heat transfer, turbulence, turbulent flow, Lam (C.K.G.), Bremhorst (K.), *2700*
- boussinesq equation, hydraulics, reynolds stresses, turbulent flow, Rodi (W.), *4570, book*
- boundary layer, pipe flow, turbulence, Lam (C.K.G.), Bremhorst (K.), *4646*
- mathematical models, turbulence, Legendre (R.), *4649*
- mixing layers, turbulence, vortices, Kiya (M.), Arie (M.), (et al.), *4651*
- boundary layer (turbulent), numerical methods, reynolds number, Biringen (S.), Reynolds (W.C.), *5465*
- shear flow, swirl flow, turbulence, Naot (D.), *5466*
- duct flow, heat transfer, turbulence, Malik (M.R.), Pletcher (R.H.), *5467*
- turbulence, two dimensional flow, Tatsumi (T.), Yanase (S.), *6679*
- spectra, turbulence, Yanase (S.), Tatsumi (T.), *6680*
- turbulence, turbulence (homogeneous), Tatsumi (T.), *6681*
- cascades, spectra, turbulence, Gledzer (Ye.B.), Makarov (A.L.), *6682*
- closure, shear flow, turbulent flow, Gallegher (B.), Magaard (L.), (et al.), *6685*
- mathematical models, turbulence, turbulent flow, variational methods, Stern (M.E.), *6687*
- heat transfer, liquid metals, turbulence, Grotzbach (G.), *6688*
- mixing, turbulence, Fournier (J.L.), Gence (J.N.), (et al.), *6690*
- closure, recirculation, turbulent flow, Minh (H.H.), *6692*
- boundary layer (turbulent), length-scale, turbulence, El-Hawary (M.A.), Nicoll (W.B.), *7749*
- free shear layer, jets, turbulence, Ahmadi (G.), *7753*
- boundary layer, finite difference methods, plates, submerged bodies, Markatos (N.-C.G.), Wills (C.B.), *8537*
- drag reduction, eddy viscosity, pipe flow, Edwards (M.F.), Smith (R.), *8572*
- noncircular pipes, secondary flow, turbulent flow, Speziale (C.G.), *9578*
- shear flow, turbulence, turbulence (anisotropic), Cambon (C.), Jeandel (D.), (et al.), *9604*
- channel flow, entrance region, turbulent flow, Zaryankin (A.E.), Likherzak (E.E.), (et al.), *10440*
- turbulent flow, wall jets, Launder (B.E.), Rodi (W.), *10459*
- empirical methods, turbulence, viscosity, Movchan (V.T.), *10469*
- coherent structure, turbulent flow, turbulent mixing, Latyshev (A.V.), Ordanovich (A.E.), *10477*
- chemically reactive flow, monte carlo analysis, real gas effects, turbulent flow, Pope (S.B.), *10479*
- boundary layer (turbulent), temperature, Subramanian (C.S.), Antonia (R.A.), *10495*
- recirculation, three dimensional flow, ventilation, Sakamoto (Y.), Matsuo (Y.), *10543*
- plumes, wind, Green (A.E.S.), Singhal (R.P.), (et al.), *10875*
- transition, turbulent mixing, Bakai (A.S.), *11491*
- reynolds stresses, strain rate, turbulence (isotropic), vorticity, Siggia (E.D.), *11541*
- similarity methods, spectra, turbulence, velocity profiles, Driscoll (R.J.), Kennedy (L.A.), *11542*
- buoyancy, ocean, stratification, turbulence (geophysical), Fu (L.-L.), Flierl (G.R.), *11549*
- reynolds stresses, shear flow, stress strain relationships, turbulent flow, So (R.M.C.), Peskin (R.L.), *11569*

turbulent flow, corners, turbomachinery, velocity measurement, Mojola (O.O.), *607*

- friction factor, hydraulic diameter, noncircular pipes, Bandopadhayay (P.C.), Ambrose (C.W.), *614*
- drag reduction, entrance region, integral methods, pipe flow, Embaby (M.H.), Verba (A.), *615*
- analogies, pipe flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *617*
- ducts (curved), laminar flow, navier stokes equation, Buggeln (R.C.), Briley (W.R.), (et al.), *621*
- stratified flow, turbulence, turbulence (geophysical), Mellor (G.), Strub (P.T.), *652*
- injection, mixing, turbulence, Schetz (J.A.), *653, book*
- flow measurement, shear flow, turbulence, velocity profiles, Harris (S.D.), Williamson (J.W.), (et al.), *660*
- pressure measurement, shear stress, surface flow, Pontikos (N.), Bradshaw (P.), *712*
- buoyant flow, convection (free), heat transfer, nusselt number, Thomas (L.C.), Wood (M.L.), *754*
- cooling, plates (perforated), Glazkov (V.V.), Gusev (M.D.), (et al.), *817*
- airfoil characteristics, finite difference methods, reynolds equation, stratification, trailing vortices, vortices, wakes, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- buoyant flow, prediction, wall jets, Ljuboja (M.), Rodi (W.), *1571*
- boundary layer (thermal), plane flow, thermal measurements, Andreopoulos (J.), Bradshaw (P.), *1678*
- hydrodynamic pressure, pipe flow, sound generation, vibration (flow induced), Bull (M.K.), Norton (M.P.), *1807*
- deposition, diffusion, filtration, particles, Gaidukov (N.I.), *1842*
- approximations (higher order), entrance region, mass transfer, pipe flow, viscoelastic fluids, Cho (Y.I.), Hartnett (J.P.), *2645*
- heat transfer, turbulence, turbulence model, Lam (C.K.G.), Bremhorst (K.), *2700*
- free boundary, laminar flow, modeling, n body problems, nonlinear theory, Greenspan (D.), *2720*
- boundary layer (thermal), boundary layer (turbulent), nozzles, turbulence (freestream), Bauer (K.), Straub (J.), (et al.), *2787*
- boundary layer (thermal), heat transfer, rotating disks, stanton number, Johnson (M.C.), *2803*
- non newtonian flow, pipe flow, Quader (A.K.M.A.), *2805*
- laminar flow, mass transfer, rotating disks, Law (C.G.) Jr., Pierini (P.), (et al.), *2848*
- flame propagation, spectral analysis, Gokalp (I.), Lasek (A.), *2864*
- axisymmetric flow, computing techniques, finite difference methods, magneto fluid dynamics, Mikelson (Yu.Ya.), Paviov (S.I.), (et al.), *2876*
- bearings (thrust), lubrication (hydrostatic), shear flow, Harada (M.), Aoki (H.), (et al.), *3043*
- moving surfaces, slots, two dimensional flow, Tognola (S.), *3663*
- eddy viscosity, pipelines, unsteady flow, Kita (Y.), Adachi (Y.), (et al.), *3667*
- heat transfer, pipe flow, viscoelastic fluids, Cho (Y.I.), Ng (K.S.), (et al.), *3670*
- ducts (curved), laminar flow, secondary flow, Taylor (A.M.K.P.), Whitelaw (J.H.), (et al.), *3673*
- diffusers, radial flow, separation, Brandt (U.), Teipel (I.), *3675*
- interaction, jets, two dimensional flow, Hoch (J.), Jiji (L.M.), *3688*
- drag reduction, heat transfer, pipe flow, Smith (R.), Edwards (M.F.), *3708*
- data analysis, laser doppler velocimeters, Schnettler (A.), *3761*
- axisymmetric flow, heat transfer, reattachment, separated flow, thermal measurements, Smyth (R.), *3780*
- boundary layer (thermal), boundary layer (turbulent), convection, heat transfer, plane flow, transient effects, Hanawa (J.), *3781*
- cooling, duct flow, heat transfer, plates (parallel), roughness, Ichimiya (K.), Hasegawa (S.), (et al.), *3788*
- buoyant flow, convection, heat transfer, pipe flow, supercritical flow, Kakaraia (C.R.), Thomas (L.C.), *3790*
- convection (forced), critical heat flux, dispersed flow, drops, heat transfer, Yao (S.-C.), Rane (A.), *3796*
- convection (free), nusselt number, plates (vertical), Ruckenstein (E.), Felske (J.D.), *3796*
- tubes, two phase flow, Elin (N.N.), Klapchuk (O.V.), *4013*
- lubrication (hydrodynamic), reynolds equation, Kumar (V.), *4108*
- bearings (journal), lubrication (hydrodynamic), thermal effects, Wada (S.), Hashimoto (H.), (et al.), *4109*
- boussinesq equation, hydraulics, reynolds stresses, turbulence model, Rodi (W.), *4570, book*
- fluid injection, pipe flow, porous walls, transpiration, Eroshenko (V.M.), Ershov (A.V.), (et al.), *4622*
- entrance region, noncircular pipes, numerical methods, Gessner (F.B.), Emery (A.F.), *4623*
- correlation, heat exchangers, heat transfer, real gas effects, Miropolskii (Z.L.), Karamysheva (A.I.), (et al.), *4648*
- liquids, reynolds equation (turbulence), three dimensional flow, Shablovskii (O.N.), *4650*
- hot wire, thermal diffusion, Gaviglio (J.), Angulliet (J.-P.), (et al.), *4652*
- aerodynamic interference, lift, spherical bodies, walls, Willetts (B.B.), Murray (C.G.), *4670*
- boundary layer (turbulent), condensation (filmwise), heat transfer, pipe flow, Chisholm (D.), *4706*
- bearings (slider), bearings (thrust), lubrication (hydrodynamic), Venkateswarlu (K.), Rodkiewicz (C.M.), *4898*
- channels (closed), counterflow, visualization, vortex flow, Humphrey (J.A.C.), Li (S.), *5397*
- initial value problems, stability, two dimensional flow, vortex shedding, vortex street, Aref (H.), Siggia (E.D.), *5399*
- cylindrical bodies, missiles, numerical methods, shock waves, supersonic flow, three dimensional flow, Hung (C.M.), Chaussee (D.S.), *5413*
- flow measurement, fluid mechanics, recirculation, steps, Moss (W.D.), Baker (S.), *5434*
- eddy viscosity, pipe flow, Vasilescu (A.A.), Andrei (V.I.), *5438*
- dimensional analysis, osborne reynolds formulae, pipe flow, Barr (D.I.H.), *5440*
- cylindrical bodies, wakes, Sreenivasan (K.R.), *5449*
- interfaces, jets, Oler (J.W.), Jenkins (P.E.), (et al.), *5452*
- decay, turbulence (isotropic), Nelkin (M.), Kerr (R.M.), *5469*
- drag, trains (railroad), tunnels, Sud (I.), Chaddock (J.B.), *5497*
- freezing, hydrodynamic stability, pipe flow, thermal instability, Thomason (S.B.), Mulligan (J.C.), *5578*
- axisymmetric flow, magneto fluid dynamics, nonuniform flow, velocity profiles, Gelfgat (Yu.M.), Gorbunov (L.A.), *5673*
- mixtures, pipes, reynolds number (small), two phase flow, Chisholm (D.), *5815*
- hydrology, roughness, wavy walls, Melekhova (N.A.), Mikhailova (N.A.), *5915*
- boundary layer, navier stokes equation, stability theory, viscous flow, Solopenko (V.M.), *6615*
- boundary layer (turbulent), noise (aerodynamic), oscillatory flow, Antonov (A.N.), *6640*
- flow irregularities, roughness, shear flow, Schofield (W.H.), *6641*
- eddy viscosity, impellers, mixing, tanks, Hiraoka (S.), Fan (L.T.), *6651*
- jets, plumes, List (E.J.), *6666*
- measurements, wakes, Sreenivasan (K.R.), *6668*
- developing flow, jets, velocity profiles, Laryushkin (M.A.), Dvoinishnikov (V.A.), *6672*
- pressure gradient, turbulence, turbulence (structure), Azad (R.S.), Hummel (R.H.), *6683*
- closure, shear flow, turbulence model, Gallagher (B.), Magaard (L.), (et al.), *6685*
- mathematical models, turbulence, turbulence model, variational methods, Stern (M.E.), *6687*
- duct flow, experimental results, flow obstructions, heat transfer, turbulence, Sparrow (E.M.), Molki (M.), (et al.), *6689*
- closure, recirculation, turbulence model, Minh (H.H.), *6692*
- acoustic emission, duct flow, heat transfer, pipe flow, resonance, unsteady flow, Andre (P.), Creff (R.), *6764*
- combustion, flames (diffusion), hydrogen, methane, Annushkin (Yu.M.), Maslov (G.F.), *6835*
- plates (perforated), reynolds number (high), sound propagation, unsteady flow, vortex shedding, Howe (M.S.), *6897*
- bubble dynamics, two phase flow, Thomas (R.M.), *6992*
- bearings (journal), lubrication (hydrodynamic), Kumar (V.), *7092*
- channel flow, free boundary, froude number, stability, Berlamont (J.E.), Vanderstappen (N.), *7648*
- laminar flow, particle fluid flow, pressure gradient, Stan (A.D.), Oana (S.), *7716*
- pipe flow, rotational flow, wavy walls, Silberman (E.), *7717*
- pipe flow, turbulence (structure), Langeheineken (T.), *7718*
- jets, slots, Marsters (G.F.), Fotheringham (J.), *7733*
- atomized liquids, jets, two phase flow, unsteady flow, Lebedev (O.N.), Solonenko (O.P.), *7734*
- jets, mixing layers, supersonic flow, Karpman (I.M.), Traskovskii (V.D.), *7737*
- buoyancy, cavities, prediction, shear, Keriah (F.J.K.), *7738*
- jets, mathematical models, Kazachkov (I.V.), *7739*
- flotation, turbulence (structure), Costes (J.), Airan (C.), (et al.), *7750*
- heat transfer, inlet flow, pipe flow, Lau (S.C.), Sparrow (E.M.), (et al.), *7751*
- closure, sensitivity analysis, turbulence (geophysical), Dwyer (H.A.), Peterson (T.), *7754*
- airfoils, incompressible flow, stalling, two dimensional flow, viscous flow, Hegna (H.A.), *7788*
- annular flow, channel flow, heat transfer, variable fluid properties, Nemira (M.), Vilemas (J.), (et al.), *7827*
- blunt bodies, galloping, vortex shedding, Nakamura (Y.), Tomonari (Y.), *7905*
- noise (aerodynamic), sound fields, trailing edge, Howe (M.S.), *7937*
- channel flow, galerkin method, simulation, Rozhdestvensky (B.L.), Prlymak (V.G.), *8569*
- experimental results, moving surfaces, noncircular pipes, El Telbany (M.M.M.), Reynolds (A.J.), *8570*
- developing flow, pipe flow, surveys, Klein (A.), *8571*
- axisymmetric flow, compressible flow, finite difference methods, internal combustion engines, reciprocating engines, Ramos (J.I.), Humphrey (J.A.C.), (et al.), *8591*
- digital simulation, jets, Edwards (A.V.J.), Morley (C.L.), *8598*
- boundary layer (turbulent), prediction, separation, Savulescu (T.N.), Dumitrescu (H.), *8611*

- **axisymmetric flow, turbulence (structure),** Durbin (P.A.), *9612*
- duct flow, fins, friction factor, heat transfer, Scott (M.J.), Webb (R.L.), *9613*
- heat transfer, pipe flow, pulsatile flow, unsteady flow, Creff (R.), Andre (P.), (et al.), *9615*
- drag reduction, pipe flow, polyacrylamide, viscous effects, weissenberg number, Kwack (E.Y.), Hartnett (J.P.), *8722*
- convection (free), heat addition, heat transfer (combined modes), internal sources, radiant interchange, Cheung (F.B.), Chan (S.H.), (et al.), *8743*
- augmentation, extended surfaces, fins, tube bundles, Carnavos (T.C.), *8758*
- ballistics (interior), detonation, heat transfer, particle dynamics, propagation, Buckingham (A.C.), *8855*
- monte carlo analysis, pipe flow, simulation, two phase flow, Yoshida (H.), Masuda (H.), (et al.), *8893*
- dilute solutions, linear systems, lyapunov's functions, polymers, stability theory, Phan-Thien (N.), Atkinson (J.D.), *9094*
- reattachment, subsonic flow, Eaton (J.K.), Johnston (J.P.), *9568*
- noncircular pipes, secondary flow, turbulence model, Speziale (C.G.), *9578*
- convection (free), cylindrical bodies, heat transfer, Na (T.Y.), Chiou (J.P.), *9610*
- numerical methods, turbulence, Zuber (I.), *9615*
- honeycomb structures, reduction, screens, turbulence, Scheiman (J.), Brooks (J.D.), *9616*
- blades, helicopters, lift, rotors, turbulence (geophysical), Fijimori (Y.), *9664*
- lasers, mixing layers, smoke tunnels, visualization, Mensing (P.), Fiedler (H.), *9679*
- channel flow, convection (forced), slots, thermal stresses, Ryadno (A.A.), Franko (N.V.), *9683*
- channel flow, liquid liquid interface, liquid metals, stratified flow, Takahashi (M.), Inoue (A.), (et al.), *9691*
- artificial satellites, convection (free), plates (vertical), transition flow, turbulence (transport), Doan-Kim-Son, Coutanceau (J.), *9695*
- convection (forced), external flow, internal flow, laminar flow, non newtonian flow, viscoelastic fluids, Shenoy (A.V.), Mashelkar (R.A.), *9707*
- bubble dynamics, micromeritics, Gavrilenko (V.G.), Martyanov (A.I.), *9885*
- compressible flow, navier stokes equation, reattachment, shear layer, Sinha (S.N.), Gupta (A.K.), (et al.), *10431*
- blades, ducts (curved), laminar flow, secondary flow, Kreskovsky (J.P.), Briley (W.R.), (et al.), *10439*
- channel flow, entrance region, turbulence model, Zaryankin (A.E.), Likherzak (E.E.), (et al.), *10440*
- developing flow, ducts, wakes, Elliott (C.J.), Townsend (A.A.), *10456*
- diffusion, jets, stratification, Hofer (K.), Hutter (K.), *10457*
- cavities, structure, Curtet (R.), Normandin-Berne (M.), *10458*
- turbulence model, wall jets, Launder (B.E.), Rodi (W.), *10459*
- atmosphere, mass transfer, Saab (A.E.), *10460*
- heat transfer, jets, mass transfer, turbulence, Mills (A.F.), Kim (S.), (et al.), *10473*
- shear flow, thermal diffusion, Sreenivasan (K.R.), Tavoularis (S.), *10475*
- coherent structure, turbulence model, turbulent mixing, Latyshev (A.V.), Ordanovich (A.E.), *10477*
- chemically reactive flow, monte carlo analysis, real gas effects, turbulence model, Pope (S.B.), *10479*
- duct flow, ducts (variable area), heat transfer, laminar flow, nusselt number, transition flow, Tanaka (H.), Kawamura (H.), (et al.), *10571*
- channel flow, convection, heat transfer (combined modes), radiant interchange, scattering, Popov (Yu.A.), Polovnikov (V.I.), *10611*
- condensation, convection, heat transfer, tube bundles, Kutateladze (S.S.), Gogonin (I.I.), (et al.), *10622*
- combustion (turbulent), flames (turbulent), noise, noise (combustion), Legendre (R.), *10705*
- afterbodies, compressible flow, supersonic flow, Yoshikawa (K.K.), Wray (A.A.), *11411*
- channel flow, laminar flow, particle dynamics, sublayers, Grishin (Yu.M.), Mosin (A.A.), *11489*
- coils, ducts (curved), heat exchangers, Vilemas (Yu.V.), Dzyubenko (B.V.), (et al.), *11490*
- axisymmetric flow, impingement, jets, particle dynamics, Korobko (V.I.), Malyi (I.N.), (et al.), *11512*
- buoyancy, hydrodynamic stability, richardson number, shear flow, stratified flow, Kranenburg (C.), *11535*
- channel flow, hydrodynamic stability, shear flow, stability theory, velocity profiles, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- compressible flow, jets, Sivirkin (V.F.), *11543*
- eddies, experimental methods, jets, shear flow, turbulence (structure), Mumford (J.C.), *11545*
- reynolds number, shear flow, turbulence (structure), velocity profiles, Antonia (R.A.), Satyaprakash (B.R.), (et al.), *11546*
- reynolds stresses, shear flow, stress strain relationships, turbulence model, So (R.M.C.), Peskin (R.L.), *11559*
- entrainment, film flow, nonlinear waves, two phase flow, Demekhin (E.A.), *11565*
- dispersion relation, rossby waves, rotating bodies, Legras (B.), *11616*
- flight, jet engines, sound generation, Obermeier (F.), *11969*
- nonlinear characteristics, sound flow interaction, Lvov (V.S.), Mikhailov (A.V.), *11985*

turbulent mixing, axisymmetric flow, jets, Navoznov (O.I.), Pavelev (A.A.), *1572*
- gravity waves (breaking), gravity waves (surface), wave energy, Thompson (R.O.R.Y.), *2708*
- combustion, jets, Buriko (Yu.Ya.), Lebedev (A.B.), *5631*
- combustion (turbulent), compressible flow, swirl flow, Sislian (J.P.), *9554*
- coherent structure, mixing layers, visualization, vortices, Bernal (L.P.), *9598*
- axisymmetric flow, jets, turbulence, Long (M.B.), Chu (B.T.), *9605*
- entrainment, similarity methods, stratified flow, stresses, Kundu (P.K.), *10408*
- grids, mixing layers, thermal diffusion, turbulence, Larue (J.C.), Libby (P.A.), (et al.), *10474*
- coherent structure, turbulence model, turbulent flow, Latyshev (A.V.), Ordanovich (A.E.), *10477*
- transition, turbulence model, Bakai (A.S.), *11491*
- buoyancy, ocean, stratification, turbulence (geophysical), Gibson (C.H.), *11548*

Turchetti (G.), see Barcilon (V.), *27*

Turcoiu (T.), data analysis, injection systems, piston driven flow, pumps, Apostolescu (N.), *5503*

Turkel (E.), see Bayliss (A.), *4187*

Turkington (B.), see Friedman (A.), *3627*

Turnbull (S.R.), cams, design, mechanisms, *8470*

Turner (C.E.), crack propagation, fracture mechanics, fracture toughness, j-integral, *8404*

Turner (C.H.), biomaterials, dental prostheses, prosthetic devices, transducers (pressure), Gross (M.J.), *1959*

Turner (J.D.), see Junkins (J.L.), *7924*

Turner (J.S.), diffusion, oceanography, stratification, stratified flow, *4870*

Turner (L.), see Montgomery (D.), *5679*

Turner (S.), see Stephenson (R.C.), *1834*

Turner (W.C.), energy conservation, heat transfer, insulating materials (thermal), thermal properties, Malloy (J.F.), *6823*

turning, chatter, digital control, process control, Eman (K.), Wu (S.M.), *437*
- machinery, numerical control, Kudinov (V.K.), Taranenko (V.A.), (et al.), *2190*
- machinery, numerical control, Yampolskiy (L.S.), Trotsenko (V.V.), (et al.), *2191*
- chip formation, milling, Venuvinod (P.K.), Lau (W.S.), (et al.), *7460*
- cutting, steel, tool wear, tools, Sewailem (M.R.), Mobarak (I.M.), *9376*
- roughness, surface profiles, surfaces, tool wear, Vajpayee (S.), *12088*

Turula (P.), see Chung (H.), *11627*

Turusov (R.A.), see Korotkov (V.N.), *7952*

Turvey (G.J.), plates (bimetallic), plates (circular), plates (sandwich), yield criteria, *2279*
- failure, plastics, reinforced bodies, *3275*
- elasticity (linear), membranes, prestressed structures, *7335*
- composite materials, failure, plates (sandwich), *10156*

Tuschak (R.), control, convergence, digital simulation, runge kutta method, *6100*

Tustaniwskyj (J.I.), see Carmi (S.), *8606*

Tuteur (F.B.), doppler effect, scattering, surface waves, wind-wave interaction, Tung (H.), (et al.), *1646*
- arrays, spectral analysis, underwater acoustics, Presley (J.A.) Jr., *4811*

Tuttle (M.E.), axial loading, beams, bending, columns, strain gages, strain measurement, *9425*

Tutushkin (A.S.), see Melnikov (D.A.), *7727*

Tveitereid (M.), see Pelm (E.), *9098*

Tverdokhlebov (A.S.), see Vishnevskii (V.M.), *2106*

Tverkovkin (B.Ye.), see Nesterenko (V.B.), *806*

Twersky (V.), acoustic properties, acoustic waves, scattering, *3934*

twisting, beams, bending, lateral stability, Warnick (W.L.), Walston (W.H.) Jr., *1218*
- bending, plates (rectangular), slabs, Nielsen (M.P.), Bach (F.), *1228*
- curvature, grids, interferometry, Subramanian (G.), Arunagiri (R.), *3486*
- cross-over, mathematical models, textiles, Famitant (H.M.), *5134*
- adhesives, textiles, yarn, Lord (P.R.), Parson (J.R.), (et al.), *7312*
- damping, dynamic effects, textiles, yarn, Lord (P.R.), Stuckey (W.C.), *7313*
- cracks, dynamic fracture, singular integral equations, stress intensity factor, Shindo (Y.), *10305*

Twizell (E.H.), ear, gravity, membranes, otolith membrane, *1950*
- see Smith (P.), *6027*
- see Smith (P.), *9069*

two body problem, oblateness, planetary theory, potential theory, torque, Schutz (B.E.), *3914*
- ks formulation, oblateness, orbit mechanics, perturbation methods, regularization, Sharma (R.K.), *6877*
- perturbation methods, transformation, Sidlichovsky (M.), *9808*
- collision models, hamiltonian equations, oscillators, perturbation theory, Terry (P.W.), *10772*
- artificial satellites, low thrust engines, optimal control, Vasilev (V.V.), *10779*

two component flow, nonequilibrium effects, shock waves, Zaslonko (I.S.), Mozzhukhin (E.V.), (et al.), *1734*
- combustion, models, numerical analysis, Buldakov (V.F.), Romanov (O.Ya.), (et al.), *1752*
- absorption, bubble dynamics, two phase flow, Wild (G.), Schlunder (N.), (et al.), *1864*
- boundary conditions, hele-shaw cell, penetration, viscous flow, Pitts (E.), *2597*

- diffusion, equations of motion, Reimschussel (W.), Abramczyk (H.), *3854*
- differential equations (partial), hydrodynamics, plasma, theory, Forste (J.), *3897*
- heat transfer, interface phenomena, stratified flow, velocity profiles, Takahashi (M.), Inoue (A.), (et al.), *6600*
- conduction (heat), integral methods, Kalinovskii (Yu.V.), *7856*
- mathematical models, porous media, saturation, Kowalski (S.J.), *7978*
- diffusion, three dimensional flow, uniqueness, unsteady flow, Beirao Da Veiga (H.), Serapioni (R.), (et al.), *9537*
- differential equations (partial), liquid liquid interface, plates, viscous flow, Pismen (L.M.), Nir (A.), *9538*
- porous media, taylor instability, Sharma (R.C.), Sharma (K.N.), *10839*
- rossby waves, rotating fluids, stratified flow, viscous flow, Boyer (D.L.), *11376*
- convection, diffusion, liquids, mixtures, optical techniques, Ruddick (B.R.), *11755*
- cavitation, dilute solutions, equilibrium, two phase flow, Cha (Y.S.), *12039*
- bubble dynamics, vibration, Pavlovskii (V.S.), Pelykh (N.A.), *12049*

two dimensional flow, boundary integral methods, free boundary, nonlinear analysis, pressure distribution, Schwartz (L.W.), *566*

- boundary conditions, free boundary, potential flow, time dependence, Longuet-Higgins (M.S.), *567*
- drops, reynolds number (small), surface tension, Vanden-Broeck (J.-M.), *569*
- cylindrical bodies, stokes flow, walls, Jeffrey (D.J.), Onishi (Y.), *572*
- drag, plates, stokes flow, viscous flow, Moon-Uhn Kim, Chang-Ho Son, *573*
- cylindrical bodies, navier stokes equation, oscillating bodies, secondary flow, Kubo (S.), Kitano (Y.), *581*
- compressible flow, euler equations, finite difference methods, Hindman (R.G.), Kulter (P.), (et al.), *587*
- cascades, compressible flow, finite difference methods, thermodynamic processes, Thyagaraja (A.), *590*
- channel flow, leaks, wavy walls, Hasegawa (E.), Fukuoka (N.), *609*
- bifurcation, numerical analysis, separation, Willie (S.O.), *622*
- hydrodynamic stability, jets, mathematical models, Morris (P.J.), *637*
- duct flow, turbulence, turbulence (structure), Rajagopalan (S.), Antonia (R.A.), *650*
- shock waves, three dimensional flow, Hunt (B.L.), *680*
- airfoil characteristics, design criteria, transonic flow, Nakamura (M.), *685*
- crossflow, fire, mathematical models, Luti (F.M.), *843*
- flow obstructions, numerical methods, stratified flow, Granberg (I.G.), *1519*
- contact angle, drops, sliding, thin films, Hocking (L.M.), *1534*
- recirculation, separated flow, stagnation point, O'Brien (V.), *1547*
- galerkin method, hartmann flow, magneto fluid dynamics, nonlinear theory, stability theory, Lifshits (A.M.), Shtern (V.N.), *1771*
- analytical methods, couette flow, magneto fluid dynamics, plates (parallel), Kishan (H.), Sharma (G.C.), *1772*
- circulation, estuaries, finite difference methods, oceanography, Wang (D.-P.), Kravitz (D.W.), *2594*
- cavities, finite element methods (hybrid), heat transfer, Chen (C.J.), Naseri-Neshat (H.), (et al.), *2605*
- flow obstructions, inviscid fluid, shear flow, vorticity, Shankar (P.N.), Sinha (U.N.), *2609*
- finite element methods, incompressible flow, navier stokes equation, Piva (R.), Di Carlo (A.), (et al.), *2611*
- compressible flow, grids, numerical methods, viscous effects, Kovenya (V.M.), Yanenko (N.N.), *2625*
- boundary layer (turbulent), fences, porous surfaces, separated flow, Perera (M.D.A.E.S.), *2628*
- numerical methods, turbulence (isotropic), turbulence model, Siggia (E.D.), Aref (H.), *2698*
- propulsion, unsteady flow, wing body combinations, Couchet (G.), *2740*
- airfoils, lift, porous walls, wind tunnels, Sawada (H.), *2769*
- magneto fluid dynamics, rotational flow, streamlines, theory, Chandna (O.P.), Toews (H.), (et al.), *2875*
- cylindrical bodies, liquid metals, magneto fluid dynamics, turbulence, Alemany (A.), Moreau (R.), (et al.), *2893*
- laminar flow, stochastics, Bellomo (N.), Riganti (R.), (et al.), *3107*
- iterative methods, navier stokes equation, numerical analysis, reynolds number (high), Cebeci (T.), Hirsh (R.S.), (et al.), *3130*
- axisymmetric flow, finite element techniques, navier stokes equation, Wille (S.O.), *3145*
- navier stokes equation, viscous flow, Govindaraju (K.), *3617*
- cylindrical bodies, free boundary, gravity waves (surface), walls, Boucher (G.), *3631*
- moving surfaces, slots, turbulent flow, Tognola (S.), *3663*
- axisymmetric flow, contraction, ducts, Jordinson (R.), Rodger (J.G.), *3674*
- bifurcation, duct flow, numerical analysis, Goldman (A.), *3676*
- interaction, jets, turbulent flow, Hoch (J.), Jiji (L.M.), *3688*
- channel flow, developing flow, hydrodynamic stability, orr sommerfeld equation, perturbations, Gupta (S.C.), Garg (V.K.), *3696*
- computing techniques, data analysis, interferometry, Ben-Dor (G.), Whitten (B.T.), (et al.), *3760*
- finite difference methods, internal flow, navier stokes equation, vorticity, Shay (W.A.), *4586*
- separation, three dimensional flow, transition, visualization, Werle (H.), *4685*
- chemical kinetics, flames, models, Bracco (F.V.), O'Rourke (P.J.), *4737*
- airfoil characteristics, blades, cascades, turbines, Pimsner (V.), Baran (N.), *4740*
- free boundary, incompressible flow, jets, Alt (H.W.), Caffarelli (L.A.), (et al.), *4977*
- flow obstructions, irrotational flow, perturbations, upper atmosphere, wind, Blank (A.D.), *5395*
- spectral analysis, stratified flow, vortex flow, Myers (R.B.), Taylor (T.D.), (et al.), *5396*
- initial value problems, stability, turbulent flow, vortex shedding, vortex street, Aref (H.), Siggia (E.D.), *5399*
- cascades, galerkin method, unsteady flow, Daiguji (H.), Shirahata (H.), *5448*
- compressible flow, hydrodynamic stability, perturbations, Kerschen (E.J.), Balsa (T.F.), *5459*
- aerodynamic coefficients, airfoils, ground effect, lift, potential flow, Plotkin (A.), Kennell (C.G.), *5490*
- integral methods, magneto plasma dynamics, transforms, viscid inviscid flow, Gorskii (V.B.), *5676*
- estuaries, galerkin method, stratified flow, Rasmussen (H.), *6607*
- complex variables, cylindrical bodies, irrotational flow, walls, Petrila (T.), *6614*
- boundary integral methods, channel flow, fredholm equations, stokes flow, Bezine (G.), Bonneau (D.), *6620*
- compressible flow, mathematical models, thermodynamics (nonequilibrium), Popov (S.P.), Romashkevich (Yu.I.), *6631*
- bgk model, channels, condensation, rarefied gases, Gajewski (P.), Wismiewski (A.), *6634*
- channel flow, cooling, injection molding, polymers, viscoelastic fluids, Isayev (A.I.), Hieber (C.A.), *6656*
- circulation, duct flow, pulsatile flow, Ssaki (Y.K.), Reddy (J.N.), *6659*
- entrainment, froude number, plumes, Phillips (W.F.), *6667*
- turbulence, turbulence model, Tatsumi (T.), Yanase (S.), *6679*
- airfoils, oscillating bodies, three dimensional flow, transient effects, transonic flow, Dowell (E.H.), *6718*
- magneto fluid dynamics, permeability, pulsatile flow, theory, Varshney (C.L.), *6859*
- interface waves, two phase flow, Akai (M.), Inoue (A.), (et al.), *6971*
- finite difference methods, finite element techniques, heat transfer, Chung (K.C.), *7673*
- cloud physics, flow obstructions, latent heat, meteorology (physical), Barcilon (A.), Jusem (J.C.), (et al.), *7677*
- diffusion, finite difference methods, separated flow, unsteady flow, vorticity, Porthouse (D.T.C.), Lewis (R.I.), *7678*
- coordinate systems, curved surfaces, generation, poisson equation, Visbal (M.), Knight (D.), *7683*
- boundary layer (turbulent), integral methods, pressure gradient, Yeung (W.-S.), Yang (R.-J.), *7697*
- boundary layer (turbulent), pressure gradient, Schofield (W.H.), *7702*
- oscillatory flow, subsonic flow, wings, Lottati (I.), Nissim (E.), *7782*
- airfoil characteristics, complex variables, incompressible flow, potential flow, White (J.W.), *7785*
- airfoils, incompressible flow, stalling, turbulent flow, viscous flow, Hegna (H.A.), *7788*
- fluctuations, laminar flow, polymers, strain rate, Abernathy (F.H.), Bertschy (J.R.), (et al.), *8508*
- channel flow, flow obstructions, free boundary, stratified flow, Janowitz (G.S.), *8532*
- corners, lifting bodies, variational methods, Djaoua (M.), *8538*
- cavities, finite difference methods, navier stokes equation, reynolds number (small), Gupta (M.M.), *8543*
- compressible flow, conformal mapping, cylindrical bodies, Sakurai (A.), Arai (T.), *8544*
- fourier transform, incompressible flow, porous surfaces, suction, Nayfeh (A.H.), Reed (H.L.), (et al.), *8563*
- boundary layer, compressible flow, deposition, gas turbines, particles, Menguturk (M.), Sverdrup (E.F.), *8564*
- turbulence (free), wakes, Pal (S.), Raj (R.), *8597*
- asymptotic behavior, blunt bodies, hypersonic flow, separation, shock layer, Barantsev (R.G.), Engelgart (V.N.), *8636*
- airfoil theory, conformal mapping, inviscid fluid, Prosnak (W.J.), Rokicki (J.), *8640*
- boundary layer, flow reversal, heat tracer, incompressible flow, shear stress, velocity measurement, Westphal (R.V.), Eaton (J.K.), (et al.), *8664*
- automatic control, flexible walls, transonic flow, wind tunnels, Goodyer (M.J.), Wolf (S.W.D.), *8670*
- boundary elements, groundwater, transient effects, Banerjee (P.K.), Butterfield (R.), (et al.), *8948*
- plates, singularities, stokes flow, velocity profiles, viscous flow, Hasegawa (E.), *9532*
- barotropic fluids, hydrodynamic stability, perturbations, Grinfeld (M.A.), *9600*
- airfoils, numerical methods, supersonic flow, Lewis (T.S.), Sirovich (L.), *9647*
- aerodynamic loads, axial compressors, axial turbines, incompressible flow, inviscid fluid, unsteady flow, Ispas (I.), Lucking (P.), *9671*
- condensation, nucleation, steam, Bakhtar (F.), Mohammadi Tochai (M.T.), *9781*

- helical flow, magneto fluid dynamics, modes, streamlines, Rakhimov (A.A.), *9798*
- finite difference methods, magneto plasma dynamics, mathematical models, nonlinear analysis, Schnack (D.), Killeen (J.), *9791*
- boundary layer, flow obstructions, reynolds number (high), Smith (F.T.), Brighton (P.W.M.), (et al.), *10423*
- airfoils, cascades, transonic flow, Messiter (A.F.), Adamson (T.C.) Jr., *10448*
- nozzles, plumes, Chu (C.-W.), Der (J.) Jr., (et al.), *10454*
- airfoils, finite difference methods, transonic flow, Chen (L.-T.), *10497*
- airfoil characteristics, blades, helicopters, oscillating bodies, Maresca (C.A.), Favier (D.J.), (et al.), *10502*
- channel flow, helical flow, magneto fluid dynamics, pumps, Kapusta (A.B.), Zibold (A.F.), (et al.), *10756*
- boundary value problems, porous media, potential flow, Orasanu (M.T.), *10833*
- estuaries, nonlinear waves, shallow water, tidal waves, Debnath (L.), Chatterjee (A.K.), *11359*
- eccentric rotating cylinders, navier stokes equation, rotating cylinders, stokes flow, Suematsu (Y.), Ito (T.), (et al.), *11374*
- blunt bodies, separated flow, vortex sheets, Lewis (R.I.), *11389*
- gases, shock waves, variational methods, Bratos (M.), Herczynski (R.), *11444*
- axisymmetric flow, entrainment, jets, mixing, Vatsa (V.N.), Werle (M.J.), (et al.), *11517*
- flexible bodies, fluid-structure interaction, membranes, strouhal number, Newman (B.G.), Low (H.T.), *11632*

two dimensional waves, gravity waves (finite depth), integral methods, transformation, Nakamura (A.), Matsuno (Y.), *668*

- finite element techniques, helmholtz equation, Helps (J.D.), Daly (P.), *1084*
- evolution equations, transient effects, Engelbrecht (J.), *4444*

two phase flow, damping, dynamic response, tubes, virtual mass, Carlucci (L.N.), *391*

- coagulation, nozzles, Rychkov (A.D.), *627*
- particulate flow, suspensions, turbulence (transport), Genchev (Zh.D.), Karpuzov (D.S.), *657*
- emissivity, radiant interchange, scattering, Adzerikho (K.S.), Antsulevich (V.I.), (et al.), *777*
- diffusion, electro fluid dynamics, mathematical models, theory, Gogosov (V.V.), Naletova (V.A.), (et al.), *850*
- bubble dynamics, radiation, sound generation, Kozyaev (E.F.), Naugolnykh (K.A.), *906*
- heat transfer, multiphase flow, power generation, Bergles (A.E.), Collier (J.G.), (et al.), *934, book*
- fluidized beds, granular media, jets, Buevich (Yu.A.), Kolesnikova (N.A.), (et al.), *935*
- boussinesq equation, mixtures, oscillating bodies, Matsufuji (H.), Hasegawa (E.), *936*
- liquid gas mixture, pipe flow, transition, Barnea (D.), Shoham (O.), (et al.), *938*
- dispersed flow, liquid vapor mixture, radiation, void fraction, Ohba (K.), *939*
- finite amplitude, korteweg de vries equation, separated flow, transient effects, Banerjee (S.), Chan (A.M.C.), *940*
- bubble dynamics, liquid gas mixture, measurements, optical techniques, Kosmowski (I.), Wunderlich (B.), (et al.), *942*
- drops, immiscible fluids, Molag (M.), Joosten (G.E.H.), (et al.), *944*
- boiling, bubble dynamics, heat transfer, vaporization, Voloshko (A.A.), *945*
- cavitation, jets, polymers, Hoyt (J.W.), Taylor (J.J.), *946*
- convection (forced), finite difference methods, oscillations, pressure drop, Akyuzlu (K.), Veziroglu (T.N.), (et al.), *947*
- optical instruments, shadowgraphic methods, Hewitt (G.F.), Whalley (P.B.), *948*
- permeability, porous media, El-Khatib (N.A.F.), *954*
- polytropic processes, steam, thermodynamic processes, Bayer (Z.), *1651*
- annular flow, boiling, critical heat flux, Boltenko (E.A.), Peskov (O.L.), (et al.), *1674*
- boiling, critical heat flux, rupture, transition boiling, Borchevkin (Yu.S.), Korolkov (B.P.), *1675*
- condensation, evaporation, heat transfer, thermosyphons, Imura (H.), Kusuda (H.), (et al.), *1719*
- boilers, critical heat flux, dryout, helical flow, pipe flow, pressure drop, tubes, Unal (H.C.), Van Gasselt (M.L.G.), (et al.), *1721*
- charged particles, electro fluid dynamics, inertia, one dimensional flow, Vatazhin (A.B.), Grabovskii (V.I.), *1774*
- initial value problems, linearization, plasma, theory, Forste (J.), *1778*
- pipelines, pneumatic transport, slug flow, waves, Tomita (Y.), Jotaki (T.), (et al.), *1839*
- bubble dynamics, ducts, dust, stochastic processes, De Socio (L.M.), Gaffuri (G.), (et al.), *1840*
- ducts, ducts (constant area), pipe flow, Prasad (N.K.), Chand (P.), (et al.), *1841*
- liquid gas mixture, tubes, Wallis (G.B.), Karlin (A.S.), (et al.), *1843*
- bubbly flow, stability (numerical), virtual mass, Lahey (R.T.) Jr., Cheng (L.Y.), (et al.), *1844*
- helical flow, liquid gas mixture, tubes, Whalley (P.B.), *1845*
- liquid gas mixture, transition, tubes, Taitel (Y.), Bornea (D.), (et al.), *1846*
- heat transfer, liquid gas mixture, liquid vapor mixture, mass transfer, Nigmatulin (R.I.), Khabeyev (N.S.), *1847*
- ducts, liquid gas mixture, one dimensional flow, transient, Hancox (W.T.), Ferch (R.L.), (et al.), *1848*
- prediction, pressure drop, tube sheets, Ishihara (K.), Palen (J.W.), (et al.), *1849*
- liquid gas mixture, pipelines, transition, Weisman (J.), Duncan (D.), (et al.), *1850*
- liquid gas mixture, prediction, Iida (Y.), *1852*
- bends, liquid gas mixture, pipe flow, Hoang (K.), Davis (M.R.), *1853*
- critical flow, models, Isbin (H.S.), *1854*
- heat transfer, tubes, Nejat (Z.), *1855*
- boiling, pressure vessels, steam, Pitts (J.H.), *1856*
- generators, heat transfer, stability, Rakopoulos (C.D.), El-Shirbini (A.A.), (et al.), *1857*
- adiabatic processes, annular flow, liquid gas mixture, Andersen (P.S.), Wurtz (J.), *1858*
- deformation, drops, Krzeczkowski (S.A.), *1859*
- absorption, bubble dynamics, two component flow, Wild (G.), Schlunder (N.), (et al.), *1864*
- leaks, models, Pinet (B.), *1869*
- emulsions, inertia, oscillations, viscoelasticity (dynamic), Oosterbroek (M.), Tropper (R.), (et al.), *2602*
- pulsatile flow, spectral density, Krokovnyi (P.M.), *2678*
- design criteria, heat exchangers, heat exchangers (multipass), radiant interchange, Kakac (S.) eds., Bergles (A.E.), (et al.), *2625, book*
- conveyors, pneumatic transport, transport, Kraus (M.N.), *2982, book*
- averaging, reynolds stresses, suspensions, Iwanaga (M.), Ishihara (T.-O.), *2985*
- evaporation, void fraction, Beck (B.T.), Wedekind (G.L.), *2987*
- bubble dynamics, plumes, Chesters (A.K.), Van Doorn (M.), (et al.), *2988*
- conducting fluid, electrical conductivity, Barnea (D.), Shoham (O.), (et al.), *2989*
- critical flow, nuclear reactors, Wallis (G.B.), *2990*
- convection (forced), interface phenomena, mass transfer, Schwarz (E.), Waldheim (W.), (et al.), *2993*
- aeration, channels, particles, porous walls, Ishida (M.), Hatano (H.), (et al.), *4006*
- diffusion, particles, pipelines, slurries, trajectories, Okuda (K.), *4011*
- counterflow, tubes, Kalb (C.E.), Smith (J.K.) Jr., *4012*
- tubes, turbulent flow, Elin (N.N.), Klapchuk (O.V.), *4013*
- adiabatic processes, centrifugation, helium, liquid vapor mixture, Zhukovskiy (A.V.), *4014*
- compressible flow, spray flow, Kinoshita (T.), *4020*
- mixtures, pressure drop, tube sheets, Grant (I.D.R.), Chisholm (D.), *4021*
- immiscible fluids, porous media, Anderson (R.M.), Ford (W.T.), *4023*
- constitutive equations, thermodynamics (irreversible), Hung (N.), *4133*
- dynamic analysis, similarity methods, Entov (V.M.), Yarin (A.L.), *4630*
- liquid gas mixture, liquid vapor mixture, Bergles (A.E.) eds., Ishigai (S.), *4820, book*
- liquid gas mixture, sound speed, Nguyen (D.L.), Winter (E.R.F.), (et al.), *4823*
- slug flow, transient effects, Fukano (T.), Sekoguchi (K.), (et al.), *4825*
- dispersion, separated flow, Banerjee (S.), *4830*
- density, measurements, particle fluid flow, Lourenco (L.), Riethmuller (M.L.), *4831*
- collision models, drops, Neizvestnyy (A.I.), Kobzunenko (A.G.), *4832*
- kinematics, Bocheva (M.), *5405*
- noise, power generation, water hammer, Papadakis (C.) eds., Scarton (H.), *5476, book*
- drag, experimental results, Balanin (B.A.), Zlobin (V.V.), *5812*
- liquid gas mixture, slip flow, Chernyy (I.M.), Kuzmenko (L.M.), (et al.), *5813*
- pseudoplastic fluids, void fraction, Srivastava (R.P.S.), Narasimhamurthy (G.S.R.), *5814*
- mixtures, pipes, reynolds number (small), turbulent flow, Chisholm (D.), *5815*
- geothermal reservoirs, transient effects, Garg (S.K.), *5840*
- experimental methods, fluidized beds, laser doppler velocimeters, Levy (Y.), Lockwood (F.C.), *5841*
- particle fluid flow, spouted beds, King (D.F.), Harrison (D.), *5847*
- heat exchangers, tube bundles, vibration (flow induced), vibration (forced), Heilker (W.J.), Vincent (R.Q.), *6289*
- scale effects, suspensions, Saha (P.) eds., Farukhi (N.M.), *6956, book*
- anemometers, laser doppler velocimeters, Lesinski (J.), Mizera-Lesinska (B.), (et al.), *6958*
- buoyancy, mixtures, oscillating bodies, particles, Matsufuji (H.), Hasegawa (E.), *6960*
- propagation, slurries, transient, Thorley (A.R.D.), *6962*

U

Uberall (H.), see Gaunaurd (G.), *4774*
- see Gaunaurd (G.C.), *5742*

Uberoi (M.S.), see Shivamoggi (B.K.), *7672*

Ucer (A.S.), energy conservation, energy storage, mathematical models, reservoirs, *9717*

Uchida (K.), see Kato (Y.), *9696*

Uchida (S.), see Nakamura (Y.), *1504*
- see Nakamura (Y.), *9585*

Uchiyama (K.), couplings, fluid couplings, oscillations, torque, Takagi (T.), (et al.), *3572*
- see Yamada (S.), *5171*

Uda (T.-A.), see Hashimoto (H.), *5393*

Udwadia (F.E.), earthquake engineering, nonlinear systems, Kuo (C.-P.), *5898*
- control, oscillations, pulse control, structural analysis, structural design, structural response, vibration, Tabaie (S.), *9183*
- controllability, dynamic properties, identification, linear systems, observability, structural response, *11048*
- control, structural design, structural stability, structures, vibration, vibration isolation, Tabaie (S.), *11097*

Ueda (M.), see Hasebe (N.), *9403*
- see Hasebe (N.), *10146*
- echos, reflection, scattering, sound, Ichikawa (H.), *11967*

Ueda (T.), boiling, critical heat flux, drops, entrainment, film flow, Inoue (M.), (et al.), *4702*
- boiling, critical heat flux, film cooling, film flow, tubes, Isayama (Y.), *7832*

Uematsu (S.), see Nagaya (K.), *10372*

Ueno (S.), atmosphere, invariant imbedding, optical thickness, quasilinearization, radiant interchange, solar radiation, *6075*
- fredholm equations, integro differential equations, nonlinear analysis, radiation, *8120*

Ueno (T.), see Terashima (K.), *2564*

Ufimtsev (A.A.), see Kukes (V.I.), *7755*

Ugryumov (M.L.), boundary layer (turbulent), rotating bodies, separation, three dimensional flow, turbomachinery, *11551*

Ugural (A.C.), continuum mechanics, elasticity, solid mechanics, structural analysis, Fenster (S.K.), *2208, book*

Uhl (V.W.), see Ramdas (V.), *790*

Uhlmann (G.A.), cauchy problem, characteristic methods, crystals, hyperbolic equations, refraction, *4978*

Uj (J.), see Hering (J.), *2214*

Ujihashi (S.), impulsive loading, shells (cylindrical), transient effects, vibration (forced), Okazaki (T.), (et al.), *1279*
- dynamic stresses, shells (cylindrical), vibration (forced), Itoh (A.), (et al.), *5221*

Ukai (T.), see Doi (O.), *5323*

Ukeguchi (N.), diffusion, finite difference methods, gases, navier stokes equation, stratified flow, Okamoto (H.), (et al.), *825*
- compressible flow, numerical methods, supersonic flow, transonic flow, Sakata (H.), (et al.), *8551*

Ukeje (E.), elastic waves, shock waves (normal), thermoelasticity, *1291*

Ulanov (G.M.), adaptive systems, sensitivity, stability theory, variable structure systems, *3169*

Ulbrecht (J.J.), see Kawase (Y.), *4567*
- drag reduction, laminar flow, laser doppler velocimeters, polymers, rotating disks, Gasparetto (C.A.), *7675*
- see Kawase (Y.), *7964*
- see Kawase (Y.), *12022*

Ulbrich (H.), design, magnetic stabilization, optimal control, rotor layer, *212*
- bearings (magnetic), bearings (thrust), dynamics, rotors, Schweitzer (G.), (et al.), *4115*

Ulitin (G.M.), see Perekhrest (V.I.), *1610*

ultimate strength, analysis, fracture toughness, plane stress, Markochev (V.M.), Morozov (E.M.), *497*
- bending, girders (plate), Shiomi (H.), *1256*
- bearing capacity, bridges (box girder), imperfections, Djubek (J.), Kamikova (I.), (et al.), *1446*
- beams (curved), beams (plastic), Fukumoto (Y.), Nishida (S.), *2263*
- bearing capacity, buckling, finite element methods, thin walled structures, Pettersen (E.), *2506*
- shear strength, slabs, stress analysis, Garas (F.K.), Waine (B.R.), (et al.), *2517*
- composite structures, nonlinear analysis, reinforced concrete, Lachance (L.), Haya (C.O.), *2518*
- bending, panels (flat), reinforced concrete, shear, torsion, Majid (K.I.), Celik (T.), *3534*
- axial loading, bearing capacity, reinforced concrete, Salat (G.), *3535*
- collapse, structural analysis, trusses, Schmidt (L.C.), Morgan (P.R.), (et al.), *3550*
- slabs, Wilby (C.B.), *4367*
- beams (composite), bending, design (optimum), shear strength, Farkas (J.), *4526*
- beams (torsional), reinforced concrete, torsion, Izumi (M.), *5353*
- experimental results, girders (plate), postbuckling behavior, Narayanan (R.), Rockey (K.C.), *7322*
- beams (box), eccentric loading, plates, Rerkshanandana (N.), Usami (T.), (et al.), *7352*
- brittle materials, compression, concrete, tests, Jayatilaka (A. De S.), Nanayakkara (V.K.N.), *7563*
- bending, cellular structures, grillages, nonlinear characteristics, structural analysis, Shanmugam (N.E.), Evans (H.R.), *8263*
- bars, imperfections, notch tests, tension, Miastkowski (J.), Skrocki (H.), *8437*
- collapse, frames, reinforced concrete, Ford (J.S.), Chang (D.C.), (et al.), *8450*
- bearing capacity, deflections, falsework, scaffolding, structural response, Holmes (M.), Hindson (D.), *8455*
- aluminum alloys, correlation, endurance limit, fatigue, flexure, steel, Stepnov (M.N.), Evstratova (S.P.), (et al.), *10330*
- design (optimum), prestressed concrete, Lo Bianco (M.), Mazzarella (C.), *10341*
- beams, reinforced concrete, shear strength, Megahid (A.), Maamoun (A.), (et al.), *10358*

ultrasonic welding, aluminum alloys, tension, welded joints, Renshaw (T.), Sarrantonio (A.), *9486*

ultrasonics, elastic waves, electromagnetic loading, flaw detection, nondestructive tests, Remezov (V.B.), Shkarlet (Yu.M.), *499*
- crystallography, propagation velocity, Yatsyk (S.I.), Krasavin (V.V.), *500*
- aluminum alloys, flaw detection, ingots, material testing, titanium, Zavyalova (N.S.), Grishina (V.M.), (et al.), *501*
- adhesives, bonded joints, layered media, Pilarski (A.), Pawlowski (Z.), *543*
- acoustic waves, biomedical frequencies, nonlinear waves, Muir (T.G.), Carstensen (E.L.), *890*
- acoustic waves, biomedical frequencies, nonlinear waves, Carstensen (E.L.), Law (W.K.), (et al.), *891*
- anisotropy, biomechanics, bones, elastic constants, Van Buskirk (W.C.), Cowin (S.C.), (et al.), *1031*
- acoustic waves, mathematical methods, sublayers, Basatskaya (L.V.), Ermolov (I.N.), *1294*
- nondestructive tests, response, transducers (ultrasonic), transient, Low (G.C.), *1417*
- adhesives, algorithms, bonded joints, nondestructive tests, Rose (J.L.), Thomas (G.H.), *1479*
- flow measurement, internal combustion engines, thermodynamic processes, Lakshminarayananan (P.A.), Janakiraman (P.A.), (et al.), *1761*
- elastic constants, high temperature, refractories, Bell (J.F.W.), Chen (J.Y.F.), (et al.), *1836*
- flaw detection, microprocessors, nondestructive tests, welded joints, Rose (J.L.), Nestleroth (J.B.), (et al.), *2481*
- crystals, scattering, sound propagation, Grigorev (O.A.), Shermergor (T.D.), *2930*
- attenuation, diffraction, transducers (ultrasonic), Chivers (R.C.), Rosselaar (L.), (et al.), *2952*
- arrays, diagnostics, piezoelectrics, transducers (ultrasonic), Sato (J.), Kawabuchi (M.), (et al.), *2955*
- defects, lasers, layered media, nondestructive tests, residual stresses, Berger (H.) eds., Linzer (M.), *3505, book*
- acoustic properties, flaw detection, reflection, Haines (N.F.), Langston (D.B.), *3940*
- liquid solid interface, numerical methods, reflection, Ngoc (T.D.K.), Mayer (W.G.), *3944*
- cylindrical bodies, elastic bodies, scattering, Welton (P.J.), De Billy (M.), (et al.), *3950*
- acoustic measurements, wave energy, Bindal (V.N.), Kumar (A.), *3975*
- arrays, imaging systems, Sato (T.), Sasaki (K.), (et al.), *3976*
- interferometry, sound fields, Higgins (F.P.), Norton (S.J.), (et al.), *3977*
- cylindrical waves, scattering, transducers, Foster (F.S.), Arditi (M.), (et al.), *3982*
- acoustic measurements, transducers, Widener (M.W.), *3983*
- atomization, capillary waves, cavitation, Mir (J.M.), *4015*
- diffraction, penny shaped crack, Achenbach (J.D.), Adler (L.), (et al.), *4778*
- arrays, imaging systems, turbulence, Sato (T.), Linzer (M.), (et al.), *4810*
- bones, cartilage, human body, Rushfeldt (P.D.), Mann (R.W.), *4907*
- composite materials, loss factor, viscoelastic waves, Williams (J.H.) Jr., Lee (S.S.), (et al.), *5140*
- testing equipment, velocity measurement, Yogurtcu (Y.K.), Lambson (E.F.), (et al.), *5240*
- attenuation, thin walled structures, Lee (S.S.), Williams (J.H.) Jr., *5247*
- cracks, defects, nondestructive tests, De Billy (M.), Cohen-Tenoudji (F.), (et al.), *5314*
- dynamic response, fracture toughness, mathematical methods, nondestructive tests, Fu (L.S.), *5315*
- aluminum alloys, composite materials, elastic constants, metallic composites, Blessing (G.V.), Elben (W.L.), *5328*
- flaw detection, inspection, nondestructive tests, Grebennik (V.S.), Taits (M.Z.), *5336*
- fluids, sound fields, Gabrielli (I.), Zugna (S.), *5760*
- aging, skin, tissues, Bhagat (P.K.), Kerrick (W.), (et al.), *6011*
- biological joints, bones, fracture, Dzene (I.Ya.), Dzenis (V.V.), (et al.), *6032*
- acoustic waves, curved surfaces, rayleigh waves, resonance, Lapin (A.D.), *6335*

- deformation, elastoplasticity, fatigue, piezoelectric devices, Bajons (P.), *6464*
- acoustic measurements, ferrites, nondestructive tests, polycrystalline materials, void fraction, Guseva (E.K.), Kovarskaya (E.Z.), (et al.), *6481*
- boron, fibers, propagation, torsion, vibration, Kaplan (M.D.), Veremeenko (S.V.), *6482*
- nondestructive tests, piezoelectric devices, transducers, Panin (V.I.), *6483*
- half space, nondestructive tests, piezoelectric devices, transducers, Kasatkin (B.A.), Pavin (N.Ya.), *6485*
- cracks, diffraction, metals, nondestructive tests, surfaces, Parvatov (G.N.), Popov (A.A.), *6496*
- nondestructive tests, reflection, surface flaws, welded joints, Perevalov (S.P.), Raikhman (A.Z.), *6489*
- acoustic measurements, acoustic waves, defects, surface flaws, Ermolov (I.N.), Razygraev (N.P.), (et al.), *6490*
- defects, flaw detection, spectral analysis, surface flaws, Vopilkin (A.Kh.), Ermolov (I.N.), (et al.), *6492*
- corrosion, grain boundaries, stainless steels, Prikhodko (V.N.), *6493*
- capillary flow, experimental methods, Dezhkunov (N.V.), Prokhorenko (P.P.), *6588*
- diagnostics, tissues, Foster (F.S.), Hunt (J.W.), *7114*
- aluminum alloys, cracks, fatigue, high cycle fatigue, Tschegg (E.), Stanzl (S.), *7473*
- cracks, diffraction, fatigue, nondestructive tests, Golan (S.), Adler (L.), (et al.), *7513*
- bonded joints, composite materials, delamination, laminates, Schramm (S.W.), Daniel (I.M.), (et al.), *7557*
- laminates, nondestructive tests, testing equipment, transducers (ultrasonic), Crostack (H.A.), Deutsch (V.), (et al.), *7560*
- algorithms, flaw detection, frequency domain techniques, transducers (ultrasonic), Cleveland (D.), Mucciardi (A.N.), *7578*
- flaw detection, stainless steel, welded joints, Tomlinson (J.R.), Wagg (A.R.), (et al.), *7580*
- shape factors, thickness, velocimeters, Melkanovich (A.A.), Firsukov (A.A.), (et al.), *7582*
- cracks, flaw detection, time domain techniques, welded joints, Silk (M.G.), Lidington (B.H.), (et al.), *7583*
- algorithms, defects, flaw detection, frequency domain techniques, Cleveland (D.), Barron (A.R.), (et al.), *7584*
- far field radiation, transducers (ultrasonic), transient, Aulenbacher (U.), Langenberg (K.J.), *7585*
- calibration, impulse, sound fields, transducers (pressure), Jones (S.M.), Carson (P.L.), (et al.), *7946*
- diffraction, optical techniques, waves, Riley (W.A.) Jr., *7947*
- absorption, experimental methods, tissues, Christman (C.L.), *8062*
- crack tip geometry, jintegral, nondestructive tests, strain measurement, stresses, King (R.B.), Herrmann (G.), (et al.), *8425*
- nondestructive tests, stresses, surfaces, transducers, Thompson (R.B.), *8426*
- velocity measurement, vortices, wind tunnels, Engler (R.H.), Schmidt (D.W.), (et al.), *8663*
- diagnostics, muscles, scattering, tissues, Engin (A.E.), Poindl (R.D.), (et al.), *9072*
- free boundary, reflection, Kutzner (J.), *9343*
- forming, tools, vibration, vibrational forming, Biddell (D.C.), *9375*
- digital simulation, microprocessors, nondestructive tests, synthesis, Hanstead (P.D.), *9423*
- axisymmetric flow, doppler effect, velocity measurement, Lefebvre (J.-P.), *9572*
- crack detection, cracks, fatigue, Ibrahim (S.I.), Whittaker (V.N.), *10275*
- crack growth, diffraction, fatigue, nondestructive tests, Sigmond (R.S.), Lian (E.), *10282*
- acoustoelasticity, nondestructive tests, orthotropic materials, plane stress, Okada (K.), *10315*
- aluminum alloys, residual stresses, thermal effects, Salama (K.), Ling (C.K.), (et al.), *10321*
- axisymmetric flow, bodies of revolution, cavitation flow, sound generation, turbulence, Murai (H.), Ihara (A.), *10532*
- drops, drying, experimental methods, Toei (R.), Furuta (T.), (et al.), *10640*
- experimental methods, fatigue, Terao (K.), Kuno (T.), (et al.), *11162*
- field tests, nondestructive tests, rocks, Mckenzie (C.K.), Stacey (G.P.), (et al.), *11181*
- rarefied gases, sound propagation, transport, transport phenomena, Woods (L.C.), Troughton (H.), *11438*
- acoustic waves, barriers, liquid solid interface, plane waves, reflection, Claeys (J.M.), Leroy (O.J.), (et al.), *11648*
- plates, submerged bodies, transmission, Ng (K.W.), Ngoc (T.D.K.), (et al.), *11657*
- dispersion, porous media, sound speed, Sayers (C.M.), *11925*
- echos, panels, reflection, Trivett (D.H.), *11973*
- impulse, sound fields, transient, Stepanishen (P.R.), Fisher (G.), *12010*
- data analysis, nondestructive tests, surveys, Fu (L.S.), *79999*

Ulyanenko (A.P.), see Novikov (N.V.), *6475*

Ulyanitskii (V.Yu.), detonation (two phase), explosions, shock waves, thermal explosions, *7931*

- chemical kinetics, detonation, detonative ignition, explosions, *9826*
- detonation, explosions, shock waves, unsteady flow, *10781*

Ulyanov (V.D.), cavities, cylindrical waves, elastic waves, interaction, *9349*

Ulyashina (A.N.), higher order theories, plates (orthotropic), plates laminated, plates orthotropic, shear, stress strain relationships, *319*

Umans (S.D.), see Jackson (M.C.), *4483*

Umanskii (S.E.), anisotropic media, elasticity (linear), existence theorems, uniqueness, *1184*

Umemiya (H.), see Yokoyama (T.), *10603*

Umemura (A.), combustion, drops, evaporation, sprays, Ogawa (S.), (et al.), *10709*

Umezawa (K.), acoustics, diagnostics, gear teeth, holography, vibration, Houjoh (H.), *11339*

Umrikhin (Yu.D.), control, probability theory, reliability analysis, *2097*

Unal (H.C.), boilers, critical heat flux, dryout, helical flow, pipe flow, pressure drop, tubes, two phase flow, Van Gasselt (M.L.G.), (et al.), *1721*

- boilers, density, density waves, oscillatory flow, *6699*
- circulation, convection, steam gas power plants, thermal instability, thermal waves, tubes, *9705*

underground, irrigation, tubes (perforated), Koroleva (O.A.), Korolev (A.V.), *821*

- buried structures, pipes, seismic waves, soil structure interaction, Parnes (R.), Weidlinger (P.), *969*
- beam columns, buried structures, connections, discontinuities, Brockenbrough (R.L.), Frost (R.W.), (et al.), *1435*
- buried structures, earthquake effects, pipes, Hindy (A.), Novak (M.), *1882*
- buckling, buried structures, nondestructive tests, pipes, Valsangkar (A.J.), Britto (A.M.), (et al.), *3567*
- darcy flow, filtration, hydrodynamics, oil removal, Rasulov (M.A.), *4968*
- buried structures, finite element methods, flexible bodies, pipes, Moser (K.), Swoboda (G.), *5260*
- moving loads, response, shells (cylindrical), Pozhuev (V.I.), *6327*
- elastoplasticity, excavation, materials properties, mining, Chugh (A.K.), *7288*
- columns, design, finite element methods, mines, pillars, structural support, Parisseu (W.G.), Sorensen (W.K.), *7610*
- cylindrical bodies, heat transfer, phase changes, pipes, stefan problem, variable thermal properties, Lunardini (V.J.), *7854*
- buried structures, pipelines, seismic loading, Hindy (A.), Novak (M.), *8967*
- earthquake resistant structures, foundations, shear stress, soil structure interaction, Meade (K.P.), Keer (L.M.), *9346*
- blast effects, explosions, impulsive loading, transient loading, Egorov (V.A.), Kolobashkin (V.M.), (et al.), *9833*
- compaction, explosions, impulsive loading, porous media, transient loading, Bovt (A.N.), Kobets (V.I.), (et al.), *9838*
- anchors, buried structures, soil mechanics, structures, Smorodinov (M.), Smolin (B.S.), *10251*

underwater acoustics, modes, ocean, ocean bed, sound propagation, Thompson (I.J.), *887*

- nonlinear waves, ocean bed, sedimentation, sound propagation, Hovem (J.M.), *892*
- impedance, ocean, ocean bed, refraction, sound propagation, Stickler (D.C.), Ahluwalia (D.S.), *893*
- modes, ocean, sound propagation, Tindle (C.T.), *894*
- ocean, sound propagation, stochastic processes, Watson (J.G.), Siegmann (W.L.), (et al.), *895*
- fluid-structure interaction, nonlinear analysis, Jackson (J.E.) Jr., Cost (T.L.), *1606*
- shells, submerged bodies, Vasudevan (R.), Dimaggio (F.L.), *2961*
- moving sources, ocean, sound propagation, Kaye (J.L.), Jacobson (M.J.), (et al.), *3927*
- scattering, thermal effects, Andrews (R.S.), *3928*
- ocean, sound propagation, Floyd (E.R.), *3941*
- attenuation, reflection, sonar, Stewart (J.L.), Westerfield (E.C.), (et al.), *3954*
- arrays, reflection, sonar, Lynch (J.F.), Pitt (S.P.), (et al.), *3956*
- acoustics, noise, Wolcin (J.J.), *3961*
- arrays, noise, Wagstaff (R.A.), *3966*
- ocean bed, reflection, sound propagation, Harrison (C.H.), *4790*
- fluid-structure interaction, submerged bodies, Geers (T.L.), *4791*
- scattering, sound propagation, Ewart (T.E.), Ehrenberg (J.E.), (et al.), *4792*
- acoustic measurements, calibration, scattering, Dragonette (L.R.), Numrich (S.K.), (et al.), *4801*
- helmholtz resonator, sound generation, transducers, Henriquez (T.A.), Young (A.M.), *4804*
- arrays, spectral analysis, Tuteur (F.B.), Presley (J.A.) Jr., *4811*
- absorption, lasers, sound generation, Hunter (S.D.), Jones (W.V.), (et al.), *5717*
- arrays, holography, imaging systems, Sutton (J.L.), *5718*
- absorption, chemical reactions, ocean, Mellen (R.H.), Browning (D.G.), (et al.), *5719*
- inverse method, ocean, sound speed, stratification, Gray (S.H.), *5721*
- sound propagation, Robertson (G.H.), *5722*
- modeling, sound propagation, Etter (P.C.), *5723*
- interference, sloping bottom, sound propagation, Bannister (R.W.), Pederson (M.A.), *5724*
- interface phenomena, ocean bed, reflection, refraction, sound propagation, Frisk (G.V.), Doutt (J.A.), (et al.), *5725*

- ocean, sound propagation, Kohler (W.E.), *5726*
- sound propagation, Weston (D.E.), *5727*
- currents, nonhomogeneous media, sound propagation, Newhall (B.K.), Jacobson (M.J.), (et al.), *5728*
- ocean, sound propagation, Spiesberger (J.L.), Spindel (R.C.), (et al.), *5729*
- explosions (underwater), sound propagation, Mitchell (S.K.), Bedford (N.R.), (et al.), *5730*
- eddies, sound propagation, Baer (R.N.), *5731*
- diffraction, modes, sound propagation, Leung (R.), Deferrari (H.A.), *5732*
- attenuation, ocean bed, sound propagation, Tindle (C.T.), *5735*
- impedance, transducers, Clark (J.A.), *5737*
- noise, ocean, Wagstaff (R.A.), *5740*
- sound propagation, turbulence, Unni (S.), Kaufman (C.), *5741*
- holography, waves, Wu (W.-T.), *5743*
- ocean, scattering, Medwin (H.), Novarini (J.C.), *5744*
- ocean bed, reflection, Vidmar (P.J.), *5745*
- ocean bed, sound propagation, Cavanagh (R.C.), Renner (W.W.), *5746*
- attenuation, ocean bed, shallow water, Tindle (C.T.), Weston (D.E.), (et al.), *5747*
- modeling, ocean bed, Hamilton (E.L.), *5748*
- acoustic measurements, coherent structure, ocean bed, reflection, Berkson (J.M.), *5749*
- acoustic measurements, noise, shallow water, Walker (A.W.), *5750*
- sound propagation, Robertson (G.H.), Wagner (R.L.), *5751*
- ocean bed, reflection, sedimentation, Vidmar (P.J.), *5752*
- attenuation, ocean bed, porous media, sedimentation, Hovem (J.M.), *5753*
- acoustic measurements, arrays, ocean, Harper (E.Y.), *5754*
- attenuation, ocean bed, sedimentation, Mitchell (S.K.), Focke (K.C.), *5755*
- ocean bed, reflection, Volovov (V.I.), Ivakin (A.N.), *5758*
- bottom irregularities, ocean bed, sound propagation, Rutherford (S.R.), Hawker (K.E.), (et al.), *5759*
- ocean, sound speed, Lovett (J.R.), *5761*
- doppler effect, sound speed, tracking, Wilcox (R.E.), *5762*
- explosions (underwater), sound propagation, sound speed, Mitchell (S.K.), Hampton (L.D.), *5763*
- dispersion, scattering, Zornig (J.G.), *5764*
- green function, layered media, sound propagation, wave equations, Dinapoli (F.R.), Deavenport (R.L.), *5767*
- diffraction, ocean, scattering, surface profiles, Holford (R.L.), *5785*
- numerical methods, sloping bottom, sound propagation, wave equations, Lee (D.), Papadakis (J.S.), *5788*
- couplings, modes, scattering, shallow water, Mcdaniel (S.T.), *6902*
- ducts, scattering, Bucker (H.P.), *6904*
- ocean bed, sedimentation, sound propagation, Stoll (R.D.), *6905*
- modes, ocean bed, Macpherson (M.K.), Frisk (G.V.), *6906*
- ocean bed, reflection, sedimentation, shear waves, Vidmar (P.J.), *6907*
- sound propagation, spectra, wave equations, Stickler (D.C.), Ammicht (E.), *6909*
- ocean, sound propagation, Jensen (F.B.), Kuperman (W.A.), *6911*
- diffraction, eddies, sound propagation, Munk (W.H.), *6912*
- modes, sound propagation, Gordon (D.F.), *6914*
- nonlinear characteristics, ocean, shock waves, sound propagation, Fridman (V.E.), *6916*
- sound propagation, waveguides, Ahluwalia (D.S.), Reiss (E.L.), (et al.), *6924*
- ducts, sound propagation, Weston (D.E.), *7933*
- ocean bed, penetration, sedimentation, Tjotta (J.N.), Tjotta (S.), *7943*
- arrays, sound fields, Neubert (J.A.), *7945*
- ocean, sound speed, Mackenzie (K.V.), *8958*
- blast waves, explosions (underwater), ocean, Fridman (V.Ye.), *9943*
- acoustic waves, finite difference methods, parabolic equations, wave equations, Lee (D.), Botseas (G.), (et al.), *10043*
- nonhomogeneous media, ocean, sound propagation, Emery (W.J.), Reid (T.J.), (et al.), *10783*
- eigenvalues, sound propagation, waveguides, Arnold (J.M.), *11695*
- cylindrical bodies, scattering, submerged bodies, Numrich (S.K.), Varadan (V.V.), (et al.), *11900*
- direction, reflection, sonar, Chestnut (P.C.), Floyd (R.W.), *11901*
- propagation, random media, Broek (H.W.), Lawlor (J.E.), *11902*
- propagation, random media, Worcester (P.F.), Williams (G.O.), (et al.), *11903*
- random media, sound propagation, Spiesberger (J.L.), Worcester (P.F.), *11905*
- explosions (underwater), impulse, transfer functions, Dicus (R.L.), *11906*
- acoustic waves, ocean bed, reflection, sedimentation, Stoll (R.D.), Kan (T.-K.), *11907*
- arrays, layered media, Eliseevnin (V.A.), *11909*
- modal analysis, refraction, Kuznetsov (V.K.), *11910*
- caustics, sound propagation, White (D.), *11911*
- bottom irregularities, ocean bed, scattering, shallow water, Ivakin (A.N.), Lysanov (Yu.P.), *11912*
- acoustic waves, modes, reflection, Weston (D.E.), Tindle (C.T.), *11913*
- arrays, focusing, Claus (A.J.), Labianca (F.M.), *11976*
- doppler effect, Shensa (M.J.), *11998*
- arrays, Mole (L.A.), *11999*
- arrays, focusing, Lynch (J.F.), Stokes (R.H.), *12000*
- detection, tracking, Moura (J.M.F.), *12002*
- piezoelectric devices, transducers, Ricketts (D.), *12008*
- calibration, transducers, velocity measurement, Ivanov (V.E.), Kirshov (V.A.), *12011*

underwater structures, pressure vessels, shells (anisotropic), shells (of revolution), shells (sandwich), Palaninathan (R.), Montague (P.), *320*
- geometric nonlinearities, offshore structures, pipes, wave loads, Felippa (C.A.), Chung (J.S.), *6534*
- elastic foundations, ocean bed, pipelines, soil mechanics, stress analysis, winkler foundation, Hobbs (R.E.), *6551*
- cables, ocean bed, torsion, Shashaty (A.J.), *9256*
- cavitation, fluid-structure interaction, numerical methods, Dimaggio (F.L.), Sandler (I.S.), (et al.), *9628*

Underwood (P.), boundary integral methods, finite element methods (hybrid), soil structure interaction, Geers (T.L.), *3009*
- computing techniques, dynamic analysis, structural analysis, Park (K.C.), *11154*

Unger (A.), dynamic analysis, rotating shafts, torque, vibration (parametric), Brull (M.A.), *9324*

Unger (J.), channel flow, flow irregularities, flow obstructions, pressure drop, reynolds number (high), *5439*
- cavities, channel flow, convection, thermal instability, *6784*

uniqueness, contact problems, elasticity (linear), singular integral equations, variational methods, Panagiotopoulos (P.D.), Zastrow (U.), *254*
- cauchy problem, existence theorems, hyperbolic equations, inhomogeneities, Ying (L.-A.), Wang (C.-H.), *1089*
- anisotropic media, elasticity (linear), existence theorems, Umanskii (S.E.), *1184*
- helical flow, vortex tubes, Adebiyi (A.), *1508*
- existence theorems, hyperbolic equations, water hammer, Barbu (V.), Morosanu (G.), *2008*
- existence theorems, navier stokes equation, three dimensional flow, Naumann (J.), *2013*
- boundary value problems, elasticity (linear), periodic problems, Howell (K.B.), *2209*
- discrete systems, existence theorems, integer programming, optimization, scheduling problems, Smadici (C.), *3114*
- elasticity (linear), infinite medium, well-posedness, Galdi (G.P.), Rionero (S.), *4124*
- boundary value problems, elasticity (linear), infinite medium, Howell (K.B.), *4125*
- inverse problems, layered media, Glasko (V.B.), Khudak (Yu.I.), *4451*
- elastoplasticity, trusses, White (D.L.), Hodge (P.G.) Jr., *4541*
- conduction (heat), inverse problems, theorems, Muzylev (N.V.), *4645*
- boundary value problems, geodesy, potential theory, Witsch (K.J.), *4985*
- elastoplasticity, work hardening, Brovko (G.L.), *5108*
- asymptotic behavior, boundary layer, cylindrical bodies, existence theorems, gortler series, yawing, Schwierz (K.-P.), *5426*
- boundary value problems, existence theorems, initial value problems, plates, vibration, Urosv (V.M.), *6073*
- burgers equation, regularization, Larkin (N.A.), *6074*
- elasticity, existence theorems, functional analyis, strips, Lebedev (L.P.), *6162*
- elasticity (nonlinear), existence theorems, Kholmatov (T.), *6156*
- conduction (heat), helical flow, materials possessing memory, Fetecau (C.), *6577*
- bending, contact problems, existence theorems, plates, variational methods, Fortune (D.), Bezine (G.), *7330*
- dynamic response, elasticity (nonlinear), existence theorems, nonlinear theory, Vilke (V.G.), *7424*
- boundary value problems, dust, initial value problems, stability, Jain (R.K.), Prabha (S.), *7961*
- moving media, supersonic flow, wave equations, Manwell (A.R.), *8109*
- diffusion, existence theorems, inverse problems, Chrzanowski (E.M.), *8115*
- boundary value problems, existence theorems, hyperbolic equations, integro differential equations, Krivoshein (L.E.), Leung (K.V.), (et al.), *8121*
- existence theorems, plasticity, work hardening, Suquet (P.-M.), *8205*
- falkner-skan equation, perturbation theory, Aziz (A.), Na (T.Y.), *8556*
- existence theorems, stefan problem, Tabisz (K.), *9096*
- boussinesq equation, existence theorems, surface waves, Schonbek (M.E.), *9101*
- diffusion, three dimensional flow, two component flow, unsteady flow, Belrao De Veiga (H.), Serapioni (R.), (et al.), *9537*
- boltzmann equation, boundary value problems, internal flow, Burov (A.V.), *10422*
- energy conservation, magneto fluid dynamics, navier stokes equation, nonlinear theory, Bershadskii (A.G.), *10747*
- gravity waves (surface), sloping bottom, theorems, Wen (S.-L.), Sastry (M.S.K.), *11571*

unloading, elastic waves, penetration, plates, Barclay (D.W.), Moodie (T.B.), (et al.), *1292*
- fracture criteria, j-integral, mixed mode fracture, Yoda (M.), *3458*
- elastoplasticity, mathematical methods, torsion, Caffarelli (L.A.), Friedman (A.), *7165*
- dynamic behavior, mechanical systems, Oosterlee (P.J.), *7418*

Unni (S.), sound propagation, turbulence, underwater acoustics, Kaufman (C.), *5741*
Unny (T.), see Al-Nassri (S.A.), *4626*
unsteady flow, closed conduit flow, polymers, viscoelastic fluids, Ryan (M.E.), Dutta (A.), *544*
- boundary layer (thermal), non newtonian flow, Goris (R.S.R.), *547*
- compressible flow, navier stokes equation, reynolds number (high), Zeytounian (R.), *586*
- damping, poiseuille flow, vibration, viscous effects, Korner (M.), *616*
- channel flow, laminar flow, porous walls, Bhattacharyya (P.), *620*
- inviscid fluid, numerical methods, transonic flow, Lerat (A.), Sides (J.), *697*
- laser doppler velocimeters, piston driven flow, vortices, Bicen (A.F.), Vlachos (N.S.), (et al.), *707*
- oscillatory flow, viscoelastic fluids, viscous flow, Salathe (E.P.), *1485*
- channel flow, finite difference methods, free boundary, one dimensional flow, open channels, Maczuga (T.), *1501*
- boussinesq equation, convection (free), nusselt number, vortices, Oertel (H.), Kessler (R.), *1513*
- compressible flow, inviscid fluid, numerical methods, Zannetti (L.), Colasurdo (G.), *1524*
- boundary layer, compressible flow, similarity methods, stagnation point, three dimensional flow, Kumari (M.), Nath (G.), *1545*
- aerodynamic loads, aeroelasticity, wings, Dunn (H.J.), *1631*
- centrifugal compressors, diffusers, rotating stall, Abdelhamid (A.N.), *1633*
- boiling, cooling, thermal properties, transition boiling, Berlin (I.I.), Kalinin (E.K.), (et al.), *1671*
- contact resistance, thermal contact resistance, Sadhal (S.S.), *1696*
- convection, fins, heat transfer, transforms, Aziz (A.), Na (T.Y.), *1703*
- aquifers, finite difference methods, finite element methods (hybrid), Guvanasen (V.), Volker (R.E.), *1874*
- plastic flow, viscoplasticity, Ogibalov (P.M.), Mirzadzhanzade (A.Kh.), *2574, book*
- incompressible flow, inviscid fluid, jets, starting, Kraemer (K.), *2583*
- cavitation inception, orifices, vaporization, Yamaguchi (A.), *2587*
- boundary value problems, initial value problems, inviscid fluid, penetration, Karzhikhov (A.V.), Ragulin (V.V.), *2598*
- compressible flow, finite difference methods, inviscid fluid, Steger (J.L.), Warming (R.F.), *2621*
- boundary conditions, compressible flow, transonic flow, Engquist (B.), Majda (A.), *2622*
- laminar flow, poiseuille flow, Stavitsky (D.), Macagno (E.), *2642*
- approximations (higher order), pipe flow, viscoelastic fluids, Manero (O.), Walters (K.), *2647*
- oil wells, pressure change, transient effects, transmission, Hoberock (L.L.), Stanbery (S.R.), *2706*
- propulsion, two dimensional flow, wing body combinations, Couchet (G.), *2740*
- interaction, propellers, thrust, wing body combinations, Mccormick (B.W.), Aljabri (A.S.), (et al.), *2759*
- ludwig tubes, transonic flow, wind tunnels, Takashima (K.), *2770*
- lifting bodies, separation, trailing edge, vorticity, Zaitsev (A.A.), Tyurev (V.V.), *2913*
- inviscid fluid, vortex rings, Poppe (W.), *3615*
- navier stokes equation, stagnation point, stream function, vorticity, Da Cunha (D.M.), Nee (V.W.), *3625*
- compressible flow, trains (railroad), tunnels, velocity profiles, Woods (W.A.), Pope (C.W.), *3629*
- axisymmetric flow, bodies of revolution, cavities, irrotational flow, Nesteruk (I.G.), *3630*
- bubble dynamics, cylindrical bodies, impulse, velocity profiles, visualization, Nagata (H.), Matsui (T.), (et al.), *3633*
- bodies of revolution, compressible flow, hypersonic flow, Hui (W.H.), Tobak (M.), *3640*
- channel flow, pumps, variational methods, Atanov (G.A.), Voronin (S.T.), *3665*
- laminar flow, pipelines, pulsatile flow, visualization, Muto (T.), Nakane (K.), *3666*
- eddy viscosity, pipelines, turbulent flow, Kita (Y.), Adachi (Y.), (et al.), *3667*
- buoyancy, couette flow, pressure gradient, velocity profiles, Andreichenko (K.P.), Smarun (A.B.), *3668*
- pipe flow, resonance, wavy walls, Latinopoulos (P.), Tolikas (D.K.), *3711*
- channel flow, heat transfer, micropolar media, Kolpashchikov (V.L.), Migun (N.P.), (et al.), *3805*
- rayleigh problem, shear flow, viscoelastic fluids, Johri (A.K.), Singhal (R.K.), *4568*
- inviscid fluid, spherical bodies, vortex flow, vortices, Mindlin (I.M.), *4579*
- convection (free), friction (skin), plates (parallel), Rath (R.S.), Jena (G.), *4617*
- ducts (curved), laminar flow, porous surfaces, secondary flow, Zapryanov (Z.), Mataklev (V.), *4618*
- particle fluid flow, plates (parallel), pressure distribution, Ramana Prasad (V.V.), Pattabhi Ramacharyulu (N.C.), *4620*
- fluid-structure interaction, gravity waves (finite depth), half space, propagation, Tkachenko (V.A.), *4663*
- channel flow, gravity waves (surface), numerical methods, Ederhofer (J.), Schmitz (G.), *4666*
- cylindrical bodies, elliptical bodies, oscillating bodies, visualization, Hansen (S.B.), Taneda (S.), *4684*
- holes, infiltration, porous walls, Raichenko (L.M.), *4839*
- characteristic methods, hyperbolic equations, waves, Kluwick (A.), *4964*
- constitutive equations, viscoelastic fluids, Slawominski (M.R.), *5381*
- elliptical bodies, numerical methods, oscillations, vortex rings, Dhanak (M.R.), De Bernardinis (B.), *5398*
- airfoils, compressible flow, finite difference methods, transonic flow, Kerlick (G.D.), Nixon (D.), *5417*
- boundary conditions, compressible flow, numerical methods, transonic flow, Kwak (D.), *5421*
- cascades, galerkin method, two dimensional flow, Daiguji (H.), Shirahata (H.), *5448*
- characteristic methods, coding, fluidics, networks, Hakoulakos (V.E.), *5487*
- airfoils, oscillating bodies, transonic flow, Shivamoggi (B.K.), *5491*
- design, floating bodies, flow measurement, pulsatile flow, Maki (H.), Ikeda (Y.), *5508*
- interferometry, laser plasma interaction, measurements (dynamic), schlieren methods, Klimkin (V.F.), Pikalov (V.V.), *5694*
- aerodynamic loads, buildings, geometrical properties, pressure distribution, Sockel (H.), Taucher (R.), *5698*
- bubble dynamics, heat transfer, mass transfer, Shagapov (V.Sh.), *5818*
- dissociation, gases, porous media, Lippy (D.), Evans (R.D.), *5832*
- conduits, finite difference methods, ice mechanics, lakes, Spring (U.), Hutter (K.), *6608*
- dust, noncircular pipes, particle fluid flow, viscous flow, Dixit (L.A.), *6653*
- cascades, numerical methods, transonic flow, Gnesin (V.I.), *6663*
- airfoils, flutter, one dimensional flow, oscillating bodies, transonic flow, wakes, Mccroskey (W.J.), *6716*
- airplanes, frequency response, lateral stability, Wells (W.R.), Banda (S.S.), (et al.), *6730*
- heat transfer, laminar flow, stagnation point, Sergeev (V.L.), Strogii (A.S.), *6762*
- acoustic emission, duct flow, heat transfer, pipe flow, resonance, turbulent flow, Andre (P.), Creff (R.), *6764*
- convection, convection (forced), crossflow, cylindrical bodies, heat transfer, sprays, Basilico (C.), Jung (G.), (et al.), *6775*
- plates (perforated), reynolds number (high), sound propagation, turbulent flow, vortex shedding, Howe (M.S.), *6897*
- boiling, chemical reactions, dissociation, Andrizhievskii (A.A.), Mikhalevich (A.A.), (et al.), *6975*
- diffusion, finite difference methods, separated flow, two dimensional flow, vorticity, Porthouse (D.T.C.), Lewis (R.I.), *7678*
- flexible walls, pipe flow, porous walls, Ohki (M.), *7719*
- chemical reactors, chemically reactive flow, Gupalo (Yu.P.), Novikov (V.A.), (et al.), *7720*
- nonisothermal flow, reynolds number (small), similarity methods, squeeze flow, Phan-Thien (N.), *7724*
- nozzles, pressure distribution, supersonic flow, Melnikov (D.A.), Tutushkin (A.S.), *7727*
- blades, cascades, finite difference methods, Mitchell (N.A.), *7729*
- atomized liquids, jets, turbulent flow, two phase flow, Lebedev (O.N.), Solonenko (O.P.), *7734*
- airfoils, wakes, Ho (C.-M.), Chen (S.-H.), *7735*
- airfoils, lift, slots, vortices, wakes, Howe (M.S.), *7783*
- cavitation, flow reversal, mathematical models, pumps, Ershov (N.S.), Kuchkin (V.N.), *7791*
- aerodynamic loads, axial compressors, inviscid fluid, stress analysis, wind tunnels, Lambertz (J.), Wallmann (T.), (et al.), *7808*
- duct flow, flow reversal, hydrodynamic stability, porous media, Bau (H.H.), Torrance (K.E.), *7840*
- cavities, convection (free), laminar flow, variable thermal properties, Le Quere (P.), Humphrey (J.A.C.), (et al.), *7843*
- conduction (heat), cylindrical bodies, internal flow, lasers, Lakusta (K.V.), *7850*
- control stability, control surfaces, ocean waves, ship motion, surge, Haddara (M.R.), *8042*
- couette flow, experimental methods, viscometry, Ravey (J.C.), Dognon (M.), (et al.), *8494*
- flow measurement, oscillatory flow, viscoelastic fluids, Sigli (D.), Maalouf (A.), *8505*
- channel flow, elliptic equations, hyperbolic equations, vortex flow, Lyapidevskii (V.Yu.), *8507*
- canals, frequency response, gates, mathematical models, Corriga (G.), Sanna (S.), (et al.), *8509*
- ellipsoids, laplace equation, oscillating bodies, viscous effects, Geissler (W.), Kienappel (K.), *8539*
- friction (skin), laminar flow, pipe flow, Achard (J.L.), Lespinard (G.M.), *8565*
- annuli, frequency domain techniques, laminar flow, Franke (M.E.), Carney (G.R.), (et al.), *8573*
- conical bodies, ducts (variable area), dynamic response, frequency domain techniques, Muto (T.), Kinoshita (Y.), (et al.), *8574*
- dust, laminar flow, noncircular pipes, particle fluid flow, Gupta (M.), *8575*

- axisymmetric flow, constrictions, ducts (variable area), pulsatile flow, Latinc-poulos (P.), Ganoulis (J.), *8582*
- heat transfer, pipe flow, pulsatile flow, turbulent flow, Creff (R.), Andre (P.), (et al.), *8615*
- channel flow, existence theorems, gravity waves (finite depth), Forste (J.), *8623*
- centrifugal compressors, dynamic stability, rotors, Vance (J.M.), Laudadio (F.J.), *8655*
- cavitation, diesel engines, erosion, injectors, visualization, Bastenhof (D.), *8661*
- cylindrical bodies, diffusion, solids, thermal excitation, Lamvik (M.), *8678*
- buoyant flow, convection (free), mixing, mixing chambers, thermal instabil-ity, Opanasenko (A.N.), Selivanov (V.M.), (et al.), *8704*
- thermal instability, thermal waves, thermodynamics (nonequilibrium), trans-port mechanisms, Sieniutycz (S.), *8708*
- composite materials, conduction (heat), green function, laminates, layered media, Huang (S.C.), Chang (Y.P.), *8733*
- free boundary, porous media, Rasmussen (H.), Salhani (D.), *8920*
- finite difference methods, mathematical models, river beds, Henriques (A.G.), *9508*
- asymptotic methods, reynolds number (small), spherical bodies, Sano (T.), *9530*
- diffusion, three dimensional flow, two component flow, uniqueness, Beirao Da Veiga (H.), Serapioni (R.), (et al.), *9537*
- compressible flow, navier stokes equation, numerical methods, Kuo-Pen-Yu, *9558*
- diffusers, inlets, simulation, supersonic flow, Colbourne (D.E.), *9590*
- flow measurement, liquid fuels, longitudinal stability, pogo phenomenon, rockets, Dordain (J.-J.), *9661*
- buildings, pressure distribution, wind loads, wind tunnels (environmental), Holmes (J.D.), Best (R.J.), *9663*
- aerodynamic performance, airplanes, mathematical models, Skoda (Z.), *9665*
- blades, helicopters, numerical methods, pressure distribution, transonic flow, Chattot (J.-J.), Philippe (J.-J.), *9666*
- aerodynamic loads, axial compressors, axial turbines, incompressible flow, inviscid fluid, two dimensional flow, Ispas (I.), Lucking (P.), *9671*
- convection (forced), laminar flow, non newtonian flow, wedges, Gorla (R.S.R.), *9706*
- analytical methods, biot number, conduction (heat), cylindrical bodies, heisler charts, spherical bodies, Sha (W.C.), Ganic (E.N.), *9714*
- solar collectors, thermal loading, transient loading, El-Refaie (M.F.), Hashish (M.A.), *9739*
- airfoils, pressure distribution, separated flow, shock waves, transonic flow, Roos (F.W.), *9905*
- one dimensional flow, particle fluid flow, shock waves (normal), two phase flow, Marconi (F.), Rudman (S.), (et al.), *9873*
- transport, two phase flow, Staub (F.W.), *9875*
- acceleration, drag, pipe flow, Ovsyannikov (V.M.), *10441*
- channels, porous walls, pressure gradient, Sai (K.S.), *10446*
- dikes, hazardous liquids, impoundments, rupture, tanks, Greenspan (H.P.), Johansson (A.V.), *10450*
- blades, helicopters, three dimensional flow, wind tunnels, wings, Monnerie (B.), Philippe (J.-J.), *10514*
- numerical analysis, swept wings, three dimensional flow, transonic flow, Bor-land (C.J.), Rizzetta (D.P.), (et al.), *10521*
- oscillatory flow, variable area flow, wind tunnels, Retelle (J.P.) Jr., Mcmichael (J.M.), (et al.), *10541*
- couette flow, magneto fluid dynamics, plates (parallel), porous walls, Mishra (S.P.), Muduli (J.C.), *10738*
- convection (free), magneto fluid dynamics, oscillating bodies, plates (verti-cal), Soundalgekar (V.M.), Patil (M.R.), (et al.), *10739*
- ionic flow, magneto fluid dynamics, power generation, steam, Pozwolski (A.E.), *10751*
- liquid metals, magneto fluid dynamics, mixing, welding, Chernysh (V.P.), Shalda (L.M.), *10754*
- detonation, explosions, shock waves, Ulyanitskii (V.Yu.), *10781*
- hydraulics, rewetting, tubes, Chan (A.M.C.), Banerjee (S.), *10825*
- anisotropic media, porous media, Falade (G.K.), *10836*
- groundwater, infiltration, leaks, tunnels, Bouvard (M.), Niquet (J.-J.), *10838*
- bubble dynamics, creeping flow, drops, frequency response, Stewart (M.B.), Morrison (F.A.) Jr., *11362*
- spherical bodies, stokes flow, variational methods, viscous flow, Utkina (S.N.), *11364*
- internal flow, rotating disks, secondary flow, vortex flow, Kurokawa (J.), Toyokura (T.), (et al.), *11377*
- jets, pressure measurement, pulsatile flow, spherical bodies, Kovasznay (L.S.G.), Tani (I.), (et al.), *11381*
- blunt bodies, finite difference methods, flow obstructions, navier stokes equation, Daiguji (H.), Kobayashi (S.), *11385*
- characteristic methods, hyperbolic equations, matrices, Edenhofer (J.), Schmitz (G.), *11392*
- cauchy problem, compressible flow, numerical methods, Katalkin (A.S.), Mik-hailov (V.V.), *11412*
- compressible flow, numerical methods, radiating flow, Volchinskaya (M.I.), Chetverushkin (B.N.), *11413*
- compressible flow, numerical methods, pipe flow, Ainola (L.Ya.), Lamp (Yu.Yu.), (et al.), *11417*
- compressible flow, energy transport, high temperature, similarity methods, Korobeynikov (V.P.), *11419*
- compressible flow, finite element techniques, navier stokes equation, shear layer, supersonic flow, Cooke (C.H.), Blanchard (D.K.), *11429*
- boltzmann equation, collision models, particles, transport, Ganapol (B.D.), Boffi (V.C.), *11436*
- noncircular pipes, sudden expansion, transonic flow, Anderson (J.S.), Meier (G.E.A.), *11493*
- flow irregularities, pipe flow, pressure drop, two phase flow, vibration (flow induced), Fokin (B.S.), Goldberg (Ye.N.), *11495*
- non newtonian flow, pipe flow, power law fluids, velocity profiles, Balmer (R.T.), Fiorina (M.A.), *11497*
- pipe flow, simulation, viscoelastic fluids, De Saint Victor, Ly (D.P.), (et al.), *11508*
- gravity waves (finite depth), gravity waves (solitary), nonlinear waves, wave interactions, Fenton (J.D.), Rienecker (M.M.), *11560*
- numerical methods, pipe flow, water hammer, Wylie (E.B.), Streeter (V.L.), *11598*
- cylindrical bodies, gravity waves (surface), irrotational flow, submerged bod-ies, Chaplin (J.R.), *11633*
- cavitation, fluid-structure interaction, hydroelasticity, Galiev (Sh.U.), *11680*
- flexible walls, pipe flow, viscoelastic materials, Regirer (S.A.), Rutkevich (I.M.), *11690*
- control, hydraulic machinery, stability, Tanaka (Y.), *11749*
- ionic flow, three dimensional flow, Powell (C.), *11804*
- laplace transform, magneto fluid dynamics, porous surfaces, rotating fluids, Seth (G.S.), Jana (R.N.), (et al.), *11812*
- infinite medium, laplace transform, magneto plasma dynamics, panels (flat), Shivamoggi (B.K.), *11814*
- acceleration, hall effect, magneto plasma dynamics, panels (flat), Borkakati (A.K.), Pop (I.), *11815*
- deceleration, deformation, drops, Gonor (A.L.), Zolotova (N.V.), *12023*
- bubble dynamics, fluidized beds, particle dynamics, potential flow, tubes, Adams (R.L.), *12036*
- bubble dynamics, drag, two phase flow, Dymenko (S.K.), Kuchkin (V.N.), *12042*
- granular media, hoppers, Wol-Gajewska (B.), Zawidzki (J.), *12060*
- compressible flow, hypersonic flow, particle fluid flow, Hui (W.H.), Tobak (M.), *12103*

unsteady state, transport phenomena, Manocha (B.L.), Al-Ali (B.M.A.), *833*
- boundary layer, eigenvalues, internal waves, Ryzhov (O.S.), Zhuk (V.I.), *2634*
- boundary layer (thermal), computing techniques, reflection, shock waves, Brun (R.), Chauvin (C.), (et al.), *2723*
- reflection, shock polar, shock waves, Ben-Dor (G.), *2724*
- boundary layer, mathematical methods, three dimensional flow, Vereshcha-gina (L.I.), *4607*
- boundary layer, heat transfer, oscillatory flow, plates, Ishida (M.), Yamada (T.), *4608*
- boundary layer, transition, Pfeil (H.), Herbst (R.), *5433*
- boundary layer, friction (skin), porous media, suction, Lai (K.), *5435*
- finite amplitude, particulate flow, shock waves, Yamamoto (Y.), Kobayashi (S.), (et al.), *5486*
- mach reflection, reflection, roughness, shock waves, Takayama (K.), Ben-Dor (G.), (et al.), *6711*
- boundary layer (turbulent), flow reversal, return flow, Cousteix (J.), Le Balleur (J.-C.), (et al.), *7703*
- asymptotic behavior, boundary layer (three dimensional), pressure gradient, Ryzhov (O.S.), *9566*
- boundary layer, suction, Beldei (L.M.), Kulonen (L.A.), *9571*
- boundary layer, hypersonic flow, supersonic flow, Gupta (R.N.), Mukherjee (S.), (et al.), *10427*
- boundary layer, compressible flow, laminar flow, Chang (I.-M.), Chen (C.-J.), *10430*

Unsworth (K.), boundary layer, mathematical models, micropolar media, stag-nation point, Chiam (T.C.), *2806*
Upadhya (V.S.), see Chaturani (P.), *9060*
Upadhyay (S.N.), see Pandey (D.K.), *4935*
- see Tabatabaie-Fareshahi (M.), *5952*

Updike (D.P.), see Yucesoglu (U.), *9488*
uplift, field tests, piles, sand, Prakash (C.), *3411*
upper atmosphere, airplanes, chemical reactions, ozone, Whitten (R.C.), Bo-rucki (W.J.), (et al.), *4065*
- flow obstructions, irrotational flow, perturbations, two dimensional flow, wind, Blank (A.D.), *5395*
- artificial satellites, drag coefficient, Goldfinger (A.D.), *5712*
- artificial satellites, oblateness, orbit decay, reentry, De Lafontaine (J.), *6983*
- approximations, artificial satellites, computer programming, Hoots (F.R.), *8818*

upset forging, cracks, fracture criteria, plasticity, Mizuta (A.), Tsuda (O.), (et al.), *1379*

- finite element techniques, porous media, Petrosian (G.L.), Nersisian (G.G.), (et al.), *1875*
- cold working, forming, plastic behavior, yield condition, Pohlandt (K.), *2393*
- materials processing, surface flaws, thermoplasticity, Jenner (A.), Bai (Y.), (et al.), *4496*
- finite element techniques, friction, mechanical properties, Hartley (P.), Sturgess (C.E.N.), (et al.), *5275*
- ductility, lubricants, lubricants (liquid), steel, Doraivelu (S.M.), Gopinathen (V.), *5991*
- stress analysis, stress strain relationships, Dedras (P.), *7454*
- axisymmetric loading, compression, plastic flow, stress strain relationships, Gelin (J.C.), Oudin (J.), (et al.), *10326*

Urakawa (T.), finite difference methods, navier stokes equation, oscillating bodies, spherical bodies, streams, Takahashi (K.), *11365*
Ural (A.N.), see Corapcioglu (M.Y.), *3416*
Urano (Y.), air conditioning, cooling, heating, thermal loading, Nanri (H.), (et al.), *9742*
Urban (V.V.), see Romanov (G.S.), *11414*
Urbanik (T.J.), containers, paper, strength, stress strain relationships, *3565*
Urbanovich (L.I.), cooling, heat transfer, high temperature, hydrodynamics, impingement cooling, sprays, Goryainov (V.A.), (et al.), *1663*
Uroev (V.M.), boundary value problems, existence theorems, initial value problems, plates, uniqueness, vibration, *6073*
Ursell (F.), acoustics, wave equations, *1825*
- cylindrical bodies, floating bodies, free boundary, heaving, singular integral equations, singularities, *4099*

Ursin (B.), see Gjoystdal (H.), *8953*
Uryupin (M.A.), filters, linear systems, optimal control, stochastic control, *4295*
Usami (T.), see Rerkshanandana (N.), *7352*
Usciński (B.J.), acoustic waves, internal waves, ocean, refraction, sound propagation, *6908*
Ushijima (R.), finite element techniques, seismic loading, soil structure interaction, Kausel (E.), *8017*
Uskov (E.I.), see Babak (A.V.), *6477*
Usmani (R.A.), boundary value problems, computing techniques, differential equations (ordinary), splines, Warsi (S.A.), *60*
- bending, boundary value problems, differential equations (ordinary), plates, splines, Warsi (S.A.), *2044*

Usov (P.P.), bearings (journal), friction (solid fluid), lubricants (liquid), lubrication (hydrodynamic), mathematical models, Toder (I.A.), (et al.), *9970*
Uspenskii (A.A.), disks, elasticity (linear), holes, rings, *5166*
Ustinov (A.N.), cooling, heat transfer, internal combustion engines, piston rings, Neznaev (A.N.), (et al.), *5648*
Ustinov (V.Ya.), see Suslov (A.D.), *11772*
Usui (H.), see Mizushina (T.), *551*
Utkin (V.B.), see Beinusov (A.G.), *10619*
Utkin (V.I.), jump conditions, optimal control, state space techniques, Yang (K.D.), *133*
- see Grishin (S.A.), *1143*

Utkina (S.N.), spherical bodies, stokes flow, unsteady flow, variational methods, viscous flow, *11364*
Utku (S.), beams (cantilever), dynamic analysis, spinning bodies, vibration, El-Essawi (M.), (et al.), *5202*
Utley (W.A.), mining, noise, noise abatement, noise measurements, *914*
Utsugi (S.), see Yoshino (T.), *4333*
Utz (W.R.), boundary value problems, differential equations (ordinary), existence theorems, falkner-skan equation, *31*
Uvarov (B.V.), beams, contact problems, creep, elastic foundations, *4361*
Uzdemir (A.P.), mathematical programming, operations research, optimization, plant location, *1155*
- linear programming, mathematical programming, nonlinear programming, optimization, plant location, *2109*

Uzgider (E.A.), dynamic loads, inelasticity, space frames, *4540*

V

V. Hoffmann (T.), see Trepp (C.), *1670*

Vaal (A.A.), materials properties, rocks, shock waves (normal), Zhukov (A.V.), (et al.), *5242*

vacuum, elastomers, friction (sliding), polymers, space, Silin (A.A.), *1005*

- diffusion pumps, pumps, Harris (N.S.), *1531*
- high temperature, low cycle fatigue, steel, Maiya (P.S.), *4480*
- fracture toughness, high temperature, inert gases, tension, testing equipment, Babak (A.V.), Uskov (E.I.), *6477*
- aluminum alloys, crack growth, low cycle fatigue, material testing, stress intensity factor, Kirby (B.R.), Beevers (C.J.), *7484*
- axisymmetric flow, compressible flow, flow obstructions, impingement, jets, shock waves, supersonic flow, Mironchuk (N.S.), Nikulin (A.N.), (et al.), *8560*
- friction (sliding), loads, steel, Gamulya (G.M.), Dobrovolskaya (G.V.), (et al.), *9021*
- evaporation, heat transfer, Palmer (H.J.), Bose (A.), *10644*
- electron beams, energy transport, heat addition, laser plasma interaction, thermodynamic processes, Derzhiev (V.I.), Marchenko (V.S.), (et al.), *11840*

vacuum technology, casting, solidification, thermal properties, Fukusako (T.), Kubo (K.), (et al.), *2403*

Vafai (K.), darcy flow, heat transfer, mass transfer, porous media, Tien (C.L.), *8782*

Vagt (J.-D.), see Fernholz (H.H.), *9563*

Vahdani (B.), see Wellford (L.C.) Jr., *6108*

Vaikovskii (S.N.), cracks, elastic behavior, finite difference methods, j-integral, stress intensity factor, Kurguzov (V.D.), *2432*

Vain (A.), dispersed flow, mass transfer, *10668*

Vaingortin (L.D.), see Roizman (V.P.), *2021*

Vainikko (G.M.), approximation methods, error, estimation, ill posed problems, *10048*

Vainshelbaum (V.M.), bimodulus materials, interface cracks, wedges, Goldshtein (R.V.), (et al.), *3475*

Vainshtok (V.A.), see Nikishkov (G.P.), *4494*

Vaisband (V.B.), gages, surface waves, wave height, Shanin (V.N.), *10871*

Vaisman (A.M.), deformation, granular media, micromechanics, spherical bodies, statistical continuum mechanics, Goldshtik (M.A.), *7270*

- half space, porous media, vortex flow, *7980*

Vajpayee (S.), roughness, surface profiles, surfaces, tool wear, turning, *12068*

Vajravelu (K.), channel flow, laminar flow, pressure drop, runge kutta method, viscous flow, wavy walls, Nayfeh (A.H.), *7714*

Vakaiov (G.N.), see Gorshkov (A.G.), *8528*

Vakalyuk (Yu.V.), climatology, heat transfer (atmospheric), meteorology (physical), potential energy, *5946*

Vakhgelt (A.F.), see Borisov (A.A.), *7760*

Valanis (K.C.), continuum mechanics, endochronic theory, plasticity, work hardening, *2231*

- fracture criteria, low cycle fatigue, polymers, probability, rubber, Yilmazer (U.), *6456*

Valente (G.), cable supported structures, roofs, second order analysis, *524*

Valentin (G.), boundary layer, diffusion, impact, mass transfer, particle dynamics, Le Goff (P.), *803*

Valenzuela (J.A.), cooling towers, heat exchangers, rotary dry cooling towers, rotating bodies, Glicksman (L.R.), *8765*

Vales (N.G.), cylindrical bodies, oscillating bodies, separated flow, vibration (self excited), vortex shedding, *7793*

Valid (R.), shells, stability theory, variational methods, *3242*

Valiev (R.Z.), see Kaibyshev (O.A.), *4515*

Valkovskiy (V.A.), coding, computer programming, parallel programming, programming, *10056*

Vallette (P.), ducts (variable area), experimental results, sudden expansion, transition (reverse), Labouche (M.), (et al.), *2644*

Valluri (S.R.), see Sih (G.C.) eds., *8405, book*

Valsangkar (A.J.), see Basudhar (P.K.), *3403*

- buckling, buried structures, nondestructive tests, pipes, underground, Britto (A.M.), (et al.), *3567*

Valsarajan (K.V.), see Rao (N.R.), *2210*

valves, culverts, locks, valve loss, Pickering (G.A.), *3602*

- friction, pneumatic components, torque, Lin (F.N.), Moore (W.I.), (et al.), *4571*
- blood flow, heart, Raul (H.), Talukder (N.), (et al.), *4917*
- oscillating bodies, pipe flow, water hammer, Thomann (H.), *5478*
- closure, finite element techniques, water hammer, Watt (C.S.), Hobbs (J.M.), (et al.), *6700*
- automatic control, electrical instruments, hydraulics, pumps, servomechanisms, Green (W.L.), Sanger (D.J.), (et al.), *6734*
- flow, modeling, prediction, Collier (S.L.), Hoerner (C.C.), *7543*
- cooling, helium, liquid vapor mixture, regulator problem, temperature, Novikov (N.V.), Gorodyskii (N.I.), (et al.), *7575*
- pulsatile flow, self excitation, tanks, Meier (G.E.A.), Szumowski (A.P.), *9603*
- airfoil theory, flow reversal, heart, moment coefficient, optimization, Tuck (E.O.), *9513*
- discharges, modeling, steam, Sonin (A.A.), *11386*
- piping systems, vibration (flow induced), water hammer, Silva (M.A.G.), *11603*
- flapper valves, piping systems, vibration (flow induced), Hayashi (S.), Matsui (T.), (et al.), *11606*
- diodes, fluidics, internal combustion engines, mass transfer, Sher (E.), *11736*

Valz-Gris (F.), see Quartapelle (L.), *9527*

Van Aken (J.A.), birefringence, experimental methods, extension, polymers, Janeschitz-Kriegl (H.), *5394*

- birefringent materials, polymers, viscometry, Gortemaker (F.H.), (et al.), *8498*

Van Amerongen (J.), controllability, maneuverability, rudders, ship maneuvers, steering, De Goeij (W.F.), (et al.), *4102*

Van Atta (C.W.), boundary layer, hydrodynamic stability, potential flow, turbulence, Sokolov (M.), (et al.), *10471*

Van Beijeren (H.), drag, hydrodynamics, kinetic theory, spherical bodies, Dorfman (J.R.), *11439*

- cylindrical bodies, drag, hydrodynamics, kinetic theory, spherical bodies, Dorfman (J.R.), *11453*

Van Brakel (J.) ed., experimental methods, hydraulic instruments, mercury, porous media, *4843, book*

Van Brussel (H.), see De Canniere (J.), *9325*

Van Buskirk (W.C.), anisotropy, biomechanics, bones, elastic constants, ultrasonics, Cowin (S.C.), (et al.), *1031*

Van De Vegte (J.), see Argoun (M.B.), *3158*

- balancing, dynamic response, flexible bodies, rotating shafts, *10217*

Van De Ven (A.A.F.), see Kuipers (M.), *10928*

Van De Ven (H.H.), adaptive systems, algorithms, estimation, identification, model reference systems, Groenendaal (A.W.M.), *4255*

Van De Ven (T.G.M.), see Foister (R.T.), *1731*

- see Takamura (K.), *6583*

Van Den Assem (D.), see Vreeburg (J.P.B.), *5477*

Van Den Berg (B.), bubble dynamics, laminar flow, leading edge, separated flow, stalling, *2635*

Van Den Berg (P.M.), acoustic waves, scattering, strips, *11977*

Van Der Ha (J.C.), see Hechler (M.), *6882*

Van Der Houwen (P.J.), see Sommeijer (B.P.), *5002*

Van Der Mee (C.V.M.), group theory, hilbert space, integro differential equations, mathematical methods, transport phenomena, wiener-hopf technique, *8118*

Van Der Meer (T.H.), see Popiel (C.O.), *727*

Van Der Pauw (L.J.), acoustic loading, acoustics, conical bodies, loudspeakers, membranes, *2949*

Van Der Sluijs (J.C.A.), damping, heat transfer, liquid solid interface, rayleigh waves, solid solid interface, Van Der Sluijs (M.J.), *9339*

Van Der Sluijs (M.J.), see Van Der Sluijs (J.C.A.), *9339*

Van Der Vooren (J.), condensers, heat pipes, vapor gas interface, variable thermal properties, wick, Delil (A.A.M.), (et al.), *10629*

- condensers, contact fronts, heat pipes, variable thermal properties, wick, Sanderse (A.), *10630*
- finite difference methods, perturbation theory, slender wings, transonic flow, wings, Huizing (G.H.), (et al.), *11729*

Van Der Weiden (A.J.J.), computer aided design, linear systems, multivariable systems, structural analysis, Boogra (O.H.), *4235*

Van Der Welle (R.), adiabatic processes, turbulence, two phase flow, viscosity, *9876*

- numerical methods, one dimensional flow, two phase flow, void fraction, *10828*

Van Der Werff (K.), dynamic analysis, finite element methods, kinematics, structural elements, *6050*

Van Der Zanden (J.), conformal mapping, free jets, incompleteness, plates, potential flow, streamlines, *7663*

Van Dooren (P.M.), algorithms, eigenvalue problems, linear systems, linear theory, *11038*

Van Doormaal (J.P.), closed conduit flow, convection (free), coordinate systems, Raithby (G.D.), (et al.), *5566*

Van Doorn (M.), see Chesters (A.K.), *2998*

Van Dyke (M.), flow, photography, visualization, *8667*

Van Eekelen (H.A.M.), plastic behavior, soils, yield criteria, *1318*

Van Gasselt (M.L.G.), see Unal (H.C.), *1721*

Van Heteren (J.), ocean waves, offshore structures, probability theory, wave height, Bruinsma (J.), *8981*

Van Landingham (H.F.), see Meirovitch (L.), *198*

Van Laersum (J.G.), condensation, evaporation, heat transfer, mass transfer, regenerators, rotary regenerators, Ambrose (C.W.), *3838*

Van Maanen (H.R.E.), see Sluman (T.J.), *1648*

Van Nieuwland (J.M.), acoustics (architectural), eigenvalue problems, reverberation, Weber (C.), *5775*

Van Schuppen (J.H.), see Kumar (P.R.), *11072*

Van Suchtelen (J.), composite materials, materials, nondestructive tests, physical properties, *1211*

Van Thiel (M.), experimental methods, finite element techniques, jet streams, Levatin (J.), *6367*

Van Thinh (N.), calibration, geometrical properties, hot wire, *5511*

Van Tuyle (G.J.), generators, mathematical models, nuclear power, steam, steam power plants, transient effects, Lee (J.C.), *8759*

Van Zanten (A.T.), algorithms, nonlinear programming, nonlinear systems, optimal control, vehicles, Krauter (A.I.), *3221*

Van'T Woudt (B.D.), granular media, groundwater, infiltration, porous media, river beds, Nicolle (K.), *976*

Vance (J.M.), centrifugal compressors, dynamic stability, rotors, unsteady flow, Laudadio (F.J.), *9655*

Vance (O.L.), see Davidson (P.B.), *8232*

Vanden-Broeck (J.-M.), drops, reynolds number (small), surface tension, two dimensional flow, *569*

- cavitation flow, free boundary, plates, surface tension, *8515*
- gravity waves (surface), potential flow, separation, ships, stern waves, *8622*
- see Miksis (M.), *8905*
- bubble dynamics, deformation, drops, Keller (J.B.), *8907*
- airfoil theory, cavitation, cavitation number, contact problems, membranes (inflatable), surface tension, weber number, *10402*

Vanderbilt (M.D.), see Mccutcheon (W.J.), *3554*

Vanderplaats (G.N.), see Johnson (C.M.), *10625*

Vanderstappen (N.), see Berlamont (J.E.), *7648*

Vandiver (J.K.), damping capacity, dynamic analysis, offshore structures, random loading, wave loads, *6536*

Vaneveld (L.), see Keller (J.O.), *9754*

Vanfossen (G.J.), channel flow, cylindrical bodies, extended surfaces, fins, heat transfer, *10621*

Vanier (D.J.), see Amkreutz (J.H.A.E.), *778*

Vanlandingham (D.J.), see Rains (D.A.), *5965*

Vanmarcke (E.H.), probability, slopes, soil stability, *6393*

Vant Riet (K.), see Heijnen (J.J.), *6972*

Vantoyan (A.A.), metals, penetration, slender bodies, *6359*

vapor pressure, equations of state, thermodynamic properties, Harmens (A.), Knapp (H.), *717*

- critical region, heavy water, saturation, water, Hill (P.G.), Macmillan (R.D.C.), *1655*
- cavitation inception, hydraulic structures, jets, Bruschin (J.), *2588*

vaporization, boiling, bubble dynamics, heat transfer, two phase flow, Volosko (A.A.), *945*

- combustors, design, flame holders, gas turbines, Plee (S.L.), Mellor (A.M.), *1757*
- cavitation inception, orifices, unsteady flow, Yamaguchi (A.), *2587*
- finite element methods, melting, phase changes, stefan problem, Bonnerot (R.), Jamet (P.), *3820*
- blunt bodies, hypersonic flow, Mirskii (V.N.), *3847*
- boundary layer, chemically reactive flow, ignition, plates, Law (C.K.), Law (H.K.), *3865*
- boundary layer, chemically reactive flow, ignition, nonequilibrium flow, plates, Ahluwalia (R.K.), Chung (P.M.), *3866*
- nucleation, thermal explosions, Henry (R.E.), Fauske (H.K.), *5547*
- binary flow, heat transfer, liquid vapor interface, mixtures, Fakhretdinov (I.A.), Chalyi (A.V.), *5611*
- combustors, emissions, gas turbines, Sjoblom (B.G.A.), *7884*
- combustion, drops, Law (C.K.), Chung (S.H.), (et al.), *8790*
- metals, phase changes, shock waves, waves, Goloveiko (A.G.), Martynikhina (V.I.), *8874*
- heat transfer, thin films, Tolubinskii (V.I.), Antonenko (V.A.), (et al.), *10645*

Varadan (V.K.), see Varadan (V.V.), *4796*

Varadan (V.V.), see Wall (D.J.N.), *1306*

- acoustic waves, scattering, Varadan (V.K.), *4796*
- see Numrich (S.K.), *11900*

Varalya (P.), see Sastry (S.), *124*

Varavin (V.Yu.), acoustic waves, scattering, surface waves, Naugolnykh (K.A.), (et al.), *2946*

Vardoulakis (I.), constitutive relations, experimental methods, sand, shear strength, *3398*

- bifurcation, plane strain, sand, soil stability, *4389*
- half space, rayleigh waves, sand, submerged bodies, *6334*
- analytical methods, experimental results, sand, trap-door problem, Graf (B.), (et al.), *6380*

Varga (G.), elastomers, friction (solid fluid), seals, surfaces, wear, Toth (O.), *8477*

Varga (J.), see Korashy (M.), *6471*

Varga (K.), inserts, junctions, shells (shallow), shells (spherical), stress analysis, *9269*

Varga (T.), alloys, crack arrest, crack growth, microcracks, steel, Allertshammer (W.), (et al.), *3432*

variable area flow, channels, erosion, river beds, Gill (M.A.), *9507*

- cavitation, channel flow, erosion, venturi tubes, vibration, He (J.-G.), Hammitt (F.G.), *9516*
- cavitation, cryogenics, ogives, thermodynamic properties, venturi, Billet (M.L.), Holl (J.W.), (et al.), *10396*
- oscillatory flow, unsteady flow, wind tunnels, Retelle (J.P.) Jr., Mcmichael (J.M.), (et al.), *10541*

variable fluid properties, convection, entrance region, variational methods, Paviovic (M.I.), Milojevic (D.Z.), *731*

- noncircular pipes, poiseuille flow, viscosity, viscosity (temperature dependent), Mikolas (M.), Bardocz (L.), *2648*
- hydrodynamics, liquids, thermal waves, thermodynamic functions, variable thermal properties, Andreev (A.F.), *5516*
- annular flow, rotating fluids, thermal instability, Jonas (P.R.), *5557*
- drag, ducts, laminar flow, porous walls, Eroshenko (V.M.), Zaichik (L.I.), (et al.), *6668*
- hydrodynamic stability, thermal instability, viscosity, Sazontov (A.G.), *6761*
- annular flow, channel flow, heat transfer, turbulent flow, Nemira (M.), Vilemas (J.), (et al.), *7827*
- channel flow, convection, non newtonian flow, Benderskaya (S.L.), Khusid (B.M.), (et al.), *9683*
- critical phenomena, pipe flow, thermal explosions, viscous flow, Aleksanopolskii (N.B.), Naidenov (V.I.), *11501*

variable loading, deformation, elastoplasticity, framed structures, inelasticity, work hardening, Tin Loi (F.), *6528*

- brittle materials, carbides, crack resistance, fracture toughness, Novikov (N.V.), *7570*

variable mass, airplanes, dynamic analysis, Nita (M.M.), *3088*

- dynamics, equations of motion, optimization, Apykhtin (N.G.), Iakovlev (V.F.), *4757*
- balancing, flexible bodies, machine design, rotors, vibration, Cveticanin (L.J.), *8476*
- analytical methods, nonholonomic system, particle dynamics, Ge (Z.-M.), Cheng (Y.-H.), *10010*

variable properties (material), boundary integral methods, crack opening displacement, edge cracks, elastic behavior, stress intensity factor, Atkinson (C.), Xanthis (L.S.), (et al.), *6441*

variable section, boundary conditions, shells (cylindrical), Tawfik (O.M.), *4385*

variable thermal properties, asymptotic methods, conduction (heat), mathematical models, perturbation methods, Aziz (A.), Jaleel (A.), (et al.), *772*

- heat transfer, nonhomogeneous media, thermal diffusion, Dulnev (G.N.), Sigalov (A.V.), *1697*
- conduction (heat), mathematical models, Galaktionov (V.A.), *2809*
- boundary integral method, conduction (heat), conduction (steady), green function, integral methods, Khader (M.S.), Hanna (M.C.), *2818*
- conduction (heat), finite element techniques, transient effects, Keramidas (G.A.), *2821*
- conduction (heat), convection, cylindrical bodies, heat transfer, Martinson (L.K.), *3778*
- extended surfaces, fins, heat transfer, perturbation methods, Aziz (A.), Na (T.Y.), *3822*
- conduction (heat), numerical methods, Taran (M.D.), Favorskii (A.P.), *3824*
- hydrodynamics, liquids, thermal waves, thermodynamic functions, variable fluid properties, Andreev (A.F.), *5516*
- conduction (heat), mathematical models, transient effects, transport properties, Maewal (A.), *6799*
- compressible flow, convection (forced), heat transfer, noether theorem, Garaev (K.G.), *7823*
- cavities, convection (free), laminar flow, unsteady flow, Le Quere (P.), Humphrey (J.A.C.), (et al.), *7843*
- cylindrical bodies, heat transfer, phase changes, pipes, stefan problem, underground, Lunardini (V.J.), *7854*
- composite materials, conduction (heat), fibers, mixtures, Murakami (H.), Hegemier (G.A.), *8738*
- convection (free), critical flow, grashof number, laminar flow, plates (vertical), temperature, Ghajar (A.J.), Parker (J.D.), *9700*
- conduction (heat), mathematical models, solids, imber (M.), *9713*
- absorption, radiant interchange, radiating flow, Reznichenko (V.V.), Smirnov (V.N.), *10609*
- condensers, heat pipes, vapor gas interface, wick, Van Der Vooren (J.), Delil (A.A.M.), (et al.), *10629*
- condensers, contact fronts, heat pipes, wick, Van Der Vooren (J.), Sanderse (A.), *10630*
- energy storage, numerical methods, packed beds, Gross (R.J.), Hickox (C.E.), (et al.), *10636*

variational methods, conduction (unsteady), heat transfer, Prokopov (V.G.), Bespalova (E.I.), (et al.), *50*

- elasticity, inequalities, plastic flow, plasticity, Necas (J.), *51*
- beams, error, finite element techniques, mathematical methods, Thomas (G.), *81*
- finite element techniques, plates, shells, structural analysis, survey, Pian (T.H.H.), Tong (P.), *83*
- elasticity (nonlinear), virtual work methods, Zhong-Heng (G.), *235*
- elasticity (nonlinear), energy methods, strain energy, Washizu (K.), *243*
- contact problems, friction (solid solid), indentation, Kravchuk (A.S.), *249*
- contact problems, elasticity (linear), singular integral equations, uniqueness, Panagiotopoulos (P.D.), Zastrow (U.), *254*
- boundary value problems, deformation (finite), plasticity, Klie (W.), *265*
- plates, vibration (free), Buculei (M.), *273*
- convection, entrance region, variable fluid properties, Paviovic (M.I.), Milojevic (D.Z.), *731*
- central force field, kepler orbits, orbit mechanics, Aleksandrov (Yu.S.), *870*
- continuum mechanics, elasticity, nonlinear theory, Edelen (D.G.B.), *1102*
- free boundary, inequalities, invariant imbedding, Donnelly (J.D.P.), *1119*

- framed structures, statics, Goldshtein (Yu.B.), Solomeshch (M.A.), *1422, book*
- channel flow, reservoirs, stratification, supercritical flow, Benjamin (T.B.), *1495*
- boundary value problems, nonlinear analysis, power law fluids, Anderson (N.), Arthurs (A.M.), *1533*
- nonhomogeneous media, thermoelasticity (steady), Tanaka (M.), Tanaka (K.), *1831*
- micropolar media, poiseuille flow, polar fluids, Rubi (J.M.), Casas-Vasquez (J.), *1974*
- boundary value problems, differential equations (ordinary), discontinuities, Kriz (J.), *1992*
- bifurcation, duality, functional equations, nonlinear programming, Sewell (M.J.), *2027*
- functional analyis, smoothing of data, Penenko (V.V.), Obraztsov (N.N.), *2028*
- control, inequalities, optimal control, Barbu (V.), *2029*
- algorithms, duality, inequalities, Bermudez (A.), Moreno (C.), *2030*
- approximations, conduction (unsteady), least squares, Djukic (D.S.), Atanackovic (T.M.), *2038*
- finite element methods (hybrid), navier stokes equation, stability (numerical), Letallec (P.), *2078*
- elastodynamics, simple materials, viscoelasticity (dynamic), Atanackovic (T.), *2217*
- adiabatic processes, magneto plasma dynamics, nonequilibrium effects, theory, Pletnev (V.D.), Skuridin (G.A.), *2897*
- shells (thin), thermoelasticity, Podstrigach (Ya.S.), Shvets (R.N.), *2963, book*
- thermal loading, thermoplasticity, Allen (D.H.), Haisler (W.E.), *2973*
- boundary elements, thermoelasticity, Tanaka (K.), Tanaka (M.), *2981*
- integro differential equations, perturbation methods, plasma, propagation, wkb method, Berk (H.L.), Pfirsch (D.), *3105*
- composite materials, computing techniques, eigenvalue problems, elasticity, finite element methods, fracture, optimization, plasticity, viscoelasticity, Nemat-Nasser (S.) ed., *3109, book*
- composite materials, conduction (unsteady), discontinuities, eigenvalue problems, Nemat-Nasser (S.), Horgan (C.O.), *3110*
- optimal control, singular control, Skorodinskii (I.T.), *3183*
- boundary value problems, elasticity (linear), Kozak (I.), *3241*
- shells, stability theory, Valid (R.), *3242*
- contact problems, contact stresses, elastic behavior, inequalities, Kravchuk (A.S.), Vasilev (V.A.), *3247*
- elasticity (nonhomogeneous), finite element methods, plates (nonhomogeneous), Tsybenko (A.S.), Vashchenko (N.G.), (et al.), *3250*
- plastic behavior, work hardening, yield condition, Casey (J.), Naghdi (P.M.), *3268*
- plasticity, relaxation methods, Germain (P.), *3272*
- optimization, tanks, Singh (K.K.), Swamee (P.K.), *3520*
- buildings (tall), frames, shear walls, Arvidsson (K.), *3549*
- channel flow, pumps, unsteady flow, Atanov (G.A.), Voronin (S.T.), *3665*
- meteorology, Penenko (V.V.), Obraztsov (N.N.), *4084*
- composite materials, dynamic analysis, elasticity (nonhomogeneous), hamilton principle, Willis (J.R.), *4174*
- elasticity (linear), singularities, solid mechanics, Rozin (L.A.), *4338, book*
- elasticity (linear), energy methods, virtual work methods, Kozak (I.), *4339*
- boundary value problems, functional analyis, plasticity, Kuznetsov (V.N.), *4355*
- lubrication (elastohydrodynamic), oscillations, rubber, squeeze films, Hori (Y.), Kato (T.), (et al.), *4897*
- perturbation methods, series, Roberts (S.M.), *4988*
- eulerian approach, hamilton principle, lagrangian approach, viscous flow, Ecer (A.), *5012*
- finite element techniques, helmholtz equation, membranes, vibration, Laura (P.A.A.), Sarmiento (G.S.), (et al.), *5025*
- finite element methods (hybrid), finite element techniques, lagrange multiplier, Wissmann (J.W.), Specht (B.), *5032*
- optimal control, optimization, Leitmann (G.), *5039, book*
- dielectrics, electroelasticity, Iannace (D.), Romano (A.), *5088*
- contact problems, elastic bodies, finite element techniques, Nguyen Dang Hung, De Saxce (G.), *5093*
- air conditioning, cooling, radiant interchange, scale models, Miyagawa (Y.), *5564*
- boundary layer (thermal), convection (free), heat transfer, integral methods, Singh (P.), Bhattacharya (D.K.), *5567*
- free boundary, infiltration, nonlinear mechanics, porous media, Quarteroni (A.), Visintin (A.), *5835*
- porous media, waves, Bedford (A.), *5837*
- conservation laws, continuum mechanics, virtual work methods, Atanackovic (T.M.), *6039*
- eigenvalues, matrices, nonsymmetric matrices, optimization, stability theory, Kaleba (R.), Spingarn (K.), (et al.), *6078*
- conduction (unsteady), nonlinear systems, Voros (G.M.), *6079*
- finite difference methods, transonic flow, Khosla (P.K.), Rubin (S.G.), *6084*
- finite element techniques, helmholtz equation, membranes, vibration, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *6097*
- plates (holed), reinforced openings, Kurshin (L.M.), Rastorguev (G.I.), *6226*
- elastoplasticity, plastic behavior, structural optimization, Cinquini (C.), Secchi (G.), *6270*
- dynamic analysis, elastic behavior, vibration (nonlinear), Lau (S.L.), Cheung (Y.K.), *6272*
- cable stayed bridges, geometric nonlinearities, Cafarella (F.), *6523*
- mathematical models, turbulence, turbulence model, turbulent flow, Stern (M.E.), *6687*
- continuum mechanics, shells, solid mechanics, Mason (J.), *7129, book*
- computing techniques, inequalities, time dependence, Glowinski (R.), Lions (J.-L.), (et al.), *7176, book*
- elasticity (nonlinear), energy methods, Zhong-Heng (G.), *7267*
- creep, shells (nonhomogeneous), Boldyrev (E.I.), Kurshin (L.M.), (et al.), *7278*
- bending, contact problems, existence theorems, plates, uniqueness, Fortune (D.), Bezine (G.), *7330*
- channel flow, energy dissipation, free boundary, Song (C.C.S.), Yang (C.T.), *7650*
- critical flow, finite element techniques, spillways, O'Carroll (M.J.), *7654*
- evasion, optimal control, pursuit, Large (E.), *7926*
- composite materials, finite element techniques, harmonic waves, layered media, Minagawa (S.), Nemat-Nasser (S.), (et al.), *8148*
- matrix methods, structural analysis, Fuchs (M.B.), *8189*
- boundary value problems, elasticity (three dimensional), Tereshchenko (V.Ya.), *8190*
- plasticity, relaxing media, Temam (R.), Strang (G.), *8210*
- beams (prestressed), buckling, flexural loading, Wauer (J.), *8229*
- beams (flexural), deformation, elastoplasticity, shakedown structures, Mazzarella (C.), *8232*
- membranes, shells (of revolution), Kreichman (M.M.), Cherevatskii (V.B.), *8248*
- buckling, plates (rectangular), plates (simply supported), Baker (G.), Paviovic (M.N.), *8265*
- corners, lifting bodies, two dimensional flow, Djaoua (M.), *8538*
- convection, heat addition, surface tension, Labon (G.), Perez-Garcia (C.), *8714*
- finite element methods, heat transfer (biological), human body, Smith (P.), Twizell (E.H.), *9069*
- dynamic analysis, hamilton principle, linear systems, Sarlet (W.), Engels (E.), (et al.), *9086*
- functional analyis, hamilton principle, tensor methods, vector methods, Reddy (J.N.), Rasmussen (M.L.), *9090*
- discretization, finite element methods, fredholm equations, free boundary, gravity waves, matrices, Berhault (C.), *9546*
- kepler orbits, special functions, three body problem, Waldvogel (J.), *9814*
- elasticity (three dimensional), functional analyis, hilbert space, mathematical methods, Nowinski (J.L.), *10013*
- dynamic programming, perturbation theory, stochastics, Hopkins (W.E.) Jr., Blankenship (G.L.), *10027*
- boundary value problems, elastic bodies, laplace equation, membranes, Lefevre (A.-M.), *10149*
- fluid mechanics, rotating disks, thermodynamics (irreversible), Singh (P.), Ram (P.), *10435*
- lubrication (hydrodynamic), navier stokes equation, reynolds number, squeeze films, Verma (R.L.), *10892*
- contact problems, penalty function, plates (nonlinear), Ohtake (K.), Oden (J.T.), (et al.), *11113*
- spherical bodies, stokes flow, unsteady flow, viscous flow, Utkina (S.N.), *11264*
- euler equations, stratified flow, vorticity, Saltanov (N.V.), *11372*
- gases, shock waves, two dimensional flow, Bratos (M.), Herczynski (R.), *11444*
- containers (partially filled), nonlinear analysis, reservoirs, sloshing, Limarchenko (O.S.), *11683*
- conduction (heat), conformal mapping, heat transfer, Laura (P.A.A.), Sarmiento (G.S.), *11766, book*

Variaki (P.), degree of nonlinearity, estimation, hammerstein type, nonlinear systems, nonlinear theory, Raybman (N.S.), *3163*
- estimation, identification, nonlinear systems, Raibman (N.S.), *4265*

Variaky (P.), controllability, identification, nonlinear systems, probability theory, subjective variance functions, Raibman (N.S.), *8137*

Varley (E.), deformation (finite), elasticity (nonlinear), holes, plane strain, plane stress, Cumberbatch (E.), *5084*

Varma (G.S.), aftershocks, earthquakes, prediction, *4945*

Varma (H.K.), see Mishra (M.P.), *1669*

Varma (S.K.), aluminum alloys, drawing, wires, work hardening, *6409*

Varoglu (E.), convection, diffusion, finite element techniques, one dimensional flow, Finn (W.D.L.), *6112*
- burgers equation, diffusion, finite element techniques, initial value problems, Finn (W.D.L.), *6119*

Varshney (C.L.), magneto fluid dynamics, permeability, pulsatile flow, theory, two dimensional flow, *6959*

Varshneya (N.K.), bounded media, cylindrical bodies, magneto fluid dynamics, oscillatory flow, viscoelastic fluids, *854*

Vasanta Ram (V.), see Kisko (S.), *4589*

Vasarhelyi (A.), beams, bending, haar functions, plates, stress analysis, *6092*
- collapse, numerical methods, panels (stiffened), plastic behavior, *10174*

Vasarhelyine Szabo (A.), panels, plasticity, stochastic processes, *3270*

Vasenev (L.G.), aerodynamic interference, experimental methods, supersonic flow, wing-body, Kharimonov (A.M.), *1624*
Vasenin (I.M.), see Butov (V.G.), *8898*
Vasenin (V.A.), compression, linear systems, optimal control, singular control, Samsonov (V.A.), *115*
Vashakmadze (T.S.), coal, elasticity (three dimensional), mining, Gotsulyak (E.A.), (et al.), *8184*
Vashchenko (N.G.), see Tsybenko (A.S.), *3250*
Vashunin (A.I.), alloys, life expectancy, material testing, thermal fatigue, Kotov (P.I.), *2976*
Vasilchenko (V.I.), aerodynamics, bodies of revolution, drag, supersonic flow, wing body combinations, *11397*
Vasilenko (N.V.), anelasticity, damping, finite element methods, material testing, viscoelasticity (dynamic), *5105*
Vasilenko (Yu.G.), couette flow, hydrodynamic stability, laser doppler velocimeters, taylor vortices, Kuznetsov (E.A.), (et al.), *639*
Vasilescu (A.), laminar flow, noncircular pipes, pipe flow, velocity profiles, Andrei (V.I.), *612*
Vasilescu (A.A.), eddy viscosity, pipe flow, turbulent flow, Andrei (V.I.), *5438*
Vasiliev (A.A.), detonation, detonative ignition, explosions, explosives, Nikolaev (Yu.A.), (et al.), *882*
Vasilev (A.M.), acoustic emission, computing techniques, flaw detection, newton method, nondestructive tests, Maslov (B.Ya.), *10317*
Vasilev (L.L.), boiling, channel flow, evaporation, film flow, heat exchangers, heat transfer, Abramenko (A.N.), (et al.), *4721*
- cooling, heat pipes, space vehicles, thermal loading, Gil (V.V.), (et al.), *5599*
- filtration, mass flow, porous media, Maiorov (V.A.), *8924*

Vasilev (V.A.), see Kravchuk (A.S.), *3247*
Vasilev (V.M.), chemical kinetics, detonation (two phase), explosions, premixed fuel air, Volpert (A.I.), (et al.), *9828*
Vasilev (V.V.), artificial satellites, low thrust engines, optimal control, two body problem, *10779*
Vasileva (L.G.), computer aided manufacturing, nonlinear systems, state space techniques, Lagunov (V.N.), *102*
Vasilevich (D.I.), see Khlichevskii (V.V.), *4418*
- see Khlichevskii (V.V.), *5208*

Vasilyev (P.P.), see Trubitsyn (V.P.), *5882*
Vasilyev (V.I.), see Petrov (B.N.), *3162*
Vasilyev (Yu.I.), cavities, elastic waves, explosions, geomechanics, Molotova (L.V.), (et al.), *8955*
Vasinyuk (I.M.), beams (variable cross section), bending, eigenvalues, experimental mechanics, vibration, Kruk (B.Z.), (et al.), *4415*
Vasseur (P.), closed conduit flow, convection (free), finite difference methods, heat transfer, laminar flow, transient effects, Robillard (L.), *2799*
- see Robillard (L.), *7844*

Vassilopoulos (L.), bearings (thrust), damping, design, ship design, stiffness, vibration, *10375*
Vasu (R.), see Carter (D.R.), *6005*
- see Carter (D.R.), *6006*

Vasudevan (R.), shells, submerged bodies, underwater acoustics, Dimaggio (F.L.), *2961*
Vasudeviah (M.), see Majhi (S.N.), *2603*
Vata (P.), approximations, convergence, integro differential equations, iterative methods, volterra equations, *2051*
Vatazhin (A.B.), charged particles, electro fluid dynamics, inertia, one dimensional flow, two phase flow, Grabovskii (V.I.), *1774*
Vathsal (S.), discrete systems, filters, inertial guidance, minimax techniques, *200*
Vatolin (V.V.), aerospace vehicles, optimal control, structural response, structures, synthesis, Degtyarev (G.L.), (et al.), *4308*
Vatsa (V.N.), axisymmetric flow, entrainment, jets, mixing, two dimensional flow, Werle (M.J.), (et al.), *11517*
Vatsala (A.S.), see Lakshmikantham (V.), *10028*
Vaughan (D.H.), aerospace vehicles, space vehicle structures, *3563*
Vaughan (N.D.), beams, dynamic behavior, galerkin method, vibration (nonlinear), Adams (R.D.), *8293*
Vavakin (V.V.), see Levytin (A.I.), *7026*
Vavilov (V.), bonded joints, nondestructive tests, sensitivity, thermal effects, *486*
Vavilov (V.P.), defects, flaw detection, inspection, temperature, thermal measurements, Gorbunov (V.I.), *2504*
- defects, delamination, heat transfer, nondestructive tests, plates, thermography, *3509*

vector methods, functional analyis, plasticity, stress invariants, yield criteria, Stokes (V.K.), *4927*
- diffusion, parabolic equations, Lugt (H.J.), *4966*
- elasticity (linear), isotropic materials, mathematical methods, tensor methods, Smith (G.F.), *6060*
- mathematical programming, optimization, Moldavskiy (M.A.), *6081*
- dynamics, linkages, mechanisms (spatial), screws, Keler (M.L.), Beran (M.A.), *7626*
- burmester configuration, computer aided design, four bar linkage, linkages, Wolford (J.C.), *8481*
- functional analyis, hamilton principle, tensor methods, variational methods, Reddy (J.N.), Rasmussen (M.L.), *9090*
- decision theory, existence theorems, optimization, Alekseichik (M.I.), Naumov (G.E.), *9113*
- lyapunov's functions, mathematical methods, Lakshmikantham (V.), Leela (S.), (et al.), *10014*
- mathematical methods, Li (C.-B.), *10026*

vehicles, automobiles, brakes, experimental results, El-Gindy (M.), Ilosvai (L.), *14*
- magnetic levitation, magnetic stabilization, simulation, transportation devices, Cherchas (D.B.), *211*
- pressure distribution, soil structure interaction, vehicles (tracked), Garber (M.), Wong (J.Y.), *531*
- dynamic response, railroads, springs, Carman (R.W.), Kieres (K.C.), *532*
- design, slender bodies, vortex shedding, Ericsson (L.E.), Reding (J.P.), *686*
- chemical propulsion, electric propulsion, orbit transfer, Rehder (J.J.), Wurster (K.E.), *849*
- design (optimum), dynamic response, guideways, Minnetyan (L.), Nelson (R.B.), (et al.), *1457*
- automobiles, dynamic behavior, maneuverability, steering, Panik (F.), Drosdol (J.), (et al.), *1459*
- beams (timoshenko), dynamic effects, elastic foundations, winkler foundation, Newton (S.G.), Clark (R.A.), *1460*
- swept wings, transportation devices, wing-in-ground vehicles, Ollila (R.G.), *1617*
- algorithms, artificial intelligence, autonomous systems, Benes (J.), Kolar (P.), *2196*
- bridges (highway), dynamic analysis, Gupta (R.K.), Traill-Nash (R.W.), *2349*
- measurements (dynamic), vibration (forced), Crolla (D.A.), Dale (A.K.), *2350*
- dynamic response, motorcycles, simulation, Black (S.H.), Taylor (D.L.), *2353*
- dynamic behavior, dynamic response, Willumeit (H.-P.) ed., *2546, book*
- algorithms, nonlinear programming, nonlinear systems, optimal control, Van Zanten (A.T.), Krauter (A.I.), *3221*
- dynamic analysis, tractors, vibration (forced), Crolla (D.A.), *3385*
- magnetic suspension, rails, vibration (random), Popp (K.), *3386*
- dynamic response, pressure distribution, vehicles (tracked), Garber (M.), Wong (J.Y.), *3561*
- aerodynamics, drag coefficient, spoilers, trucks, wind tunnels, Menneron (J.-C.), *3732*
- bridges (highway), dynamic loads, Gupta (R.K.), *4438*
- dynamic stability, lateral stability, Huston (J.C.), Johnson (D.B.), *4546*
- automatic control, control, guideways, mass transportation, Shladover (S.E.), *5062*
- internal combustion engines, minimum fuel control, optimal control, Sweet (L.M.), *5066*
- dynamic analysis, plasticity, shear, snow, tracked vehicles, Brown (R.L.), *5366*
- dynamic response, frames, motorcycles, structural response, Verma (M.K.), Scott (R.A.), (et al.), *6313*
- dynamic loads, railroad cars, statically indeterminate structures, substructuring, trains (railroad), Balogh (V.), *6499*
- dynamic response, oscillations, roughness, Hammond (J.K.), Harrison (R.F.), *6543*
- design (optimum), modeling, railroad cars, railroads, Haftka (R.T.), Prasad (B.), *6544*
- dynamic stability, rails, Bell (C.E.), Horak (D.), (et al.), *7146*
- articulated vehicles, kinematics, sliding, slipping, wheels, Dudzinski (P.), *8096*
- maneuverability, response, steering, El-Gindy (M.), Ilosvai (L.), *8463*
- descent, dynamic analysis, tractors, Hunter (A.G.M.), *9462*
- decelerators, drag, friction, Korst (H.H.), White (R.A.), *9658*
- automatic control, design, magnetic levitation, magnetic stabilization, transportation devices, Breini (W.), *10082*
- dynamic response, gust loads, magnetic levitation, modeling, suspension systems, wind loads, Garg (D.P.), Barrows (T.M.), *10768*
- design, hovercraft, optimal control, suspension systems, Balzer (L.A.), *11078*

Veillette (M.), see Bassim (M.N.), *6463*
Veitsman (R.I.), see Averbukh (A.Z.), *8222*
Veksler (N.D.), acoustic waves, cylindrical bodies, diffraction, *4775*
Velarde (M.G.), see Castillo (J.L.), *638*
- see Ariiz-Cohen (J.A.), *2801*

Veldkamp (G.R.), curvature, dynamic analysis, kinematics, mathematical methods, *1060*
- see Bottema (O.), *3060*

Veldman (A.E.P.), asymptotic methods, boundary layer, incompressible flow, interaction, separation, singular perturbations, *1549*
Velinsky (S.A.), automobiles, dissipation, dynamic response, highways, roughness, White (R.A.), *3384*
Velizhanina (K.A.), absorption, acoustic properties, cavities, noise abatement, resonance, Oborotov (V.A.), *4783*
velocimeters, aerosols, laser velocimeter, turbulence (geophysical), velocity measurement, wind, Matvienko (G.G.), Samokhvalov (I.V.), *4083*
- acoustic measurements, Mccartney (M.L.), Mudd (C.P.), (et al.), *4789*
- automatic control, balancing, pneumatic components, three dimensional flow, Wechter (J.), Heneka (A.), (et al.), *6739*
- anemometers, boundary layer (atmospheric), turbulence (geophysical), velocity measurement, Wyngaard (J.C.), *7070*
- shape factors, thickness, ultrasonics, Melkanovich (A.A.), Firsukov (A.A.), (et al.), *7582*

- data analysis, lasers, stress strain relationships, Duffey (T.A.), Karpp (R.R.), (et al.), *9422*

velocity measurement, corners, turbomachinery, turbulent flow, Mojola (O.O.), *607*

- measurements (dynamic), pressure measurement, Adler (D.), Taylor (P.M.), *1639*
- data acquisition, flow measurement, hot wire, Lehmann (B.), *1640*
- jets, laser doppler velocimeters, spectral analysis, Roberts (J.B.), Downie (J.), (et al.), *1645*
- boundary layer (atmospheric), injection, modeling, wind tunnels, Sluman (T.J.), Van Maanen (H.R.E.), (et al.), *1648*
- laser doppler velocimeters, rotors, turbomachinery, Schodl (R.), *2766*
- bubble dynamics, hydrogen, visualization, wakes, Wilkinson (D.L.), Willoughby (M.A.), *3751*
- calibration, nozzles, pressure measurement, swirl flow, Murakami (M.), Kito (O.), *3755*
- bubble dynamics, hydrogen, visualization, Bejan (A.), Yewell (R.B.), *3758*
- aerosols, laser velocimeter, turbulence (geophysical), velocimeters, wind, Matvienko (G.G.), Samokhvalov (I.V.), *4093*
- channel flow, free boundary, jets, mixing, weirs, Naib (S.K.A.), *4576*
- lasers, optical techniques, rotors, turbomachinery, Smart (A.E.), Wisler (D.C.), (et al.), *4687*
- testing equipment, ultrasonics, Yogurtcu (Y.K.), Lambson (E.F.), (et al.), *5240*
- calibration, direction, flow measurement, Huffman (G.D.), Rabe (D.C.), (et al.), *5510*
- closed conduit flow, particle fluid flow, suspensions, Kowalewski (T.A.), *6587*
- mixing layers, ocean air interaction, velocity profiles, Weller (R.A.), *7067*
- anemometers, boundary layer (atmospheric), turbulence (geophysical), velocimeters, Wyngaard (J.C.), *7070*
- calibration, flow measurement, hot wire, low velocity flows, Christman (P.J.), Podzimek (J.), *7812*
- laminar flow, optical techniques, particle dynamics, particle fluid flow, vessels, Kamiwano (M.), Motoyoshi (T.), (et al.), *7813*
- data acquisition, lasers, scattering, Hirleman (E.D.), *7815*
- bubble dynamics, measurements, two phase flow, Krizan (P.), Pilhofer (T.), *7971*
- axial compressors, blades, pressure distribution, strain gages, surge, Shatalov (I.K.), *8657*
- electric spark discharge, low density flows, wind, Brown (J.H.), Good (R.E.), *8662*
- ultrasonics, vortices, wind tunnels, Engler (R.H.), Schmidt (D.W.), (et al.), *8663*
- boundary layer, flow reversal, heat tracer, incompressible flow, shear stress, two dimensional flow, Westphal (R.V.), Eaton (J.K.), (et al.), *8664*
- calibration, data analysis, flow measurement, pitot tube, three dimensional flow, Nishimura (H.), *8673*
- anemometers, hot wire, oceanography, Gust (G.), *8984*
- hydrodynamic stability, temperature, turbulence, turbulence (structure), Antonia (R.A.), Chambers (A.J.), (et al.), *9617*
- axisymmetric flow, doppler effect, ultrasonics, Lefebvre (J.-P.), *9672*
- annular flow, axial turbines, boundary layer, visualization, Hunter (I.H.), *10527*
- calibration, transducers, underwater acoustics, Ivanov (V.E.), Kirshov (V.A.), *12011*
- concentration, optical techniques, particle size, Stanley-Wood (N.G.), Llewellyn (G.J.), (et al.), *12058*
- surface waves, wave height, weather satellites, wind, Martsinkevich (L.M.), *12083*

velocity profiles, channel flow, flumes, free boundary, inviscid fluid, surface profiles, Davis (R.W.), Deutsch (S.), *560*

- laminar flow, noncircular pipes, pipe flow, Vasilescu (A.), Andrei (V.I.), *612*
- flow measurement, shear flow, turbulence, turbulent flow, Harris (S.D.), Williamson (J.W.), (et al.), *660*
- heat transfer, melting, phase changes, solidification, Ramachandran (N.), Jaluria (Y.), (et al.), *769*
- hodograph methods, seismic waves, waveguides, Burmin (V.Yu.), *963*
- free boundary, ice, rivers, Shen (H.T.), Ackermann (N.L.), *1493*
- axial flow, heat transfer, laminar flow, vortex flow, Simmers (D.A.), Coney (J.E.R.), *1566*
- boundary layer, flames, plates, Garo (A.), Puechberty (D.), (et al.), *1757*
- developing flow, jets, Rankin (G.W.), Sridhar (K.), *2659*
- cylindrical bodies, liquid metals, magneto fluid dynamics, theory, Bashtovoi (V.G.), *2880*
- channel flow, free boundary, sediment transport, Itakura (T.), Kishi (T.), *3606*
- oscillating bodies, particle fluid flow, rotating disks, Mitra (P.), *3618*
- compressible flow, trains (railroad), tunnels, unsteady flow, Woods (W.A.), Pope (C.W.), *3629*
- bubble dynamics, cylindrical bodies, impulse, unsteady flow, visualization, Nagata (H.), Matsui (T.), (et al.), *3633*
- buoyancy, couette flow, pressure gradient, unsteady flow, Andreichenko (K.P.), Smarun (A.B.), *3668*
- conical flow, diffusers, inlet flow, inlet flow (sheared), shear flow, Nakamura (I.), Ishikawa (K.), (et al.), *3679*
- annular flow, hot wire, Simmers (D.A.), Coney (J.E.R.), *3752*
- ducted propellers, elliptical bodies, vortex sheets, George (M.F.), *5400*
- additives, drag, polymers, spherical bodies, structure, Puris (B.I.), Polesskii (E.P.), (et al.), *5428*
- pipe flow, slots, sudden expansion, Skawinski (R.), Lasowska (A.), (et al.), *5443*
- jets, reynolds number, Antonia (R.A.), Chambers (A.J.), (et al.), *5460*
- developing flow, hydrodynamic stability, pipe flow, reynolds number (critical), Garg (V.K.), *5460*
- film flow, heat transfer, nusselt number, Sobin (V.M.), *5536*
- duct flow, fins, fredholm equations, magneto fluid dynamics, Ariel (P.D.), Aggarwala (B.D.), *5672*
- axisymmetric flow, magneto fluid dynamics, nonuniform flow, turbulent flow, Gelfgat (Yu.M.), Gorbunov (L.A.), *5673*
- hydrodynamics, packed beds, Volkov (V.I.), Danilov (N.S.), (et al.), *5829*
- heat transfer, interface phenomena, stratified flow, two component flow, Takahashi (M.), Inoue (A.), (et al.), *6800*
- jets, laminar flow, stick-slip, swell, Trogdon (S.A.), Joseph (D.D.), *6860*
- developing flow, jets, turbulent flow, Laryushkin (M.A.), Dvoinishnikov (V.A.), *6872*
- circulatory systems, flow measurement, tracers, transit time, Huang (S.-C.), *6741*
- chemical kinetics, combustors, flames (turbulent), statistical mechanics, Moreau (P.), *6838*
- holography, two phase flow, Bakrunov (A.O.), Ertanova (O.N.), (et al.), *6964*
- fluidized beds, particle fluid flow, Grewal (N.S.), Saxena (S.C.), *7013*
- mixing layers, ocean air interaction, velocity measurement, Weller (R.A.), *7067*
- axial turbines, blades, design, Hirsch (C.), Denton (J.D.), *7802*
- boundary layer (turbulent), friction (skin), roughness, spherical bodies, stanton number, transpiration cooling, Ligrani (P.M.), Kaya (W.M.), (et al.), *7824*
- channel flow, magneto fluid dynamics, plates (parallel), theory, Belogrivtsev (V.M.), *7895*
- fluidized beds, solid fuels, Livshits (Yu.E.), Tamarin (A.I.), *7968*
- particle dynamics, penetration, Merzhievskii (L.A.), *8348*
- inviscid fluid, shear flow, vortex flow, Kida (S.), *8528*
- developing flow, entrance region, numerical analysis, overshoot, Li (L.C.), Ludford (G.S.S.), *8585*
- compressible flow, contraction, turbulence, wind tunnels, Winter (K.G.), Boyd (C.), *8671*
- convection, dissipation, heat addition, laminar flow, Jaluria (Y.), *8681*
- liquid metals, magneto fluid dynamics, measurements (dynamic), unsteady effects, Chamberel (A.), Ricou (R.), (et al.), *8827*
- fluidized beds, particle fluid flow, testing equipment, Ishida (M.), Shirai (T.), (et al.), *8935*
- design, dynamic analysis, four bar linkage, mechanisms (spatial), Osman (M.O.M.), Dukkipati (R.V.), *9479*
- annular flow, cyclones, cylindrical bodies, internal flow, inviscid fluid, vortex flow, Martynov (Yu.V.), *9523*
- plates, singularities, stokes flow, two dimensional flow, viscous flow, Hasegawa (E.), *9532*
- cascades, developing flow, nozzles, Cherepenin (N.D.), *9579*
- trailing edge, turbulence (structure), wakes, Hah (C.), Lakshminarayana (B.), *9598*
- approximations (higher order), finite amplitude, gravity waves (surface), highest wave, Srokosz (M.A.), *9618*
- gravity waves (solitary), gravity waves (surface), korteweg de vries equation, Longuet-Higgins (M.S.), *9619*
- airfoils, boundary layer, potential flow, Dutt (H.N.V.), Sreekanth (A.K.), *9654*
- convergence, developing flow, ducts (variable area), power law fluids, Jarzebski (A.B.), Wilkinson (W.L.), *10443*
- centrifugal compressors, diffusers, inlet flow, laser doppler velocimeters, Flueckiger (G.), Melling (A.), *10528*
- axial compressors, inlet flow, rotating stall, Grahl (K.), Neuhoff (H.G.), *10529*
- calibration, electromagnetic loading, flow measurement, meters, Tsangaris (S.), Leiter (E.), *10535*
- axial compressors, laser doppler velocimeters, transonic flow, turbomachinery, Powell (J.A.), Strazisar (A.J.), (et al.), *10537*
- film flow, pressure distribution, vortex flow, Kislykh (V.I.), Smutski (I.I.), *10543*
- non newtonian flow, pipe flow, power law fluids, unsteady flow, Balmer (R.T.), Florina (M.A.), *11497*
- gas-trips, laser doppler velocimeters, mixing, nozzles, supersonic flow, Cenkner (A.A.) Jr., *11511*
- channel flow, hydrodynamic stability, shear flow, stability theory, turbulent flow, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- similarity methods, spectra, turbulence, turbulence model, Driscoll (R.J.), Kennedy (L.A.), *11542*
- reynolds number, shear flow, turbulence (structure), turbulent flow, Antonia (R.A.), Satyaprakash (B.R.), (et al.), *11546*
- boundary layer (turbulent), channel flow, swirl flow, turbulence (structure), Shchukin (V.K.), Khalatov (A.A.), (et al.), *11547*
- gravity waves (breaking), visualization, wakes, Battjes (J.A.), Sakai (T.), *11586*
- aerodynamic coefficients, axial compressors, cascades, three dimensional flow, Starke (J.), *11739*
- condensation (filmwise), laminar flow, porous walls, similarity methods, Liu (C.Y.), Ismail (K.A.R.), (et al.), *11762*

- analytical methods, electrical conductivity, magneto fluid dynamics, vortex flow, Kalis (Kh.E.), Kolesnikov (Yu.B.), *11832*

Venets (V.I.), nonlinear systems, optimal control, synthesis, Dudnikov (E.E.), (et al.), *2156*

Venkatachala (B.J.), boundary layer, cylindrical bodies, differential equations (partial), magneto fluid dynamics, transport, Nath (G.), *2886*

- convection (free), heat transfer, laminar flow, stratification, Nath (G.), *11371*

Venkatapathy (E.), see Tannehill (J.C.), *11728*

Venkataraman (P.), bottom irregularities, channel flow, dimensional analysis, intakes, modeling, *555*

- see Nasser (M.S.), *3599*

Venkatarangan (S.N.), laplace transform, nonlinear waves, pade approximation, singular perturbations, Narendran (G.), *9109*

Venkatasubramanian (T.V.), see Okumura (N.), *5293*

Venkatesh (A.), finite element techniques, laminates, shells (anisotropic), shells (of revolution), Rao (K.P.), *4194*

Venkatesha (M.C.), see Dhir (M.P.), *8350*

Venkateswara Rao (G.), design (minimum weight), design (optimum), thermal loading, thermal stresses, *6507*

- columns, design (minimum weight), design (optimum), optimization, post-buckling behavior, Narayanaswami (R.), *10351*

Venkateswaran (A.), crack growth, creep, elasticity (nonhomogeneous), micromechanisms, Hasselman (D.P.H.), *7277*

Venkateswarlu (K.), bearings (slider), bearings (thrust), lubrication (hydrodynamic), turbulent flow, Rodkiewicz (C.M.), *4898*

Venkatram (A.), boundary layer (atmospheric), dispersion, *5928*

- boundary layer, convection, dispersion, smoke stacks, thermal plumes, *11519*

Venselaar (H.C.J.), see Tausk (R.J.M.), *7003*

ventilation, aerodynamic performance, noncircular pipes, nozzles, Yetter (J.A.), Lasvitt (L.D.), *3680*

- similarity methods, wall jets, El-Taher (R.M.), *10453*
- recirculation, three dimensional flow, turbulence model, Sakamoto (Y.), Matsuo (Y.), *10643*

Venuvinod (P.K.), chip formation, milling, turning, Lau (W.S.), (et al.), *7460*

Venyavkina (E.A.), see Marchenko (N.V.), *7865*

Verba (A.), see Embaby (M.H.), *615*

Verble (A.J.) Jr., control, rockets, solid propellants, space vehicles, thrust, Mccool (A.A.), (et al.), *1770*

Veremeenko (S.V.), see Kaplan (M.D.), *6482*

Vereschagin (A.F.), algorithms, control, design, manipulators, robotics, trajectories, Generozov (V.L.), *216*

Vereshchagin (A.F.), algorithms, cybernetics, optimal control, optimization, pursuit, search, trajectories, Medvedev (V.S.), (et al.), *9184*

Vereshchagina (L.I.), boundary layer, mathematical methods, three dimensional flow, unsteady state, *4607*

Verstennikov (V.V.), aerosols, measurements, microstructures, Kozlov (V.S.), (et al.), *5821*

Verevkin (V.M.), see Gokubev (A.S.), *8435*

Verghese (G.), laplace transform, matrix methods, pole zero structure, state space techniques, *101*

Verhaart (H.F.A.), bubble dynamics, electrolysis, liquids, De Jonge (R.M.), (et al.), *8909*

Verheest (F.), harmonic analysis, interaction, nonlinear analysis, resonance, wave interactions, *8114*

Verheggen (T.), random media, reflection, transmission, *11172*

Verigin (N.N.), heat transfer, mass transfer, moving media, porous media, saturation, Khabibullin (I.L.), (et al.), *5853*

- dissociation, fluid mechanics, gases, moving surfaces, porous media, Khabibullin (I.L.), (et al.), *10691*

Verkhovodov (P.A.), see Kosygin (E.P.), *7492*

Verma (A.K.), see Dyson (B.F.), *4514*

- darcy flow, ekman layer, porous media, *10830*

Verma (J.P.), see Narayanan (S.), *5203*

Verma (M.K.), dynamic response, frames, motorcycles, structural response, vehicles, Scott (R.A.), (et al.), *6313*

Verma (M.S.), see Singh (A.), *2380*

Verma (P.D.), asymptotic methods, cylindrical bodies, drag, porous media, viscous flow, Vyas (H.K.), *11390*

Verma (P.D.S.), annular flow, magneto fluid dynamics, numerical methods, pipe flow, porous walls, Singh (M.), *10732*

Verma (R.L.), channel flow, incompressible flow, lubrication (hydrodynamic), navier stokes equation, plates (parallel), squeeze films, *8057*

- lubrication (hydrodynamic), navier stokes equation, reynolds number, squeeze films, variational methods, *10692*

Verma (S.P.), see Mishra (S.K.), *9894*

Verma (V.), see Malcolm (D.G.), *7846*

Vernikov (E.M.), see Frolov (V.F.), *1717*

Veronis (G.), see Bye (J.A.T.), *5922*

Verpoest (I.), fatigue, flaw detection, fracture, microcracks, surface flaws, Aernoudt (E.), (et al.), *2503*

Verruijt (A.), dissipation, modeling, pore pressure, soils, *411*

- interface phenomena, porous media, rotational flow, *8928*

Vertogradskii (V.A.), calorimeters, differential thermal analysis, thermal instability, thermal measurements, thermodynamic processes, Egorova (L.S.), *5633*

Verwer (J.G.), differential equations (ordinary), initial value problems, mathematical methods, *7182*

Verzaro (F.), see Villermaux (J.), *3873*

Vesey (D.G.), see Snell (C.), *10838*

vessels, containment, nuclear reactors, reliability, structure, testing equipment, Weymouth (L.J.), *488*

- magneto fluid dynamics, nonlinear characteristics, rotating fluids, spherical bodies, Kirlushin (V.V.), *858*
- combustion, flame propagation, kinetics, thermodynamics, Babkin (V.S.), Babushok (V.I.), (et al.), *1742*
- containment, liquid metals, magneto fluid dynamics, melting, Getselev (Z.N.), Martinov (G.I.), *3894*
- laminar flow, optical techniques, particle dynamics, particle fluid flow, velocity measurement, Kamiwano (M.), Motoyoshi (T.), (et al.), *7813*
- cylindrical bodies, elasticity (linear), Duthie (G.), White (G.C.), (et al.), *10163*

Vest (C.M.), see Boyd (R.D.), *3831*

Vestner (H.), gases, heat transfer, plates (parallel), *11455*

Vestyak (A.V.), frequencies, plates (sandwich), vibration (free), *4435*

Vetter (B.), see Todten (H.), *1497*

Veziroglu (T.N.), see Akyuzlu (K.), *947*

- multiphase flow, reactors, safety, transport, *10819*

Veziroglu (T.N.) ed., distillation, energy conversion, solar cells, solar collectors, solar energy, *1652, book*

- energy, energy (alternative sources), solar energy, wave energy, wood, *1965, book*
- energy, energy conservation, energy conversion, solar energy, *2785, book*
- boiling, condensation, multiphase flow, nuclear reactors, safety, *3794, book*
- hydrogen, metal-hydrogen systems, safety, storage, *4121, book*
- multiphase flow, porous media, transport phenomena, *5827, book*
- air conditioning, energy conservation, heat pumps, heating, solar energy, *6818, book*
- energy conservation, energy storage, optimization, solar collectors, solar energy, *7862, book*

Vialaton (G.), computing techniques, elasticity, multiple cracks, stress intensity factor, Brunet (M.), (et al.), *5298*

Viano (D.C.), see Khalil (T.B.), *1951*

- bones, fracture, impact, injuries, knees, Stalnaker (R.L.), *9050*

vibration, distributed systems, eigenvalue problems, inverse problems, iterative methods, Barcilon (V.), Turchetti (G.), *27*

- digital simulation, dynamic behavior, magnetically suspended structures, railroads, state space techniques, Sommerer (J.), *73*
- algorithms, control, design (optimum), vibration isolation, De Silva (C.W.), *165*
- beams (cantilever), control, modal control, vibration (flow induced), Horikawa (H.), Dowell (E.H.), (et al.), *228*
- buckling, cooling towers, design, shells (hyperbolic), Form (J.), Krings (W.), (et al.), *321*
- damping, dynamic stability, Schneider (J.), *362*
- approximation methods, mathematical models, Kuttler (J.R.), Sigillito (V.G.), *363*
- elastodynamics, structural analysis, Magrab (E.B.), *364, book*
- beams, dynamic response, Fossman (R.), Sorensen (A.) Jr., *366*
- columns, modal analysis, Gajewski (A.), *367*
- dynamic response, flexural waves, shells (cylindrical), wave engines, Fuller (C.R.), *374*
- eigenvalues, rotating bodies, Muller (P.C.), *381*
- rotating disks, rotating shafts, Forrai (L.), *382*
- dynamic behavior, machine design, Major (A.), *385, book*
- dynamic analysis, railroads, Chudzikiewicz (A.), Kisilowski (J.), (et al.), *387*
- dynamic analysis, mathematical models, rolling, Dobrucki (W.), Swiatoniowski (A.), *389*
- dynamic response, seismic loading, structural analysis, Kana (D.D.), *393*
- dynamic response, substructuring, Nelson (F.C.), *394*
- creep, measurements (dynamic), Cawley (P.), Adams (R.D.), (et al.), *451*
- damping, poiseuille flow, unsteady flow, viscous effects, Komer (M.), *616*
- convection (free), heat transfer, thermal effects, Dawood (A.S.), Manocha (B.L.), (et al.), *753*
- acoustic waves, baffles, flexural waves, Ko (S.-H.), Sherman (C.H.), *915*
- cyclic loading, heating, polymers, thermal effects, thermal explosions, Meinkohn (D.), *929*
- bearings (liquid lubricated), dynamics, rotors, Dowson (D.), Taylor (C.M.), *1029*
- bearings (gas lubricated), dynamics, rotors, Marsh (H.), *1030*
- anelasticity, elasticity (nonhomogeneous), magnetoelasticity, micropolar media, Hsieh (R.K.T.), Voros (G.), *1058*
- composite materials, constitutive relations, fibers, stiffness, Aboudi (J.), *1207*
- frequency response, structural response, Sengupta (G.), *1258*
- dynamic analysis, nonlinear systems, random loading, Gopalsamy (K.), *1264*
- dynamic analysis, mathematical methods, strings, Synge (J.L.), *1270*
- cables, dynamic response, power generation, shock, transmission lines, Dubey (R.N.), Sahay (C.), *1272*
- damping, dynamic behavior, Inosov (S.V.), *1285*
- damping, optimization, structural design, Brotchie (J.F.), *1287*
- dynamic properties, rotating bodies, Wildheim (J.), *1288*

- calibration, dynamic response, shock, transducers, Bouche (R.R.), *1289, book*
- offshore structures, surveys, Rubin (S.), *1452*
- feeding mechanisms, frequencies, Okabe (S.), Yokoyama (Y.), *1473*
- non newtonian flow, pipe flow, pressure gradient, Phan-Thien (N.), *1559*
- containers (partially filled), hydroelasticity, shells (cylindrical), shells (fluid-filled), Perekhrest (V.I.), Ulitin (G.M.), *1610*
- noise abatement, sound generation, sound propagation, Andrzejewski (M.), Cempel (C.), *1805*
- earth dams, earthquake effects, Abdel-Ghaffar (A.M.), Koh (A.-S.), *1880*
- bearings (journal), lubrication (hydrodynamic), oil films, Parkins (D.W.), *1937*
- existence theorems, nonconservative systems, periodic orbits, Pivovarov (I.), *1996*
- approximation theory, numerical methods, Malsch (H.), *2324*
- dynamic analysis, strings, Cabannes (H.), *2326*
- piping systems, power plants, lotti (R.C.) eds., Bernstein (M.D.), *2327, book*
- approximation methods, edge effects, plates (rectangular), plates (stiffened), Laura (P.A.A.), Gutierrez (R.H.), *2330*
- blades, dynamic response, rotors, Shaw (J.), Albion (N.), *2337*
- eigenvalues, modal analysis, rotating shafts, Matsushita (O.), Kikuchi (K.), (et al.), *2342*
- finite element methods, shear walls, structural response, Li (G.C.), Desai (C.S.), *2344*
- acoustic measurements, bearings (wall), diagnostics, spectral analysis, vibroacoustics, Cempel (C.), *2480*
- dynamic properties, elastic constants, mechanical properties, polymers, Mertz (K.), *2490*
- convection, heat, internal flow, space vehicles, Kamotani (Y.), Prasad (A.), (et al.), *2606*
- fluid-structure interaction, shells (coaxial), shells (fluid-filled), Stussi (U.W.), Jemelka (P.), *2710*
- finite element techniques, fluid-structure interaction, plates, Aggarwal (K.R.), Sinhasan (R.), (et al.), *2714*
- control, helicopters, rotors, springs, Drees (J.M.), Dooley (L.W.), (et al.), *2745*
- beams, waves, Pesko (F.), *2932*
- acoustic waves, nonlinear waves, sound generation, Ginsberg (J.H.), *2938*
- acoustic waves, nonlinear waves, sound generation, Ginsberg (J.H.), *2940*
- bearings (journal), lubrication (hydrodynamic), rotating shafts, turbomachinery, Ruddy (A.V.), Summers-Smith (D.), *3051*
- algorithms, gradient techniques, optimal control, vibration isolation, Poterasu (V-F.), Popescu (D.), *3209*
- damping, distributed systems, dynamic analysis, Beskos (D.E.), Boley (B.A.), *3347*
- dynamic properties, flexible bodies, structural response, Wodzicki (W.), *3349*
- elastic behavior, plates (circular), Laura (P.A.A.), Ficcadenti (G.M.), *3396*
- blades, measurements (dynamic), steam turbines, Donato (V.), Bannister (R.L.), (et al.), *3370*
- density, measurements (dynamic), viscous effects, Wenger (A.P.), *3754*
- elastic bodies, ocean waves, ship dynamics, ship motion, Bishop (R.E.D.), Price (W.G.), *4105*
- bearings (journal), bearings (tilted pad), damping, dynamic behavior, Springer (H.), *4111*
- buildings (tall), oscillations, structural stability, vibration (flow induced), wind loads, Soong (T.T.), Skinner (G.T.), *4328*
- control, dynamic analysis, Beards (C.P.), *4402, book*
- beams, eigenvalues, Levinson (M.), *4411*
- approximations, beams, rotating bodies, Hodges (D.H.), *4414*
- beams (variable cross section), bending, eigenvalues, experimental mechanics, Vasinyuk (I.M.), Kruk (B.Z.), (et al.), *4415*
- dissipation, experimental mechanics, materials properties, Khlichevskii (V.V.), Vasilevich (D.I.), *4418*
- dynamic testing, experimental mechanics, holography, interferometry, Hazell (C.R.), *4437*
- dynamic testing, elastoplasticity, shakedown structures, Ceradini (G.), *4513*
- cavities, flow irregularities, structures, Milan (D.), *4772*
- bearings (journal), chatter, elastomers, water, Krauter (A.I.), *4890*
- friction (sliding), sliding, stiffness, Budanov (B.V.), Kudinov (V.A.), (et al.), *4892*
- computer programming, finite element techniques, mesh generation, stiffness matrix, Hoa (S.V.), Sankar (S.), *5019*
- finite element techniques, helmholtz equation, membranes, variational methods, Laura (P.A.A.), Sarmiento (G.S.), (et al.), *5025*
- beams (variable cross section), eigenvalues, rotary inertia, stiffness matrix, To (C.W.S.), *5033*
- accelerators, control, lasers (gasdynamic), vibrational control, Meerkov (S.M.), *5064*
- dynamic analysis, vibration (nonlinear), Klotter (K.), *5169, book*
- dynamic properties, friction (sliding), Iviev (V.I.), *5190*
- coatings, damping, experimental mechanics, tubes, Zainetdinova (R.Z.), Naumkina (N.I.), (et al.), *5194*
- beams (cantilever), dynamic analysis, spinning bodies, Utku (S.), El-Essawi (M.), (et al.), *5202*
- beams, dynamic stresses, flexural waves, Hirano (Y.), Nagaya (K.), (et al.), *5204*
- dynamic response, rods, shear stress, wave equations, Klyasbeli (T.N.), *5207*
- cyclic testing, experimental mechanics, plates, Clarkson (B.L.), Pope (R.J.), *5210*
- cracks, plates (rectangular), plates (weakened), Hirano (Y.), Okazaki (K.), *5211*
- frequencies, plates (rectangular), Irie (T.), Yamada (G.), (et al.), *5212*
- blades, spectral analysis, turbines, Egorov (I.V.), *5215*
- blades, gas turbines, spectral analysis, Kanunnikov (I.P.), Sidorenko (M.K.), *5216*
- dynamic properties, shells (cylindrical), shells (of revolution), shells (stiffened), Moshenskii (N.L.), *5219*
- modal analysis, shells (of revolution), Wang (D.-J.), Ren (J.-G.), (et al.), *5220*
- fluid-structure interaction, piezoelectric devices, Borisyuk (A.I.), Kirichok (I.F.), *5222*
- cylindrical bodies, damping, hydrodynamics, inertia, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5232*
- cylindrical bodies, dissipation, oscillating bodies, viscous effects, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5233*
- concrete, consolidation, rheology, Aci Committee 309, *5352*
- flywheels, high speed, machinery, shafts, Pandey (R.C.), Midha (A.), *5371*
- frequency domain techniques, internal combustion engines, pressure measurement, Arques (P.), *5649*
- ducts, modes, pipes, sound propagation, Kerschen (E.J.), Johnston (J.P.), *5773*
- interface phenomena, nonlinear waves, plates, sound fields, Ginsberg (J.H.), *5781*
- piezoelectrics, sound generation, wave generation, Kinh (N.V.), Pajewski (W.), *5783*
- impact, ocean waves, pitching, ship slamming, Hansen (H.-J.), *5962*
- asymptotic behavior, differential equations (ordinary), oscillations, Taylor (W.E.) Jr., *6062*
- differential equations (ordinary), routh-hurwitz criterion, stability theory, time delay systems, tools, Stepan (G.), *6070*
- boundary value problems, existence theorems, initial value problems, plates, uniqueness, Uroev (V.M.), *6073*
- finite element techniques, helmholtz equation, membranes, variational methods, Laura (P.A.A.), Gutierrez (R.H.), (et al.), *6097*
- plates, shells, stability theory, stress analysis, Galimov (K.Z.) eds., Sachenkov (A.V.), *6215, book*
- dynamic behavior, imperfections, plates (rectangular), Pasic (H.), Herrmann (G.), *6268*
- dynamic properties, experimental mechanics, Jahn (K.-D.), *6284*
- attenuation, damping, piezoelectric devices, Bondarenko (A.A.), Kutsenko (G.V.), (et al.), *6324*
- boron, fibers, propagation, torsion, ultrasonics, Kaplan (M.D.), Veremeenko (S.V.), *6482*
- cams, design criteria, modal analysis, Wiederrich (J.L.), *6555*
- boilers, flue gases, fluid mechanics, Leithner (R.), Hermann (W.), (et al.), *6843*
- junctions, slabs, sound propagation, stochastic processes, transmission, Wohle (W.), Beckmann (T.), (et al.), *6894*
- biodynamics, human body, perception thresholds, yawing, Irwin (A.W.), *7123*
- data analysis, fourier transform, frequency domain techniques, random excitation, Bendat (J.S.), *7175*
- forced systems, matrix methods, periodic structure, structures, substructuring, Fricker (A.J.), Potter (S.), *7209*
- control, modal control, sensitivity, space vehicle structures, structural response, Hallauer (W.L.) Jr., Bartholemy (J.-F.M.), *7257*
- bifurcation, buckling, plates (annular), thermal instability, Tani (J.), *7358*
- fast fourier transform, spectral analysis, vibration (random), Gossmann (E.), Waller (H.), *7377*
- eigenvalues, elastic bodies, Rieder (G.), Zastrow (U.), *7378*
- plates, shells, Soedel (W.), *7388*
- holography, interferometry, lasers, metrology, surfaces, Kohler (H.), *7552*
- blast effects, cyclic loading, fatigue, panels, plaster panels, shear loading, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- flexibility, lubrication (hydrostatic), seals, squeeze films, Etsion (I.), Dan (Y.), *7629*
- fluid-structure interaction, shells (fluid-filled), Kalumuck (K.M.), Huber (P.W.), *7771*
- cavitation, corrosion, erosion, surface effect, Hoss (S.), Hirth (F.W.), (et al.), *7810*
- attitude control, guidance systems, rockets, Cochran (J.E.) Jr., Christensen (D.E.), *7921*
- dynamic response, friction, piles, soil structure interaction, Akiyoshi (T.), *8014*
- biodynamics, human body, Griffin (M.J.), *8080*
- acoustic loading, biodynamics, human body, Meister (F.J.), *8081*
- control, dynamic analysis, dynamic properties, feedback, rotating bodies, rotors, Allaire (P.E.), Lewis (D.W.), (et al.), *8177*
- boundary conditions, composite structures, connected bodies, shells, Averbukh (A.Z.), Veitsman (R.I.), (et al.), *8222*
- plates (anisotropic), plates (thick), Cheung (M.S.), Chan (M.Y.T.), *8253*
- bars, buckling, stability theory, Panovko (Ya.G.), Gubanova (I.I.), *8257, book*
- displacement, dynamic analysis, structural response, transient loading, Popplewell (N.), Scarth (D.A.), (et al.), *8277*
- damping, mechanical systems, Ottl (D.), *8287*
- plates, Leissa (A.W.), *8304*

- eigenvalues, frequencies, modal analysis, Bugeat (L.P.), Lallement (G.), *8323*
- experimental mechanics, impedance methods, Bessrour (J.), Senicourt (J.M.), (et al.), *8326*
- dynamic response, seismic loading, soils, Gazetas (G.), *8349*
- experimental methods, highways, surface waves, Dhir (M.P.), Venkatesha (M.C.), (et al.), *8350*
- beams, design (minimum weight), design (optimum), Karihaloo (B.L.), Parbery (R.D.), *8441*
- bearings (ball), design, springs, stiffness, Tamura (H.), Tsuda (Y.), *8474*
- balancing, flexible bodies, machine design, rotors, variable mass, Cveticanin (L.J.), *8476*
- annuli, fluid-structure interaction, shells (fluid-filled), Pavlovskii (V.S.), Ometsinskaya (E.B.), *8633*
- computing techniques, rayleigh ritz method, soil structure interaction, Solari (G.), Stura (D.), *8963*
- eigenvalue problems, iterative methods, Johnson (C.P.), Craig (R.R.) Jr., (et al.), *9120*
- finite element techniques, plates, stiffness matrix, Pedersen (P.), Cederkvist (J.), *9136*
- control, oscillations, pulse control, structural analysis, structural design, structural response, Udwadia (F.E.), Tabaie (S.), *9183*
- elastic behavior, plates (circular), rayleigh ritz method, Laura (P.A.A.), Avalos (D.R.), (et al.), *9308*
- dynamic behavior, flexible bodies, modes, space vehicle structures, Hablani (H.B.), *9309*
- dynamic testing, stiffness matrix, Baruch (M.), *9329*
- dielectrics, dynamic testing, transducers, Vomel (M.), *9331*
- forming, tools, ultrasonics, vibrational forming, Biddell (D.C.), *9375*
- deformation, displacement, holography, moire methods, Abramson (N.), Bjelkhagen (H.), *9420*
- seals, vibration (self excited), Nau (B.S.), *9476*
- cavitation, channel flow, erosion, variable area flow, venturi tubes, He (J.-G.), Hammitt (F.G.), *9516*
- fluid-structure interaction, modes, shells (fluid-filled), Parkus (H.), *9627*
- combustion chambers, frequency response, gases, Furletov (V.I.), *9765*
- acoustic measurements, damping, machinery, Koss (L.L.), Moffatt (J.A.), *9951*
- bearings (journal), damping, squeeze films, viscoelasticity, Tichy (J.A.), *9955*
- bearings (gas lubricated), bearings (thrust), lubricants (gas), reynolds equation, Wernerowski (K.), *9966*
- beams, differential equations (partial), evolution equations, periodic orbits, Holmes (P.), Marsden (J.), *10024*
- damage, laminates, stress concentration, thermography, Henneke (E.G.) II, *10135*
- dynamic analysis, eigenvalues, oscillating bodies, Schneider (J.), *10187*
- flexible bodies, perturbation methods, rotating cylinders, Lakin (W.D.), Nachman (A.), *10198*
- dynamic analysis, fluid-structure interaction, gates, plates (rectangular), Casacci (S.), Caillot (G.), *10207*
- dynamic response, shock, structural analysis, Wiss (J.F.), *10225*
- dynamic analysis, modal analysis, Natke (H.G.), *10226*
- half space, layered media, torsional waves, viscoelastic materials, Martincek (G.), *10238*
- piles, soils, vibratory driving, Rodger (A.A.), Littlejohn (G.S.), *10252*
- piles, soil structure interaction, Nogami (T.), Novak (M.), *10258*
- beams, composite structures, design (minimum weight), design (optimum), reinforced bodies, structural stability, Rikards (R.B.), *10348*
- bearings (thrust), damping, design, ship design, stiffness, Vassilopoulos (L.), *10375*
- balancing, four bar linkage, linkages, mechanisms, Bagci (C.), *10378*
- boilers, channel flow, dynamic stability, liquid vapor mixture, Vlasov (S.M.), Ratnikov (E.F.), (et al.), *10496*
- attitude control, control, guidance systems, space vehicle structures, Anderson (R.H.), Haung (C.-C.), (et al.), *10774*
- buildings, coupled buildings, seismic loading, torsion, Tsicnias (T.G.), Hutchinson (G.L.), *10860*
- damping, oscillations, vibration isolation, Alley (T.L.), *11082*
- control, structural design, structural stability, structures, vibration isolation, Udwadia (F.E.), Tabaie (S.), *11097*
- critical load, shells (toroidal), Bulygin (A.V.), *11122*
- axial turbines, blades, dynamic response, rotating disks, Michimura (S.), Nagamatsu (A.), (et al.), *11130*
- dynamic analysis, shells (sandwich), Kuznetsov (N.D.), Kartashov (G.G.), *11137*
- elastic waves, propagation, shells (cylindrical), Guz (A.N.), *11138*
- dynamic stability, rotating shafts, Iwatsubo (T.), Okaue (M.), (et al.), *11141*
- foundations, soil structure interaction, Saha (S.), Chattopadhyay (B.C.), *11150*
- critical speed, dynamic response, rotating disks, Hinkel (H.M.), *11153*
- anisotropic media, elastic waves, half space, propagation, Osipov (I.O.), *11166*
- diagnostics, flaw detection, gear trains, transmissions, Randall (R.B.), *11338*
- acoustics, diagnostics, gear teeth, holography, Umezawa (K.), Houjoh (H.), *11339*
- bodies (liquid filled), fluid-structure interaction, shells (cylindrical), Chung (H.), Turula (P.), (et al.), *11627*
- acoustic waves, fluid-structure interaction, submerged bodies, Clark (A.V.) Jr., Whitman (A.M.), *11634*
- acoustic waves, axisymmetric flow, fluid-structure interaction, plates, Woolley (B.L.), *11650*
- seismic loading, submerged bodies, tube bundles, Shinohara (Y.), Shimogo (T.), *11653*
- bending, drilling, drilling rods, ocean bed, rods, Aso (K.), Kan (K.), *11659*
- hydroelasticity, shells (fluid-filled), vibration (nonaxisymmetric), Radovinskii (A.L.), *11689*
- pipe flow, pipelines, viscoelastic materials, Guin (M.S.), *11691*
- damping, ducts, sound fields, walls, Loh (H.-T.), Reethof (G.), *11928*
- junctions, modes, plates, sound propagation, Craven (P.G.), Gibbs (B.M.), *11947*
- plates (circular), sound generation, Kojima (N.), Ikoma (K.), (et al.), *11948*
- plates (reinforced), sound generation, Evseev (V.N.), Ivanov (V.S.), (et al.), *11949*
- beams, sound generation, Rzhevkin (S.N.), *11950*
- plates (circular), sound generation, Czarnecki (S.), *11952*
- experimental methods, plates, sound fields, Vyalyshev (A.I.), Dubinin (A.I.), (et al.), *11954*
- acoustics, couplings, spherical bodies, Reese (J.M.), Thompson (W.) Jr., *11984*
- bubble dynamics, two component flow, Pavlovskii (V.S.), Pelykh (N.A.), *12049*

vibration (electromechanical), casting, polymers, rheomolding, vibration (forced), Ibar (J.P.), Solomat (S.A.), *10266*

vibration (flow induced), beams (cantilever), control, modal control, vibration, Horikawa (H.), Dowell (E.H.), (et al.), *228*

- dynamic response, nuclear reactors, Wambsganss (M.W.), Mulcahy (T.M.), *383*
- hydrodynamic pressure, pipe flow, sound generation, turbulent flow, Bull (M.K.), Norton (M.P.), *1807*
- cavitation flow, discharges, gates, hydroelectric power, tunnels, Giezendanner (W.), Henry (P.), *2582*
- damping, tube bundles, virtual mass, Weaver (D.S.), El-Kashlan (M.), *2712*
- lumped systems, models, Naudascher (E.), Rockwell (D.), *2717*
- bridges (suspension), buildings (tall), heat exchangers, hydraulic machinery, hydraulic structures, nuclear reactors, ship structures, Naudascher (E.) eds., Rockwell (D.), *2906, book*
- flutter, supersonic flow, viscoelastic materials, Anvarov (R.), Gegel (E.I.), *2907*
- aerodynamic interference, smoke stacks, strakes, wind loads, wind tunnels, Ruscheweyh (H.), *2910*
- acoustic waves, cylindrical bodies, vortex shedding, Okamoto (S.), Hirose (T.), (et al.), *2931*
- creep buckling, experimental methods, tube bundles, Weaver (D.S.), El-Kashlan (M.), *3715*
- chimneys, vortex shedding, wind loads, Hansen (S.O.), *3905*
- girders, ship design, Wereldsma (R.), *4097*
- buildings (tall), oscillations, structural stability, vibration, wind loads, Soong (T.T.), Skinner (G.T.), *4328*
- mining, ocean bed, pipelines, Rogers (A.C.), Abramson (H.N.), *4665*
- fluid-structure interaction, plates, resonance, Strawderman (W.A.), Ko (S.-H.), (et al.), *4767*
- axial pumps, cavitation, noise, reynolds number (high), Vladsianu (D.), Marinescu (V.), *5501*
- piston driven flow, sound generation, Harris (G.R.), *5776*
- finite element techniques, propellers (marine), ships, Skaar (K.T.), Carlsen (C.A.), *5970*
- heat exchangers, tube bundles, two phase flow, vibration (forced), Heilker (W.J.), Vincent (R.Q.), *6289*
- boundary value problems, duct flow, sound fields, Myers (M.K.), *6935*
- dynamic stability, pipe flow, Thompson (J.M.T.), Lunn (T.S.), *7773*
- axial flow, density, fluid-structure interaction, tube bundles, Paidoussis (M.P.), Besancon (P.), *8624*
- mining, ocean bed, pipelines, Chung (J.S.), Whitney (A.K.), (et al.), *8626*
- cylindrical waves, hydroelasticity, oscillatory flow, Sarpkaya (T.), *8934*
- fluidized beds, stability theory, Buevich (Yu.A.), Ryzhkov (A.F.), (et al.), *8936*
- design, hull propeller interaction, propellers (marine), Johnsson (C.-A.), *9009*
- hull propeller interaction, hydroelasticity, structural response, Wereldsma (R.), *9943*
- cables, cylindrical bodies, submerged bodies, suppression, vortex shedding, Every (M.J.), King (R.), (et al.), *10488*
- crossflow, elastic behavior, tube bundles, Tangemann (H.), *10766*
- crossflow, statistical design, tube bundles, viscous flow, Katinas (V.I.), Lukosevicius (K.K.), (et al.), *10767*
- flow irregularities, pipe flow, pressure drop, two phase flow, unsteady flow, Fokin (B.S.), Goldberg (Ye.N.), *11495*
- fluid-structure interaction, matrix methods, piping systems, Keskinen (R.P.), *11600*
- piping systems, valves, water hammer, Silva (M.A.G.), *11603*
- flapper valves, piping systems, valves, Hayashi (S.), Matsui (T.), (et al.), *11606*
- fretting, heat exchangers, tube bundles, Ko (P.L.), Rogers (R.J.), *11624*
- cylindrical bodies, damping, scale models, Mulcahy (T.M.), *11626*
- cables, offshore structures, vortex shedding, Griffin (O.M.), Pattison (J.H.), (et al.), *11628*
- crossflow, dynamic stability, tube bundles, Chen (S.S.), Jendrzejczyk (J.A.), *11647*
- crossflow, dynamic stability, fluid-structure interaction, tube bundles, Tanaka (H.), Takahara (S.), *11665*

- bifurcation, bodies (liquid filled), ducts, Bajaj (A.K.), Sethna (P.R.), (et al.), *11671*
- articulated structures, damping, dynamic stability, pipe flow, Sugiyama (Y.), Noda (T.), *11685*

vibration (forced), compression, dynamic behavior, plates (isotropic), White (R.G.), Teh (C.E.), *369*

- dynamic response, plates (anisotropic), plates (holed), Tyagi (G.C.D.), Chadha (C.C.), *371*
- dynamic response, elastic foundations, piles, Aboul-Ella (F.), Novak (M.), *396*
- dynamic analysis, tubes, Ertepinar (A.), Gurkok (A.), *1259*
- nonlinear systems, structural analysis, Plakhtienko (N.P.), Lysak (N.V.), *1261*
- dynamic response, elastodynamics, hyperelastic materials, tubes, vibration (free), Rogers (C.), Baker (J.A.), *1262*
- impulsive loading, shells (cylindrical), transient effects, Ujihashi (S.), Okazaki (T.), (et al.), *1279*
- dynamic analysis, foundations, Gamer (U.), Pao (Y.-H.), *1283*
- dynamic properties, seismic loading, shock, Polyakov (V.S.), *1286*
- experimental mechanics, modal analysis, structural response, Bonnecase (D.), *1290*
- aerodynamics, fluidized beds, Gupta (R.), Mujumdar (A.S.), *1871*
- dissipation, dynamic properties, friction, Plakhtienko (N.P.), *2316*
- drilling, dynamic properties, rods, Carlvik (I.), *2340*
- dynamic response, nonlinear mechanics, rotating shafts, Yamamoto (T.), Ishida (Y.), (et al.), *2341*
- measurements (dynamic), vehicles, Crolla (D.A.), Dale (A.K.), *2350*
- helicopters, vibration isolation, Done (G.T.S.), *2352*
- dynamic analysis, turbomachinery, Sidorenko (M.K.), *2355*
- beams (flexural), dynamic response, pumps, Stecco (S.S.), Janigro (A.), *2358*
- conveyors, dynamic response, particle dynamics, Kogan (E.A.), *3342*
- dynamic analysis, frequency response, Vulfson (M.N.), *3345*
- beams, transient effects, Hirano (Y.), Nagaya (K.), *3353*
- beams, dynamic response, geometric nonlinearities, Masri (S.F.), Mariamy (Y.A.), (et al.), *3356*
- dynamic analysis, manipulators, robotics, Yudin (V.I.), *3357*
- beams (cantilever), eigenvalues, Dhole (A.), *3359*
- beams (timoshenko), impedance methods, shock, Rangaiah (V.P.), Neubert (V.H.), *3360*
- beams (curved), eigenvalues, Irie (T.), Yamada (G.), (et al.), *3361*
- eigenvalues, rings, Teichmann (D.), *3363*
- dynamic response, plates, shock waves, transient effects, Coleby (J.R.), Mazumdar (J.), *3365*
- blades, dynamic response, turbomachinery, vibration (random), Huang (W.-H.), *3368*
- finite element techniques, rotating disks, Nigh (G.L.), Olson (M.D.), *3369*
- dynamic response, dynamic stability, rotating shafts, stability theory, Iwatsubo (T.), Kawai (R.), (et al.), *3372*
- dynamic response, elastic foundations, soil structure interaction, Iguchi (M.), Luco (J.E.), *3375*
- dynamic response, masonry, structural response, Benedetti (D.), Castellani (A.), *3379*
- modal analysis, numerical methods, Saunders (L.R.), Collings (A.G.), *3380*
- bridges (highway), dynamic response, Gangarao (H.V.S.), Haslebacher (C.A.), *3383*
- dynamic analysis, tractors, vehicles, Crolla (D.A.), *3385*
- damping, experimental mechanics, thin films, Fox (M.J.H.), Whitton (P.N.), *3387*
- fluid-structure interaction, mechanics, nuclear reactors, pressure vessels, Jaeger (T.A.) eds., Boley (B.A.), *3565, book*
- algorithms, optimal control, vibration isolation, vibrators, vibrotransporter, Zevin (A.A.), *4311*
- dynamic analysis, pendulums, Zlatoustov (V.A.), Sazonov (V.V.), (et al.), *4404*
- damping, turbines, Matveev (V.V.), *4407*
- dissipation, experimental mechanics, friction, Karius (D.), *4408*
- cables, dynamic response, Geschwindner (L.F.) Jr., West (H.H.), *4409*
- distributed parameters, dynamic analysis, pantographs, Manabe (K.), Morikawa (T.), *4416*
- beams, dynamic analysis, impulsive loading, Levin (E.M.), Pankova (N.V.), *4417*
- beams, dynamic stability, Guzev (V.V.), Nagaev (R.F.), *4419*
- beams (timoshenko), resonance, rotating bodies, Victor (F.), Ellyin (F.), *4431*
- rotating bodies, transient effects, Yanabe (S.), *4432*
- experimental mechanics, flexible bodies, rotating shafts, Flack (R.D.), Leader (M.E.), (et al.), *4433*
- plates (sandwich), rotary inertia, vibration (free), Grover (A.S.), Kapur (A.D.), *4434*
- hamilton principle, shells (sandwich), Dubenets (V.G.), *4436*
- dynamic response, vibration isolation, Bishop (R.E.D.), Mahalingam (S.), *5188*
- beams, frequency response, Edstrom (C.R.), *5196*
- beams, wave equations, Dbdt (L.A.), *5206*
- damping, dynamic response, rotating bodies, Matveev (V.V.), Zinkovskii (A.P.), *5214*
- dynamic stresses, shells (cylindrical), Ujihashi (S.), Itoh (A.), (et al.), *5221*
- eigenvalues, spinning bodies, Osmont (D.), Simon (L.), *5225*
- dynamic response, finite element methods, ship structures, Camsetti (C.), Macco (A.), (et al.), *5229*
- stability theory, tools, Stephan (G.), *5230*
- thermal effects, viscoelasticity (dynamic), Gumenyuk (B.P.), Karnaukhov (V.G.), (et al.), *5802*
- dynamic analysis, finite element methods, impedance methods, Nagamatsu (A.), Ookuma (M.), *6281*
- heat exchangers, tube bundles, two phase flow, vibration (flow induced), Heilker (W.J.), Vincent (R.Q.), *6289*
- dynamic analysis, dynamic response, marine risers, modal analysis, ocean, Kirk (C.L.), Etok (E.U.), (et al.), *6291*
- nonlinear analysis, plates (rectangular), Putnick (L.J.), Matkowsky (B.J.), (et al.), *6293*
- buckling, edge effects, plates (annular), saws, stability theory, Srinivasan (V.), Ramamurti (V.), *6296*
- floating bodies, fluid-structure interaction, plates, shear, Suvorov (A.M.), Cherkesov (L.V.), *6297*
- helicopters, impedance methods, Hohenemser (K.H.), Yin (S.-K.), *6299*
- helicopters, impedance methods, vibration isolation, Viswanathan (S.P.), Myers (A.W.), *6300*
- buckling, shells (cylindrical), shells (stiffened), Singer (J.), *6302*
- gyrodynamics, rotating shafts, Yanabe (S.), *6304*
- critical speed, resonance, rotating bodies, Matsuura (K.), *6305*
- films, fluid-structure interaction, rotating disks, viscous effects, Anikeev (G.I.), Blokhin (I.L.), (et al.), *6306*
- acoustic loading, ducts, dynamic response, rods, Lin (W.-H.), *6308*
- dynamic response, foundations, vibration (torsional), Sankaran (K.S.), Krishnaswamy (N.R.), (et al.), *6310*
- bridges (railroad), experimental mechanics, railroads, Okada (K.), *6311*
- dynamic interaction, space vehicles, transient loading, Chen (J.C.), Zagzebski (K.P.), (et al.), *6314*
- damping, structural response, Wood (W.L.), *6316*
- modal control, structural analysis, Coupry (G.), *6319*
- blades, propellers, spectra, wind turbines, Akesson (B.), Sandstrom (S.), *6870*
- aeroelasticity, buildings, design, wind tunnels, Templin (J.T.), Cooper (K.R.), *6871*
- cables, dynamic response, electric power, towers, wind loads, Matheson (M.J.), Holmes (J.D.), *6872*
- beams (cantilever), damping, dynamic stresses, Kume (Y.), Hashimoto (F.), (et al.), *7375*
- dynamic analysis, friction (sliding), strings, Cabannes (H.), *7379*
- beams (timoshenko), optimization, Rikards (R.B.), *7384*
- blades, finite element methods, friction (sliding), turbines, vibration (free), Zmitrowicz (A.), *7397*
- approximation methods, elastic bodies, mathematical methods, singularities, George (O.D.), *7398*
- ceramics, piezoelectric devices, shells (of revolution), Gololobov (V.I.), *7400*
- experimental mechanics, propellers, Crandall (S.H.), Dugundji (J.), *7401*
- critical speed, rotating disks, Iwatsubo (T.), *7402*
- dynamic effects, turbomachinery, Busse (L.), Heiberger (D.), *7405*
- dynamic properties, experimental mechanics, gear trains, Drago (R.J.), Brown (F.W.), *7414*
- dams, earthquake engineering, experimental mechanics, Severn (R.T.), Jeary (A.P.), (et al.), *7608*
- critical speed, rotating bodies, Markert (R.), Pfutzner (H.), *8283*
- cables, crossflow, fluid-structure interaction, towing cables, vortex shedding, Alexander (C.M.), *8291*
- acoustic loading, frequency domain techniques, piping systems, El-Raheb (M.), *8295*
- beams, dynamic response, flexure, thin walled structures, Voveris (A.V.), Kalinin (V.S.), *8296*
- dynamic response, edge effects, plates (rectangular), Mukhopadhyay (M.), *8309*
- bending, critical speed, flexible bodies, rotating bodies, Markert (R.), *8320*
- boundary conditions, cylindrical bodies, elastic foundations, vibration (torsional), Wada (H.), *8322*
- dynamic analysis, random excitation, vibration (parametric), Schmidt (G.), *8298*
- blades, dynamic analysis, helicopters, Lucjanek (W.), Narkiewicz (J.), *9317*
- chatter, cutting, dynamic analysis, mathematical methods, De Canniere (J.), Van Brussel (H.), (et al.), *9325*
- computing techniques, fast fourier transform, Gossmann (E.), Waller (H.), *9330*
- modal analysis, rotary inertia, shear, shells (spherical), Shenderov (E.L.), *9337*
- dynamic response, vibration (self excited), Azfar (K.R.), Nayfeh (A.H.), (et al.), *10190*
- damping, dynamic analysis, hysteresis, Fabries (M.), *10192*
- dynamic response, elastic bodies, parallelepipeds, Hill (E.V.K.), Egle (D.M.), *10200*
- plates, rotating disks, Sreenivasamurthy (S.), Ramamurti (V.), *10205*
- damping, dynamic response, shells (cylindrical), Leissa (A.W.), Iyer (K.M.), *10213*
- balancing, dynamic behavior, rotating shafts, Shiohata (K.), Fujisawa (F.), (et al.), *10216*
- bearings (thrust), damping, experimental methods, stiffness, Schwanecke (H.), *10218*
- beams (sandwich), hamilton principle, Simkova (O.), Markus (S.), *10222*

- casting, polymers, rheomolding, vibration (electromechanical), Ibar (J.P.), Solomat (S.A.), *10266*
- cylindrical bodies, shells (stiffened), Malyutin (I.S.), Nedbai (A.Ya.), *11135*
- damping, dynamic analysis, rotating shafts, Muller (A.A.), *11140*
- critical speed, damping, dynamic analysis, rotating shafts, Yanabe (S.), *11143*
- bearings (journal), damping, turbomachinery, vibration isolation, Beskietnyi (M.E.), Igumentsev (E.A.), *11147*
- dynamic response, statistical design, Tanaka (K.), Onishi (H.), (et al.), *11151*
- fatigue, offshore structures, stochastic processes, wave loads, Sigbjornsson (R.), *11334*

vibration (free), beams (cantilever), flexure, Subrahmanyam (K.B.), Kulkarni (S.V.), *366*

- dynamic analysis, flexure, plates (isotropic), Voyiadjis (G.Z.), Baluch (M.H.), *368*
- dynamic response, plates (stiffened), Lesnichaya (V.A.), Manevich (L.I.), *370*
- blades, dynamic stresses, rotating bodies, Ramamurti (V.), Sreenivasamurthy (S.), *372*
- plates, variational methods, Buculei (M.), *373*
- frequency response, shells (cylindrical), Palchevskii (A.S.), Pryadko (A.A.), (et al.), *375*
- dynamic response, eigenvalues, shells (cylindrical), El Raheb (M.), Babcock (C.D.) Jr., *376*
- dynamic behavior, shells (sandwich), shells (spherical), Lizarev (A.D.), Rostanina (N.B.), *378*
- plates (circular), thermal effects, Tomar (J.S.), Tiwari (V.S.), *922*
- dynamic response, elastodynamics, hyperelastic materials, tubes, vibration (forced), Rogers (C.), Baker (J.A.), *1262*
- beams, elastic foundations, railroads, Richard (J.), *1274*
- frequency response, plates (rectangular), plates (stiffened), Saito (H.), Yamaguchi (H.), *1275*
- optimal control, plates, Litvinov (V.G.), *1276*
- frequency response, plates (rectangular), plates (simply supported), Gupta (R.K.), *1277*
- modal analysis, shells (spherical), shells (thin), Skudrzyk (E.J.), *1278*
- frames, frequency response, sensitivity, Yaghmai (I.), Frohrib (D.A.), *1281*
- frequencies, plates (circular), Gelos (R.), Ficcadenti (G.M.), (et al.), *2331*
- frequencies, plates (rectangular), Gottlieb (H.P.W.), *2332*
- plates (rectangular), rayleigh ritz method, Kaldas (M.M.), Dickinson (S.M.), *2333*
- frequencies, mindlin plates, plates (circular), Takahashi (S.), Suzuki (K.), (et al.), *2334*
- beams (timoshenko), mindlin plates, plates (rectangular), Roufaeil (O.L.), Dawe (D.J.), *2335*
- frequency response, slabs, Stoyan (Yu.G.), Makarovskii (E.L.), *2336*
- frequencies, shells (of revolution), Goldenveizer (A.L.), *2339*
- frequencies, modal analysis, multistory frames, Roberts (E.H.), Wood (R.H.), *2343*
- buildings (tall), dynamic analysis, frequency response, structural response, Ellis (B.R.), *2347*
- cooling towers, dynamic analysis, finite element methods, frequency response, Cedolin (L.), Mang (H.A.), (et al.), *2348*
- anisotropic media, design (optimum), plates (circular), Olhoff (N.), Lurie (K.A.), (et al.), *2508*
- dynamic properties, kinematics, Buculei (M.), Marghitu (D.), (et al.), *3081*
- beams, dynamic analysis, ponding, roofs, Mansouri (A.H.), Chinn (J.), *3290*
- cables, finite difference methods, Luongo (A.), Rega (G.), *3350*
- beams, bending, eigenvalues, modal analysis, Zarek (J.H.B.), Gibbs (B.M.), *3352*
- beams (cantilever), eigenvalues, Akesson (B.A.), Friberg (P.O.), *3354*
- beams (variable cross section), bending, dynamic analysis, Trapezon (A.G.), *3356*
- dynamic analysis, plates (rectangular), Marita (Y.), *3367*
- experimental mechanics, shells (cylindrical), Voloshanovskii (Yu.P.), *3371*
- beams, rotating bodies, Takeyama (H.), *3373*
- dynamic analysis, shells (cylindrical), wirewound vessels, Greenberg (J.B.), Stavsky (Y.), *3374*
- dynamic response, rails, soil structure interaction, Moritoh (Y.), *3376*
- cooling towers, dynamic analysis, Nelson (R.L.), *3381*
- coatings, damping, dynamic response, tubes, Vinogradov (B.D.), Chernoberovskii (V.V.), *3388*
- elastic bodies, plates, Romilly (N.), *4403*
- beams, dynamic response, Westermo (B.D.), *4410*
- beams (curved), nonlinear structures, Reddy (J.N.), Singh (I.R.), *4413*
- beams, dynamic properties, Sundara Raja Iyengar (K.T.), Raman (P.V.), *4420*
- membranes, plates, Irie (T.), Yamada (G.), (et al.), *4422*
- elastic foundations, plates (stiffened), Singer (J.), Rand (O.), (et al.), *4424*
- elastic foundations, plates (circular), Leissa (A.), Narita (Y.), *4426*
- approximation methods, beams, Mohsin (M.E.), Sadek (E.A.), *4427*
- approximations, mindlin plates, plates (circular), Irretier (H.), *4428*
- elastic foundations, plates (circular), plates (holed), Basu (U.), *4429*
- plates (sandwich), rotary inertia, vibration (forced), Grover (A.S.), Kapur (A.D.), *4434*
- frequencies, plates (sandwich), Vestyak (A.V.), *4435*
- mathematical methods, vibration (nonlinear), Schrapel (H.D.), *5191*
- relaxation methods, structural response, Flanagan (D.P.), Belytschko (T.), *5196*
- beams (cantilever), frequency response, Kumar (D.), Kulkarni (S.V.), (et al.), *5197*
- beams (timoshenko), frequency response, Rao (J.S.), Kulkarni (S.V.), (et al.), *5199*
- beams, damping, structural response, Narayanan (S.), Verma (J.P.), (et al.), *5203*
- beams, finite element methods, rotating bodies, Hodges (D.H.), Rutkowski (M.J.), *5213*
- dissipation, shells (fluid-filled), submerged bodies, viscous effects, Su (T.C.), *5217*
- dynamic response, shells (cylindrical), shells (shallow), Emmerling (F.A.), Kloss (R.A.), *5218*
- dynamic response, shells (cylindrical), shells (stiffened), Amiro (I.Ya.), Palamarchuk (V.G.), *5223*
- fourier transform, shells (spherical), Bhattacharyya (R.), *5224*
- cables, dynamic response, Rosenthal (F.), *6285*
- cables, matrix methods, Sergev (S.S.), Iwan (W.D.), *6286*
- cables, dynamic response, finite difference methods, Rega (G.), Luongo (A.), *6287*
- beams (cantilever), damping, experimental mechanics, Kerlin (R.L.), *6288*
- beams (timoshenko), damping, Irie (T.), Yamada (G.), (et al.), *6290*
- dynamic response, plates, Kuttler (J.R.), Sigillito (V.G.), *6292*
- approximation methods, plates (simply supported), plates (skew), Sakata (T.), *6294*
- plates (holed), plates (rectangular), rayleigh method, Ali (R.), Atwal (S.J.), *6295*
- dynamic properties, elastic constants, plates (annular), Elek (K.), Granat (J.), (et al.), *6298*
- eigenvalues, plates (rectangular), plates (sandwich), Antonenko (V.M.), Piskunov (V.G.), (et al.), *6307*
- numerical methods, structural response, Gupta (K.K.), *6317*
- cooling towers, dynamic response, Nelson (R.L.), *6522*
- beams, frequencies, Hutchinson (J.R.), *7381*
- dynamic response, filaments, Kurkin (V.I.), Medvedev (S.A.), *7382*
- membrane theory, rayleigh ritz method, strings, Irie (T.), Yoda (K.), *7387*
- dynamic analysis, flexure, plates (circular), Komissarova (G.L.), *7389*
- frequency response, plates (rectangular), Gorman (D.J.), *7390*
- dynamic response, inertia, plates (circular), plates (sandwich), Markus (S.), Nanasi (T.), *7391*
- edge effects, elastic foundations, plates (rectangular), rayleigh ritz method, Laura (P.A.A.), Grossi (R.O.), *7392*
- galerkin method, plates (simply supported), plates (triangular), Chaudhuri (S.K.), *7394*
- galerkin method, large displacement, plates (orthotropic), plates (rectangular), Pesotskaya (N.K.), *7395*
- elastic foundations, plates (skew), transient effects, Bhandari (N.C.), Juneja (B.L.), (et al.), *7396*
- blades, finite element methods, friction (sliding), turbines, vibration (forced), Zmitrowicz (A.), *7397*
- blades, experimental mechanics, frequencies, rotating bodies, turbines, Beckmann (J.), Wachter (J.), *7399*
- arches, elastic foundations, Plaut (R.H.), Johnson (E.R.), *7406*
- dynamic response, finite element methods, long duration exposure facility, Edighoffer (H.H.), Sewall (J.L.), *7411*
- dynamic analysis, eigenvalues, vibration (torsional), Wang (C.C.), *7412*
- dynamic analysis, strings, vibration (nonlinear), wave engines, Cabannes (H.), *8290*
- elastic bodies, frequencies, parallelepipeds, Gottlieb (H.P.W.), *8294*
- beams, plates, Chikhladze (E.D.), Kislov (A.G.), *8296*
- beams, dynamic stresses, elastic foundations, Dresig (K.F.H.), Labes (M.), *8299*
- membranes, plates (circular), plates (holed), wave engines, Lin (W.H.), *8301*
- plates (circular), Rossing (T.D.), *8303*
- anisotropic structures, plates (sandwich), rayleigh ritz method, shells, Kuznetsov (N.D.), Kartashov (G.G.), (et al.), *8305*
- plates, Leissa (A.W.), *8306*
- buckling, plates (rectangular), rayleigh ritz method, Kaldas (M.M.), Dickinson (S.M.), *8307*
- dynamic analysis, finite element methods, large displacement, plates, Aksy (H.U.), *8310*
- dynamic analysis, shells (long), Berdichevskii (V.L.), Le Khan Chau, *8314*
- dynamic response, plates (thick), Fridman (L.I.), *8315*
- rayleigh method, shells (orthotropic), shells (spherical), De Souza (V.C.M.), Croll (J.G.A.), *8316*
- frequency response, rotating shafts, Bauer (V.O.), *8319*
- damping, dynamic analysis, mathematical methods, Inman (D.J.), *9301*
- dynamic response, eigenvalues, Soriano (H.L.), *9303*
- beams (timoshenko), dynamic analysis, Bhashyam (G.R.), Prathap (G.), *9304*
- beams (flexural), rotating bodies, Bauer (H.F.), *9306*
- bessel functions, dynamic analysis, mathematical methods, Liu (X.-Z.), *9307*
- dynamic properties, plates (stiffened), Aksu (G.), *9310*
- dynamic properties, plates (reinforced), Fox (D.W.), Sigillito (V.G.), *9311*

- dynamic analysis, plates (rectangular), Darevskaya (E.V.), *9312*
- dynamic analysis, plates (circular), Lebedeva (N.K.), *9313*
- dynamic analysis, plates (annular), Rangaiah (V.P.), Sadasivan (S.), *9314*
- dynamic analysis, plates, vibration (self excited), Simcak (F.), *9315*
- blades, dynamic analysis, rotating disks, Irretier (H.), *9316*
- dynamic analysis, plates (circular), shells (cylindrical), Rott (W.), *9319*
- dynamic analysis, shells (ellipsoidal), shells (of revolution), Filippov (S.B.), *9321*
- dynamic analysis, prestressed structures, shells (cylindrical), Kukudzhanov (S.N.), *9322*
- lattices, prestressed structures, structural response, Anderson (M.S.), *9326*
- beams, dynamic response, elastic foundations, moving loads, Apaydin (T.A.), *9328*
- fast fourier transform, frequency response, Mitchell (L.D.), *10196*
- beams, dynamic properties, rotary inertia, shear, Doyle (J.F.), *10199*
- plates (annular), Mukhopadhyay (M.), *10202*
- elastic foundations, plates (isotropic), shear, Volos (N.P.), Dovganich (M.I.), *10203*
- plates (rectangular), rayleigh ritz method, Laura (P.A.A.), De Irassar (P.V.), (et al.), *10204*
- beams (cantilever), bending, blades, rotary inertia, shear, Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- blades, rayleigh ritz method, shells (cylindrical), Leissa (A.W.), Lee (J.K.), (et al.), *10210*
- impedance methods, shells (cylindrical), Eichelberger (E.C.), *10211*
- dynamic properties, shells (cylindrical), Barron (R.), Villanueva (C.), *10212*
- averaging, eigenvalues, shells (conical), shells (stiffened), Lesnichaya (V.A.), Pisanko (A.N.), *10214*
- moving loads, shells (cylindrical), Mulyukov (R.M.), *10215*
- dynamic analysis, shells (cylindrical), shells (sandwich), Bespalova (E.I.), *10221*
- buckling, cantilevered structures, structural analysis, Rosman (R.), *10224*
- dynamic analysis, impedance methods, plates (orthotropic), Busch-Vishniac (I.J.), *11127*
- elastic foundations, mindlin plates, plates (circular), Tomar (J.S.), Gupta (D.C.), *11129*
- ceramics, electromechanical components, piezoelectric devices, Aronov (B.S.), *11131*
- shells (spherical), shells (thick), transient loading, Gurkok (A.), Ertepinar (A.), *11132*
- dynamic analysis, shells (cylindrical), Takahashi (S.), Suzuki (K.), (et al.), *11133*
- dynamic analysis, fins, shells (cylindrical), shells (stiffened), Palamarchuk (V.G.), *11136*
- beams (curved), dynamic analysis, rotary inertia, shear, Suzuki (K.), Takahashi (S.), *11148*
- dynamic analysis, plates (sandwich), Shalashilin (V.I.), Kolesnikov (I.Yu.), (et al.), *11149*

vibration (nonlinear), impulsive loading, nonlinear structures, Anderson (J.C.), Masri (S.F.), *1260*
- beams (flexural), dynamic analysis, shear loading, Nguyen Xuan Hung, *1263*
- nonlinear systems, random excitation, Riganti (R.), *1268*
- dynamic properties, mathematical methods, strings, Faulkner (M.G.), Mioduchowski (A.), (et al.), *1271*
- dynamic properties, nonlinear mechanics, Hagedorn (P.), *2314, book*
- beams, dynamic response, Watanabe (T.), *2315*
- beams (elastic), dynamic response, Ichikawa (Y.H.), Konno (K.), (et al.), *2328*
- dynamic analysis, mathematical methods, pendulums, Samson (A.), *3092*
- averaging, bifurcation, dynamic analysis, Holmes (C.), Holmes (P.), *3343*
- averaging, dynamic analysis, Nocilla (S.), *3344*
- dynamic response, networks, perturbation methods, ropes, Ivovich (V.A.), *3351*
- dynamic response, random excitation, Dimentberg (M.F.), *4406*
- galerkin method, plates (circular), rotary inertia, shear, Chia (C.Y.), Sathyamoorthy (M.), *4423*
- finite element methods, large displacement, plates (circular), Reddy (J.N.), Huang (C.L.), (et al.), *4425*
- buckling (nonlinear), shells (nonlinear), Novikov (V.V.), *5186*
- dynamic analysis, vibration, Klotter (K.), *5189, book*
- mathematical methods, vibration (free), Schrapel (H.D.), *5191*
- beams, galerkin method, Yamamoto (Y.), Yasuda (K.), (et al.), *5201*
- cracks, flaw detection, spectral analysis, Wedig (W.), Brautgam (H.), *5205*
- dynamic analysis, nonlinear characteristics, rotating shafts, Yamamoto (T.), Ishida (Y.), (et al.), *5227*
- dynamic analysis, elastic behavior, variational methods, Lau (S.L.), Cheung (Y.K.), *6272*
- damping, dynamic analysis, particle dynamics, Gershman (M.D.), *6273*
- damping, dynamic properties, Peleg (K.), *6274*
- dynamic response, pendulums, vibration (parametric), Khue (L.N.), *6275*
- shells (cylindrical), Nguyen Xuan Hung, *6301*
- dynamic analysis, nonlinear analysis, Arnold (T.W.), Case (W.), *7366*
- buildings (tall), dynamic response, experimental mechanics, Masri (S.F.), Bekey (G.A.), (et al.), *7367*
- gyrodynamics, rings, rotating bodies, structural response, Maewal (A.), *7368*
- limit cycles, nonlinear analysis, oscillators, quenching, Singh (Y.P.), *7369*
- elastic foundations, pendulums, stability theory, Breitenberger (E.), Mueller (R.D.), *7370*
- dynamic analysis, nonlinear analysis, vibration (self excited), Pivovarov (I.), *7371*
- galerkin method, plates (circular), plates (orthotropic), rotary inertia, shear, Sathyamoorthy (M.), *7393*
- dynamic response, rotating bodies, Adams (M.L.), *7403*
- mechanical systems, Kononenko (V.O.), *8279*
- mathematical methods, nonlinear analysis, Gottlieb (H.P.W.), *8280*
- averaging, time lag, Kolesov (Yu.S.), *8281*
- dynamic analysis, strings, vibration (free), wave engines, Cabannes (H.), *8290*
- beams, dynamic behavior, galerkin method, Vaughan (N.D.), Adams (R.D.), *8293*
- panels (flat), plates, solar collectors, Zak (M.A.), *8300*
- dynamic analysis, plates, rotary inertia, shear, Sathyamoorthy (M.), *8303*
- dynamic analysis, equations of motion, mathematical methods, Benson (D.C.), *9296*
- dynamic analysis, mathematical methods, Rosseau (M.), *9297*
- dynamic analysis, stability theory, Trujillo (D.M.), *10188*
- dams, dynamic analysis, earthquake effects, Dungar (R.), *10189*
- dynamic analysis, mechanical systems, Manevich (L.I.), Pilipchuk (V.N.), *10191*
- averaging, dynamic analysis, random excitation, Spanos (P.-T.D.), *10195*
- analog simulation, plates (holed), tension, Datta (P.K.), *10206*
- dynamic stresses, shells (cylindrical), shells (sandwich), Ertepinar (A.), Mengi (Y.), *11134*
- rotating cylinders, vibration (torsional), Inoue (Y.), Shibata (T.), (et al.), *11142*

vibration (parametric), dynamic analysis, mathematical methods, pendulums, Kozlov (V.V.), *358*
- dynamic analysis, mathematical methods, Krupenin (V.L.), *359*
- nonlinear analysis, shells (cylindrical), Bogdanovich (A.E.), Feldmane (E.G.), *377*
- dynamic response, nonlinear theory, vibration (self excited), Tondl (A.), *1265*
- buoys, mathieu equation, oscillating bodies, surface waves, Ogihara (K.), *1609*
- dynamic stability, rails, wheels, Korb (J.), *1986*
- articulated structures, dynamic stability, pipe flow, pipelines, Rousselet (J.), Herrmann (G.), *2719*
- dynamic stability, stability theory, Takahashi (K.), *5195*
- dynamic response, pendulums, vibration (nonlinear), Khue (L.N.), *6275*
- beams, friction, stability theory, Zajaczkowski (J.), *6279*
- approximation methods, differential equations (ordinary), Zajaczkowski (J.), *6283*
- random excitation, stochastic systems, Ibrahim (R.A.), *7372*
- dynamic response, elastic behavior, Bolotin (V.V.), *7376*
- dynamic analysis, engines, nonlinear systems, vibration (torsional), Dittrich (G.), Krumm (H.), *7404*
- acceleration, deceleration, dynamic analysis, random excitation, Dimentberg (M.F.), *8284*
- dynamic response, stability theory, Noah (S.T.), Hopkins (G.R.), *8289*
- dynamic analysis, random excitation, vibration (forced), Schmidt (G.), *9298*
- dynamic analysis, rotating shafts, torque, Unger (A.), Brull (M.A.), *9324*

vibration (random), beams, mathematical methods, random excitation, Wedig (W.), *361*
- gyroscopes (rotary), modes, Kuzman (V.M.), *1089*
- dynamic response, plates (sandwich), Ramachandra Reddy (C.V.), Ganesan (N.), (et al.), *1282*
- earthquake effects, nonlinear systems, Fujita (T.), Hattori (S.), *2320*
- dynamic response, random excitation, Kropac (O.), *2321*
- measurements (dynamic), random excitation, Walker (A.W.), *2325*
- collision models, nonlinear analysis, random excitation, Fujita (T.), Hattori (S.), *3346*
- plates (annular), random loading, Chonan (S.), *3364*
- blades, dynamic response, turbomachinery, vibration (forced), Huang (W.H.), *3398*
- magnetic suspension, rails, vehicles, Popp (K.), *3986*
- dynamic response, nonlinear mechanics, random excitation, Kimura (K.), Sakata (M.), *4405*
- beams, random excitation, Davies (H.G.), Wahab (M.A.), *4412*
- dynamic properties, random loading, Fitzpatrick (J.A.), *5192*
- dynamic properties, nonlinear analysis, wave interactions, Gurbatov (S.N.), *5193*
- dynamic response, random excitation, Robson (J.D.), *7373*
- fast fourier transform, spectral analysis, vibration, Gossmann (E.), Waller (H.), *7377*
- dynamic response, frequency domain techniques, gravity platforms, offshore structures, stochastic processes, wave loads, Sigbjornsson (R.), Smith (E.K.), *7814*
- approximation methods, dynamic response, Dobrynin (S.A.), Feldman (M.S.), *8285*
- probabilistic design, reliability, risk, stochastic processes, Shinozuka (M.) eds., Yao (J.T.P.), *8447, book*
- hysteresis, random excitation, seismic waves, structures, Baber (T.T.), Wen (Y.-K.), *9106*
- random excitation, stochastic systems, Kropac (O.), *10032*

- beams, elastic behavior, solids (fluid immersed), Dinca (D.), *10194*
- beams (cantilever), random excitation, Gasparini (D.A.), Debchaudhury (A.), (et al.), *10201*
- dynamic stresses, heat shields, mathematical models, space shuttle, Doyle (G.R.) Jr., *11155*

vibration (self excited), dynamic response, nonlinear theory, vibration (parametric), Tondl (A.), *1265*
- damping, optimization, vibration isolation, Rowbottom (M.D.), *2323*
- chatter, tools, Kondo (Y.), Kawano (O.), (et al.), *2354*
- dynamic analysis, nonlinear analysis, Yaroshevskii (V.A.), *3090*
- damping, oscillations, relaxation, Levin (A.I.), *6066*
- dynamic analysis, nonlinear analysis, Brommundt (E.), *6276*
- dynamic response, machinery, tools, Soavi (F.), *6315*
- dynamic analysis, nonlinear analysis, vibration (nonlinear), Pivovarov (I.), *7371*
- cylindrical bodies, oscillating bodies, separated flow, vortex shedding, Vales (N.G.), *7793*
- bifurcation, nonlinear analysis, stability theory, Berezovskaia (F.S.), Khibnik (A.I.), *8282*
- blades, turbines, Borishanskii (K.N.), Naumov (A.V.), *8312*
- bearings (journal), damping, lubrication (hydrodynamic), rotors, stiffness, Michalopoulos (D.), Dimarogonas (A.), *9020*
- dynamic stability, rotating bodies, spinning bodies, Rimrott (F.), *9089*
- dynamic analysis, plates, vibration (free), Simcak (F.), *9315*
- seals, vibration, Nau (B.S.), *9476*
- dynamic response, vibration (forced), Asfar (K.R.), Nayfeh (A.H.), (et al.), *10190*
- acoustics, gases, sound generation, thermal effects, Kilchinskaya (G.A.), Protsenko (O.P.), *11920*

vibration (thermally excited), decomposition, reaction kinetics, Zaslonko (I.S.), Mukoseev (Yu.K.), *829*
- probability theory, radiant interchange, real gas effects, Kruglov (V.I.), Katkovskii (L.V.), (et al.), *5588*
- rotating disks, thermal stresses, Chen (L.-T.), Dugundji (J.), *5797*

vibration (torsional), dynamic response, rotating shafts, Pouyet (J.M.), Lataillade (J.L.), *379*
- beams (timoshenko), rotating shafts, Nelson (N.D.), *380*
- dynamic stability, nonlinear structures, structural stability, Antonelli (R.G.), Meyer (K.J.), (et al.), *3377*
- dynamic response, structural response, wind loads, Foutch (D.A.), Safak (E.), *3378*
- bending, blades, eigenvalues, frequencies, steam turbines, Belohradsky (H.-J.), *4430*
- beams (cantilever), frequency response, Subrahmanyam (K.B.), Kulkarni (S.V.), *5200*
- bending, dissipation, rods, stresses (normal), Khilchevskii (V.V.), Vasilevich (D.I.), *5208*
- damping, optimization, Holzweibig (F.), Liebig (S.), *5231*
- crankshafts, diesel engines, noise abatement, Ochiai (K.), Nakano (M.), *5652*
- dynamic stability, joints, stability theory, Kotera (T.), *6280*
- diesel engines, dynamic stresses, failure, rotating shafts, Pasricha (M.S.), Carnegie (W.D.), *6303*
- dynamic response, foundations, vibration (forced), Sankaran (K.S.), Krishnaswamy (N.R.), (et al.), *6310*
- geomechanics, spherical bodies, Kalachnikov (A.A.), *7022*
- conical bodies, dynamic stresses, shock, Brepta (R.), Trnka (J.), *7386*
- dynamic analysis, engines, nonlinear systems, vibration (parametric), Dittrich (G.), Krumm (H.), *7404*
- beams, elastic foundations, transient effects, Wada (H.), *7410*
- dynamic analysis, eigenvalues, vibration (free), Wang (C.C.), *7412*
- boundary conditions, cylindrical bodies, elastic foundations, vibration (forced), Wada (H.), *8322*
- dynamic properties, shells (conical), Tomar (J.S.), Gupta (D.C.), (et al.), *9318*
- damping, dynamic properties, eigenvalues, Doughty (S.), *9323*
- elliptical bodies, Mandal (B.N.), *10036*
- dynamic analysis, rigid bodies, Siawienowski (J.J.), *10193*
- rotating cylinders, vibration (nonlinear), Inoue (Y.), Shibata (T.), (et al.), *11142*

vibration (viscoelastic), elastic constants, rods, viscoelastic waves, Pritz (T.), *4447*
- cavities, damping, dynamic response, friable media, Briskin (E.S.), *8286*

vibration isolation, algorithms, control, design (optimum), vibration, De Silva (C.W.), *165*
- springs, testing equipment, Barker (H.A.), Noble (A.E.), (et al.), *226*
- dynamic testing, experimental methods, Walker (W.R.), *384*
- damping, dynamic response, Hundal (M.S.), *390*
- design, helicopters, Reichert (G.), *696*
- noise abatement, Purcell (W.E.), *1821*
- damping, optimization, vibration (self excited), Rowbottom (M.D.), *2323*
- helicopters, vibration (forced), Done (G.T.S.), *2362*
- damping, dynamic behavior, rotors, Kravtsova (E.V.), Poznyak (E.L.), *2356*
- beams, distributed parameters, dynamic analysis, Wauer (J.), *2357*
- algorithms, gradient techniques, optimal control, vibration, Potarasu (V-F.), Popescu (D.), *3209*
- control, turbomachinery, Schelthe (W.), Trommer (W.), *3389*
- algorithms, optimal control, vibration (forced), vibrators, vibrotransporter, Zevin (A.A.), *4311*
- damping, dynamic analysis, optimization, Thompson (A.G.), *4440*
- dynamic response, vibration (forced), Bishop (R.E.D.), Mahalingam (S.), *5188*
- impedance methods, mechanical systems, Granhall (A.), Kihlman (T.), *6282*
- helicopters, impedance methods, vibration (forced), Viswanathan (S.P.), Myers (A.W.), *6300*
- dynamic analysis, elastic bodies, linear systems, structural response, structures, Ryaboi (V.M.), Genkin (M.D.), (et al.), *7244*
- dynamic response, optimization, Warburton (G.B.), *7416*
- beams, dynamic response, Davidson (P.B.), Vance (O.L.), *8292*
- control, flexible bodies, rotating shafts, Stanway (R.), Burrows (C.R.), *8318*
- dynamic interaction, gear teeth, Benton (M.), Seireg (A.), *8324*
- dynamic response, friction, nonlinear characteristics, Dragani (R.), Sarra (M.), *8325*
- design (optimum), dynamic analysis, optimization, Rao (S.S.), Hati (S.K.), *9302*
- heat exchangers, heat exchangers (rod baffle), tube bundles, Smyth (R.), *10616*
- damping, oscillations, vibration, Alley (T.L.), *11082*
- control, structural design, structural stability, structures, vibration, Udwadia (F.E.), Tabaie (S.), *11097*
- bearings (journal), damping, turbomachinery, vibration (forced), Beskletnyi (M.E.), Igumentsev (E.A.), *11147*
- bearings, damping, flexible bodies, rotors, squeeze films, Cookson (R.A.), Kossa (S.S.), *11340*

vibrators, concrete, mixing, mixtures, Eyman (K.H.), *1436*
- algorithms, optimal control, vibration (forced), vibration isolation, vibrotransporter, Zevin (A.A.), *4311*
- impulse, sound fields, transducers, Stephanishen (P.R.), *4762*
- material testing, nondestructive tests, stress intensity factor, Pye (C.J.), Adams (R.D.), *10310*

Vick (B.), entrance region, heat transfer, integral methods, pipe flow, transforms, Ozisik (M.N.), (et al.), *734*
- axial flow, closed conduit flow, conduction (heat), laminar flow, peclet number, Ozisik (M.N.), *3812*
- conduction (heat), convection (forced), heat exchangers, heat transfer (combined modes), pipe flow, slug flow, Ozisik (M.N.), *8745*

Victor (F.), beams (timoshenko), resonance, rotating bodies, vibration (forced), Eliyin (F.), *4431*

Vidmar (P.J.), ocean bed, reflection, underwater acoustics, *5745*
- ocean bed, reflection, sedimentation, underwater acoustics, *5752*
- ocean bed, reflection, sedimentation, shear waves, underwater acoustics, *6907*

Vidyanidhi (V.), convection (free), magneto fluid dynamics, plates (perforated), rotating bodies, slip flow, Raju (G.K.), (et al.), *859*
- couette flow, hall effect, heat transfer, magneto fluid dynamics, rotating disks, Krishnam Raju (G.), (et al.), *4745*

Vidyasagar (M.), graph theory, large scale systems, nonlinear systems, stability theory, *123*

Viegas (J.R.), see Kussoy (M.I.), *601*
- see Mateer (G.G.), *5432*

Vielsack (P.), buckling, contact problems, rails, rods, *333*
- bifurcation, buckling, rods, *338*
- bifurcation, buckling, prestressed structures, rods, *10170*

Viernstein (L.J.), diagnostics, head, human body, pressure measurement, *6028*

Vigak (V.M.), distributed parameters, optimal control, thermal diffusion, thermal stresses, Kostenko (A.V.), *177*

Vigdorovich (V.N.), conduction (heat), thin films, Geranin (V.P.), (et al.), *5524*

Vigevano (L.), computer programming, conical flow, delta wings, vortices, *9650*

Vighnesam (N.V.), see Soundalgekar (V.M.), *1676*

Viguier (J.), see Migniot (C.), *2593*

Vijayakumar (K.), edge cracks, elasticity, elliptical cracks, infinite medium, Atluri (S.N.), *1361*

Viktorov (G.V.), see Agarwal (P.K.), *4677*

Viktorova (I.V.), see Suvorova (Yu.V.), *4478*

Vilemas (J.), see Nemira (M.), *7827*

Vilemas (Yu.V.), coils, ducts (curved), heat exchangers, turbulent flow, Dzyubenko (B.V.), (et al.), *11490*

Vilenkin (S.Ya.), algorithms, array ordering, arrays, matrix methods, Chamaya (I.S.), *2113*
- algorithms, erlang distribution, mathematical models, queue theory, two phase systems, Fedotov (A.G.), *3197*

Vilkunov (V.N.), see Baushev (V.S.), *5643*

Vilke (V.G.), dynamic analysis, elastic bodies, mathematical methods, rotating bodies, *11*
- dynamic analysis, spherical bodies, viscoelastic materials, *1066*
- dynamic response, elasticity (nonlinear), existence theorems, nonlinear theory, uniqueness, *7424*

Vilkhovchenko (S.D.), deformable bodies, force, inviscid fluid, potential flow, three dimensional flow, Yakimov (Yu.L.), *8524*

Vilks (U.K.), axial loading, creep, polymers, torsion, Tabuns (V.A.), (et al.), *272*

Villanueva (C.), see Barron (R.), *10212*

Villchur (E.), distortion, doppler effect, loudspeakers, sound generation, Allison (R.F.), *3974*

Villermaux (J.), models, particles, pyrolysis, reaction rates, Antoine (B.), *3872*
- heat transfer, models, particles, pyrolysis, reaction rates, Verzaro (F.), (et al.), *3873*

Vilnay (O.), beams (cantilever), influence matrix, modal control, simply supported structures, structural analysis, time domain techniques, *7592*

Vilyunov (V.H.), see Burkina (R.S.), *6832*

Vilyunov (V.I.), see Burkina (R.S.), *10425*

Vinayagalingam (T.), design, wind tunnels, wind turbines, *5667*

Vincent (R.Q.), see Heilker (W.J.), *6289*

Vincent (T.L.), controllability, optimization, state space techniques, Skowronski (J.M.), *4241*

Vinje (T.), currents, cylindrical bodies, gravity waves, hydrodynamic pressure, *3719*

Vinnikov (K.Ya.), climatology, modeling, Groisman (P.Ya.), *4076*

Vinogradov (B.D.), coatings, damping, dynamic response, tubes, vibration (free), Chernoberevskii (V.V.), *3388*

Vinogradov (G.V.), see Froishteter (G.B.), *612*

Vinokurov (V.A.), crack propagation, failure, physical properties, Makarov (G.I.), *469*

Vinson (T.S.), see Czajkowski (R.L.), *6389*

Vinter (R.B.), linear systems, regulator problem, synthesis, time delay systems, Kwong (R.H.), *1142*

Viola (E.), biaxial loading, cracks, inclusions, rigid bodies, Piva (A.), *1366*

- biaxial loading, bifurcation, crack growth, cracks, *2436*
- bonded joints, composite materials, fracture criteria, interface cracks, singularities, Piva (A.), *7535*

Vir (D.), see Chand (J.), *1679*

Vira (N.R.), conical bodies, heat transfer, rotating bodies, rotating fluids, spinning bodies, Fan (D.-N.), *8716*

- boundary layer (thermal), heat transfer, rotating disks, viscous effects, Fan (D.-N.), *11552*

Virchenko (Yu.P.), boltzmann equation, kinetic theory, Laskin (N.V.), *1650*

virtual mass, damping, dynamic response, tubes, two phase flow, Carlucci (L.N.), *391*

- cylindrical bodies, drag coefficient, gravity waves (surface), submerged bodies, wave loads, Koterayama (W.), *1594*
- oscillating bodies, spherical bodies, stratified flow, Lai (R.Y.S.), Lee (C.-M.), *1602*
- bubbly flow, stability (numerical), two phase flow, Lahey (R.T.) Jr., Cheng (L.Y.), (et al.), *1844*
- damping, tube bundles, vibration (flow induced), Weaver (D.S.), El-Kashlan (M.), *2712*
- crossflow, drag coefficient, tube bundles, Chakraborti (S.K.), *3716*
- cylindrical bodies, inertia, oscillatory flow, Stansby (P.K.), *5482*
- drag coefficient, nonlinear analysis, offshore structures, wave loads, Debnath (L.), Rahman (M.), *7767*
- bodies of revolution, deformation, ellipsoids, integral methods, Apshtein (E.Z.), Kolotilova (N.G.), *8534*
- cylindrical bodies, damping, gravity waves (surface), submerged bodies, Sebuncu (T.), Calisal (S.), *8630*
- damping, heaving, ship motion, surface effect, Kim (C.H.), Tsakonas (S.), *9014*
- empirical methods, inviscid fluid, plates, Payne (P.R.), *9543*
- oscillating bodies, pipelines, submerged bodies, wave loads, Efthymiou (M.), Narayanan (R.), *10394*
- heaving, pitching, rolling motion, ship motion, yawing, Troesch (A.W.), *10678*
- ducts, submerged bodies, wave absorbers, wave energy, Thomas (J.R.), *11602*
- cylindrical bodies, damping, floating bodies, Yeung (R.W.), *11654*
- cylindrical bodies, oscillating bodies, wave generation, Wang (S.), *11668*
- damping, floating bodies, gravity waves (surface), Faines (J.), *11675*
- cylindrical bodies, floating bodies, gravity waves (finite depth), waves (long), Sayer (P.), *11681*

virtual work methods, elasticity (nonlinear), variational methods, Zhong-Heng (G.), *236*

- muller-breslau principle, structures, Charlton (T.M.), *2505*
- elasticity (linear), energy methods, variational methods, Kozak (I.), *4339*
- conservation laws, continuum mechanics, variational methods, Atanackovic (T.M.), *6039*

Visalakshi (N.), see Roy (A.), *8340*

Visalvanich (K.), beams, cements, composite materials, fracture mechanics, material testing, Naaman (A.E.), *6439*

Visarion (V.), computing techniques, existence theorems, mathematical methods, shells, Migdalovici (M.), *69*

Visbal (M.), coordinate systems, curved surfaces, generation, poisson equation, two dimensional flow, Knight (D.), *7683*

viscid inviscid flow, compressible flow, corners, transonic flow, Diesperov (V.N.), *2613*

- axial compressors, blades, boundary layer, geometrical properties, subsonic flow, Calvert (W.J.), Herbert (M.V.), *3745*
- bodies of revolution, compressible flow, hypersonic flow, numerical methods, Polyanskii (A.F.), Skurin (L.I.), (et al.), *5416*
- integral methods, magneto plasma dynamics, transforms, two dimensional flow, Gorskii (V.B.), *5676*
- boundary layer (turbulent), separation, Whitfield (D.L.), Swafford (T.W.), (et al.), *6638*
- nozzles, nozzles (underexpanded), pressure distribution, Volchkov (E.P.), Kozmenko (V.K.), (et al.), *8587*

viscoelastic fluids, closed conduit flow, polymers, unsteady flow, Ryan (M.E.), Dutta (A.), *544*

- capillary flow, extrusion, Prokunin (A.N.), Sevruk (V.D.), *545*
- filaments, fluid injection, power law fluids, Kase (S.), Nakajima (T.), *548*
- analogies, pipe flow, turbulent flow, Cho (Y.I.), Hartnett (J.P.), *617*
- bounded media, cylindrical bodies, magneto fluid dynamics, oscillatory flow, Varshneya (N.K.), *854*
- blood flow, particle fluid flow, peristaltic flow, Shen (M.C.), Lin (K.C.), (et al.), *1042*
- metals, nonhomogeneous media, void growth, Taya (M.), Seidel (E.D.), *1195*
- non newtonian flow, rotating bodies, simple fluids, spherical bodies, Fosdick (R.L.), Kao (B.G.), *1484*
- oscillatory flow, unsteady flow, viscous flow, Salathe (E.P.), *1485*
- jets, polymers, thin films, Entov (V.M.), Kestenboim (Kh.S.), (et al.), *1487*
- shear waves, solutions (material), surface waves, De Feijter (J.A.), Benjamins (J.), *1489*
- drag reduction, oscillatory flow, particulate flow, Mclaughlin (J.), *1490*
- internal state variables, shear waves, viscoelastic waves, Bampi (F.), Morro (A.), *1971*
- constitutive equations, materials possessing memory, non newtonian flow, shear flow, Menezes (E.V.), *2575*
- material testing, polymers, recoil, thermoplasticity, Apicella (A.), Nicodemo (L.), (et al.), *2576*
- relaxing media, stress relaxation, stresses (normal), viscometry, Pedersen (S.), Chapoy (L.L.), *2577*
- flow measurement, polymers, stresses (normal), Roger (D.V.), Denn (M.M.), *2579*
- approximations (higher order), entrance region, mass transfer, pipe flow, turbulent flow, Cho (Y.I.), Hartnett (J.P.), *2645*
- approximations (higher order), ducts (variable area), pipe flow, Williams (E.W.), Javadpour (S.H.), *2646*
- approximations (higher order), pipe flow, unsteady flow, Manero (O.), Walters (K.), *2647*
- differential equations (ordinary), magneto fluid dynamics, nonlinear theory, rotating disks, Bhatnagar (R.K.), *2887*
- equations of motion, existence theorems, polar fluids, rheology, Solonnikov (V.A.), Kazhikhov (A.V.), *3076*
- constitutive equations, dynamic viscoelasticity, rayleigh problem, Soundalgekar (V.M.), Dasgupta (A.K.), *3589*
- polymers, viscoelastic materials, Marin (G.), Montfort (J.P.), (et al.), *3591*
- friction (skin), poiseuille flow, porous surfaces, suction, Dash (G.C.), Behera (S.C.), *3669*
- heat transfer, pipe flow, turbulent flow, Cho (Y.I.), Ng (K.S.), (et al.), *3670*
- clausius-duhem inequality, conduction (heat), shock waves, thermodynamics, Morro (A.), *3722*
- channel flow, convection, porous walls, Mohapatra (P.), Devi (P.), *3906*
- rayleigh problem, shear flow, unsteady flow, Johri (A.K.), Singhal (R.K.), *4568*
- ducts (constant area), fourier series, magneto fluid dynamics, pressure gradient, Sengupta (P.R.), Bhattacharyya (S.K.), *4746*
- bubble dynamics, motion, Tiefenbruck (G.F.), Leal (L.G.), *4829*
- inlets, viscous flow, Kim (S.), *5102*
- constitutive equations, unsteady flow, Siawomirski (M.R.), *5381*
- constitutive equations, couette flow, micromechanisms, Quentrec (B.), *5382*
- drag, external flow, heat transfer, transport phenomena, Masheikar (R.A.), Marrucci (G.), *5383*
- micromechanisms, polymers, rheology, Johnson (M.W.) Jr., Segalman (D.), *5386*
- acoustics, resonance, Fiorito (R.), Madigosky (W.), (et al.), *5738*
- blood flow, compressional waves, flexible walls, pulsatile flow, Kaimal (M.R.), *6020*
- constitutive equations, polymers, shear flow, Leonov (A.I.), Prokunin (A.N.), *6571*
- entrainment, rotating cylinders, shear flow, viscoplasticity, Shulman (Z.P.), Baikov (V.I.), *6572*
- constitutive equations, non newtonian flow, Niggemann (M.), *6574*
- constitutive equations, seismic loading, Nazarov (A.G.), *6575*
- experimental methods, viscometry, Oosterbroek (M.), Waterman (H.A.), (et al.), *6592*
- impulse, non newtonian flow, plates, rivlin erickson fluid, Teipel (I.), *6644*
- channel flow, cooling, injection molding, polymers, two dimensional flow, Isayev (A.I.), Hieber (C.A.), *6656*
- bearings, inertia, lubrication (hydrostatic), Rout (B.), Sinha Roy (J.), *7102*
- free boundary, rheology, rotating cylinders, Beavers (G.S.), Yoo (J.Y.), (et al.), *7642*
- constitutive equations, particulate flow, polymers, White (J.L.), Tanaka (H.), *7645*
- nonlinear analysis, pipe flow, rivlin-ericksen fluid, Erdogan (E.), *7721*
- noncircular pipes, oldroyd fluid, pressure gradient, Rukmangadachari (E.), *7722*
- duct flow, entrance region, fluid injection, Dash (G.C.), Behera (S.C.), *7723*
- bearings (thrust), inertia, lubricants (liquid), lubrication (hydrostatic), Sinha Roy (J.), Biswal (B.), *8068*
- constitutive equations, creeping flow, plastic flow, White (J.L.), *8086*
- dies, extrusion, Crochet (M.J.), Keunings (R.), *8488*

- relaxing media, statistical continuum mechanics, Skvortsov (G.E.), *8489*
- dilute solutions, polar fluids, suspensions, Taran (E.Yu.), *8503*
- constitutive equations, micromechanisms, stresses (normal), Barrett (A.J.), De Kee (D.), *8504*
- flow measurement, oscillatory flow, unsteady flow, Sigli (D.), Maalouf (A.), *8505*
- free jets, laminar flow, Jimenez (J.), Daguenet (M.), (et al.), *8595*
- boundary layer, convection (free), elastico-viscous liquids, oscillatory flow, Mishra (S.P.), Mohapatra (U.), *8723*
- convection, critical flow, Garifullin (F.A.), Zapparov (F.I.), *8724*
- motion, particles, Brunn (P.), *8894*
- inertia, lubrication (hydrodynamic), oscillating bodies, plates (parallel), squeeze films, Roy (J.S.), Biswal (B.), *9026*
- couplings, half space, rayleigh waves, scattering, Angel (Y.C.), Bogy (D.B.), *9338*
- convection (forced), external flow, internal flow, laminar flow, non newtonian flow, turbulent flow, Shenoy (A.V.), Mashelkar (R.A.), *9707*
- channel flow, heat transfer, non newtonian flow, power law fluids, shear stress, Shulman (Z.P.), Khusid (B.M.), (et al.), *9708*
- channel flow, finite element techniques, holes, plates (holed), Richards (G.D.), Townsend (P.), *10445*
- pipe flow, simulation, unsteady flow, De Saint Victor, Ly (D.P.), (et al.), *11506*
- channel flow, heat transfer, porous surfaces, pulsatile flow, Roy (J.S.), Nayak (P.), (et al.), *11509*
- cavities, channel flow, non newtonian flow, Burde (G.I.), Ilyasov (E.P.), (et al.), *11510*
- plates, plates (waving), swimming propulsion, Sturges (L.D.), *11630*

viscoelastic materials, inclusions, stress analysis, viscoelasticity, Laws (N.), *260*
- materials properties, polymers, Zezin (Yu.P.), Malinin (N.I.), *262*
- periodic problems, plates (circular), thermal stresses, turbomachinery, Raous (M.), *263*
- beam columns, structural stability, Madan (V.P.), *357*
- nonlinear materials, springs, thermoelasticity (transient), Senchenkov (I.K.), Gumenyuk (B.P.), *927*
- aortic valve, heart, materials properties, Dorogin (A.D.), Maltsev (L.E.), (et al.), *1040*
- dynamic analysis, spherical bodies, Vilke (V.G.), *1066*
- combined loading, experimental results, polymers, Nishitani (T.), Murayama (Y.), *1189*
- creep, thermoviscoelasticity, Caruthers (J.M.), Cohen (R.E.), *1190*
- bending, material testing, wood, Becker (H.F.), *1401*
- biomaterials, constitutive equations, nonlinear materials, tissues, Decraemer (W.F.), Maes (M.A.), (et al.), *1951*
- adhesives, bonded joints, nonlinear materials, Weitsman (Y.), *2227*
- alloys, data analysis, relaxing media, stress relaxation, Povolo (F.), *2230*
- flutter, supersonic flow, vibration (flow induced), Anvarov (R.), Gegel (E.I.), *2907*
- biomaterials, lungs, tissues, Grotberg (J.B.), Davis (S.H.), (et al.), *3060*
- accelerated testing, polymers, relaxing media, Askadskii (A.A.), Todadze (T.V.), *3258*
- crack growth, crack propagation, edge cracks, Christensen (R.M.), Wu (E.M.), *3461*
- computing techniques, dynamic fracture, finite element techniques, stress intensity factor, Aoki (S.), Kishimoto (K.), (et al.), *3476*
- polymers, viscoelastic fluids, Marin (G.), Montfort (J.P.), (et al.), *3591*
- anisotropic media, contact problems, indentation, Predeleanu (M.), Dahan (M.), *4348*
- baffles, barriers, flexural waves, wave absorbers, Ko (S.-H.), *4764*
- acoustic waves, modes, reflection, resonance, transmission, Madigosky (W.), Fiorito (R.), *4787*
- transient effects, viscoelastic waves, Nakagawa (N.), Kawai (R.), *5238*
- crack growth, dugdale model, fracture mechanics, griffith cracks, survey, Kaminskii (A.A.), *5301*
- numerical methods, volterra equations, Cameron (R.F.), Mckee (S.), *6176*
- beams (variable cross section), follower forces, structural stability, Kar (R.C.), *6267*
- finite element techniques, large displacement, Guelin (P.), Nowacki (W.K.), (et al.), *6337*
- cavities, wave generation, Pal (P.C.), *6340*
- adhesives, bonded joints, Nagaraja (Y.R.), Alwar (R.S.), *6668*
- bending (viscoelastic), elastic foundations, plates (rectangular), thermoviscoelasticity, Misra (J.C.), Samanta (S.), *6944*
- edge cracks, laminates, plates (weakened), Gorelik (A.V.), *7506*
- boundary layer (turbulent), coatings, compliant materials, interaction, surface flow, Airapetov (A.B.), *7698*
- nonlinear materials, porous media, wedges, Kolokolchikov (V.V.), *8194*
- constitutive equations, creep, elastoviscoplasticity, viscoplasticity, Katona (M.G.), *8195*
- half space, screw dislocations, Brock (L.M.), *8338*
- crack growth, dugdale model, polymers, Kaminskii (A.A.), *8410*
- thermal loading, thermoelasticity, Shevchenko (Yu.N.), Terekhov (R.G.), (et al.), *8880*
- experimental methods, stress strain relationships, tendons, tissues, Woo (S.L.-Y.), Gomez (M.A.), (et al.), *9046*
- bones, spine, stress strain relationships, Burns (M.L.), Kaleps (I.), *9049*
- aging, computer programming, laminates, volterra equations, Huet (C.), *9250*
- composite materials, damping capacity, inclusions, Kligman (R.L.), Madigosky (W.M.), (et al.), *9341*
- half space, interface phenomena, love waves, prestressed structures, Chattopadhyay (A.), De (R.K.), *9342*
- buckling, rods, Gurtin (M.E.), Mizel (V.J.), (et al.), *10182*
- half space, layered media, torsional waves, vibration, Martincek (G.), *10238*
- adhesion, roughness, Greenwood (J.A.), Johnson (K.L.), *10886*
- flexible walls, pipe flow, unsteady flow, Regirer (S.A.), Rutkevich (I.M.), *11690*
- pipe flow, pipelines, vibration, Guin (M.S.), *11691*

viscoelastic waves, nonlinear waves, viscoelasticity (dynamic), Engelbrecht (J.), *1055*
- ice, plates, Bates (H.F.), Shapiro (L.H.), *1303*
- internal state variables, shear waves, viscoelastic fluids, Bampi (F.), Morro (A.), *1971*
- analogies, layered media, Ting (T.C.T.), Mukunoki (I.), *2364*
- mixtures, suspensions, waves, D'Anna (A.), De Socio (L.M.), (et al.), *4130*
- elastic constants, rods, vibration (viscoelastic), Pritz (T.), *4447*
- harmonic waves, layered media, Tanaka (K.), Kon-No (A.), *4448*
- harmonic waves, layered media, Tanaka (K.), Kon-No (A.), *4449*
- composite materials, loss factor, ultrasonics, Williams (J.H.) Jr., Lee (S.S.), (et al.), *5140*
- transient effects, viscoelastic materials, Nakagawa (N.), Kawai (R.), *5238*
- inverse problems, laplace transform, Nigul (U.K.), *5239*
- attenuation, earth, Akopyan (S.Ts.), Zharkov (V.N.), (et al.), *5877*
- dynamic response, tubes, Moodie (T.B.), Haddow (J.B.), (et al.), *6339*
- interface waves, materials possessing memory, scattering, Lokshin (A.A.), *6341*
- random media, rayleigh waves, Beltzer (A.I.), *8337*
- impact, rods, waves, Gakiuk (S.I.), *8343*

viscoelasticity, constitutive equations, relaxing media, Kecs (W.), *258*
- constitutive equations, correspondence principle, solid mechanics, Rajagopal (K.R.), Wineman (A.), *259*
- inclusions, stress analysis, viscoelastic materials, Laws (N.), *260*
- continuum mechanics, micromechanisms, thermodynamics, Morro (A.), *1053*
- interface cracks, propagation, semi infinite media, wiener-hopf technique, Sills (L.B.), Benveniste (Y.), *1376*
- dielectrics, lubricants (liquid), viscosity, Bair (S.), Winer (W.O.), *1940*
- averaging, integro differential equations, nonlinear theory, Turbe (N.), *2015*
- composite materials, computing techniques, eigenvalue problems, elasticity, finite element methods, fracture, optimization, plasticity, variational methods, NematNasser (S.) ed., *3109, book*
- beams (composite), creep, reinforced concrete, Lazic (V.B.), Lazic (J.D.), *3251*
- prestressed concrete, reinforced concrete, Temnov (I.I.), Khlopovskii (Yu.N.), *3538*
- earth, earth's crust, faults, sliding, stress concentration, Mukherji (P.), Pal (B.P.), (et al.), *4031*
- creep, deformation (finite), Arutyunyan (N.Kh.), *4345*
- elasticity, modeling, ocean bed, Lambeck (K.), Nakiboglu (S.M.), *4844*
- boundary value problems, elasticity, orthogonal functions, Meinikov (V.P.), *4962*
- composite materials, elasticity (linear), photoplasticity, shells, Kuznetsov (G.B.) eds., Shakirov (N.V.), *5071, book*
- composite materials, diatomic solids, microstructures, mixture theories, Demiray (H.), *5104*
- experimental methods, hopkinson bar, relaxing media, stress strain relationships, Tormala (P.), Paakkonen (E.), (et al.), *5106*
- constitutive equations, creep, Mohamed (F.A.), Ginter (T.J.), *7274*
- composite structures, elastic behavior, missiles, random loading, stochastic systems, Weeks (G.E.), Cost (T.L.), *7301*
- blood vessels, brain, muscles, tissues, Misra (J.C.), Chakravarty (S.), *7646*
- drag reduction, jets, polymers, slots, Fruman (D.H.), Galivel (P.), *7667*
- hydrodynamic stability, liquid solid interface, membranes, Steinchen (A.), Gallez (D.), (et al.), *8275*
- computing techniques, crack propagation, Tsai (Y.M.), *8412*
- crack growth, fracture mechanics, linear theory, Mccartney (L.N.), *8413*
- bearings (journal), damping, squeeze films, vibration, Tichy (J.A.), *9965*
- cartilage, human body, joints, lubrication (hydrodynamic), squeeze films, Manohar (K.), Nigam (K.M.), *9968*
- galerkin method, half space, layered media, surface waves, Chiroiu (V.), Nicolae (V.), *10234*
- acoustic waves, layered media, reflection, transmission, waveguides, Stepanishen (P.R.), Strozeski (B.), *11966*

viscoelasticity (dynamic), dynamic viscoelasticity, impedance methods, Martincek (G.), *261*
- complex variables, correspondence principle, cyclic loading, Dasgupta (G.), *264*
- nonlinear waves, viscoelastic waves, Engelbrecht (J.), *1055*
- cyclic loading, nonlinear mechanics, thermoviscoelasticity, Gumenyuk (B.P.), Kamaukhov (V.G.), *1188*
- materials properties, polymers, strain rate, Kokoshvili (S.M.), Kainin (P.P.), *1193*
- elastodynamics, simple materials, variational methods, Atanackovic (T.), *2217*

- emulsions, inertia, oscillations, two phase flow, Oosterbroek (M.), Tropper (R.), (et al.), *2602*
- biomaterials, tendons, Schwerdt (H.), Constantinesco (A.), (et al.), *3061*
- crack propagation, stress intensity factor, strips, wiener-hopf technique, Popelar (C.H.), Atkinson (C.), *3468*
- anelasticity, damping, finite element methods, material testing, Vasilenko (N.V.), *5105*
- thermal effects, vibration (forced), Gumenyuk (B.P.), Kamaukhov (V.G.), (et al.), *5802*
- creep, statistical continuum mechanics, Day (W.A.), *6173*
- composite materials, micromechanics, resins, Schaffer (B.G.), Adams (D.F.), *7273*
- impact, materials properties, polymers, Matsumoto (H.), Nakahara (I.), (et al.), *7279*
- boltzmann equation, conduction, enskog fluid, kinetic theory, pressure, viscosity, Schmidt (G.), Kohler (W.E.), (et al.), *7819*
- impulsive loading, radial loading, shells (spherical), Guelin (P.), Nowacki (W.K.), (et al.), *8345*
- bubble dynamics, creeping flow, non newtonian flow, spherical bodies, Tiefenbruck (G.), Leal (L.G.), *10412*
- impact, layered media, punch problems, shear, winkler foundation, Aleksandrov (V.M.), Zelentsov (V.B.), *11159*
- layered media, moving loads, Privarnikov (A.K.), Radovskii (B.S.), *11160*
- elastoplasticity, impact, numerical methods, Mikkola (M.J.), Tuomala (M.), (et al.), *11175*

viscometry, polymers, shear flow, Kulicke (W.-M.), Porter (R.S.), *1486*
- relaxing media, stress relaxation, stresses (normal), viscoelastic fluids, Pedersen (S.), Chapoy (L.L.), *2577*
- biomechanics, rheology, shear flow, Whorlow (R.W.), *2578, book*
- coal, particulate flow, pipelines, suspensions, Davis (P.K.), Muchmore (C.B.), (et al.), *3594*
- internal combustion engines, lubricants (liquid), temperature, Shaub (H.), Murphy (C.K.), *3757*
- capillary flow, viscous flow, yield condition, Golovanchikov (A.G.), Tyabin (N.V.), *6589*
- experimental methods, non newtonian flow, Ozturk (Y.), Williams (R.W.), *6591*
- experimental methods, viscoelastic fluids, Oosterbroek (M.), Waterman (H.A.), (et al.), *6592*
- constitutive equations, couette flow, shear flow, Goddard (J.D.), *6593*
- dilute solutions, polymers, viscosity, Nikonov (N.T.), *7641*
- blood flow, hydrodynamic stability, Dintenfass (L.), Fu-Lung (L.), *8063*
- couette flow, experimental methods, unsteady flow, Ravey (J.C.), Dognon (M.), (et al.), *8494*
- birefringent materials, polymers, Van Aken (J.A.), Gortemaker (F.H.), (et al.), *8498*
- free boundary, liquid vapor interface, shear flow, Krieg (R.D.), Son (J.E.), (et al.), *8500*
- disks, water, Kestin (J.), Shankland (J.R.), *8666*
- calibration, disks, oscillating bodies, Kestin (J.), Shankland (I.R.), *9675*

viscoplasticity, constitutive relations, extrusion, finite element techniques, rate sensitivity, Teyal (A.K.), Natarajan (R.), *1339*
- constitutive relations, crack propagation, work hardening, Aboudi (J.), Achenbach (J.D.), *1377*
- drawing, photoelasticity, polymers, Nishitani (T.), *2471*
- plastic flow, unsteady flow, Ogibalov (P.M.), Mirzadzhanzade (A.Kh.), *2574, book*
- damage, metals, plastic flow, Nicholson (D.W.), *3078*
- large displacement, thin walled structures, tubes, Murase (K.), Nishimura (T.), *3291*
- impulsive loading, large displacement, plates (circular), Idczak (W.), Rymarz (C.), (et al.), *3314*
- anelasticity, continuum mechanics, creep, metals, Rusinko (K.N.), Ivasyuk (V.V.), *5114*
- deformation (plastic), dislocations, hot working, microstructures, steel, Teodosiu (C.), Soos (E.), (et al.), *5273*
- deformation, plasticity, strain analysis, thermoplasticity, Lehmann (T.), *6034*
- entrainment, rotating cylinders, shear flow, viscoelastic fluids, Shulman (Z.P.), Baikov (V.I.), *6572*
- constitutive equations, creep, elastoviscoplasticity, viscoelastic materials, Katona (M.G.), *8195*
- cavities, channel flow, liquid liquid interface, Burde (G.I.), Ilyasov (E.P.), (et al.), *9582*
- channel flow, noncircular pipes, Jakovenko (A.), *11507*

viscosity, bubble dynamics, noise, nonhomogeneous media, sound generation, Mccomb (W.D.), Ayyash (S.), *889*
- hydrodynamic stability, non newtonian flow, pipe flow, shear-rate dependent, Akbay (U.), *1560*
- boundary layer, free boundary, gravity waves (surface), surface tension, Trad (A.), *1593*
- mixtures, thermal effects, transport properties, Dymond (J.H.), Young (K.J.), (et al.), *1658*
- dielectrics, lubricants (liquid), viscoelasticity, Bair (S.), Winer (W.O.), *1940*
- film thickness, lubrication (elastohydrodynamic), rolling contact, Gecim (B.), Winer (W.O.), *1941*
- noncircular pipes, poiseuille flow, variable fluid properties, viscosity (temperature dependent), Nikolas (M.), Bardocz (L.), *2648*
- high pressure, thermophysical properties, transport properties, Bimboim (M.H.), Weiss (H.), *5520*
- critical region, steam, transport properties, Basu (R.S.), Sengers (J.V.), *5529*
- attenuation, porous media, sand, saturation, sound propagation, Hovem (J.M.), Ingram (G.D.), *5733*
- lubricants (liquid), pressure, So (B.Y.C.), Klaus (E.E.), *5989*
- micromechanisms, polymers, Budtov (V.P.), Romanovskii (G.K.), *6578*
- dilute solutions, polymers, viscous flow, Geisler (H.), Muller (H.G.), *6579*
- couette flow, statistical mechanics, thermodynamics (nonequilibrium), Naitoh (T.), Ono (S.), *6749*
- conduction (heat), conductivity, dispersed flow, spherical bodies, thermodynamic functions, Endler (B.S.), *6759*
- hydrodynamic stability, thermal instability, variable fluid properties, Sezontov (A.G.), *6761*
- mechanical properties, mixtures, two phase flow, Oshima (N.), *6980*
- friction (sliding), lubricants (liquid), metals, scoring, wear, Drozdov (Yu.N.), Archegov (V.G.), *7081*
- particle fluid flow, rheology, suspensions, Tanaka (H.), White (J.L.), *7639*
- dilute solutions, polymers, viscometry, Nikonov (N.T.), *7641*
- boltzmann equation, conduction, enskog fluid, kinetic theory, pressure, viscoelasticity (dynamic), Schmidt (G.), Kohler (W.E.), (et al.), *7819*
- contact angle, drops, surface profiles, surface tension, Welygan (D.G.), Burns (C.M.), *8491*
- dilute solutions, particle fluid flow, suspensions, Ryskin (G.), *8496*
- liquid gas mixture, non newtonian flow, two phase flow, Lewis (D.H.) Jr., Ryason (P.R.), *8899*
- bearings (hydrodynamic), couette flow, friction (solid fluid), torque, Pascovici (M.D.), *9025*
- contact problems, film thickness, lubrication (elastohydrodynamic), reynolds number, Evans (H.P.), Snidle (R.W.), *9027*
- bearings (porous metal), bearings (thrust), lubrication (hydrostatic), pressure distribution, temperature, Yadav (J.S.), Kapur (V.K.), *9030*
- failure, friction (sliding), lubrication (elastohydrodynamic), oil films, thin films, Begelinger (A.), De Gee (A.W.J.), *9037*
- bearings (journal), peclet number, reynolds equation, temperature, Smith (R.N.), Tichy (J.A.), *9039*
- reynolds equation, rolling contact, rolling contact, temperature, Mahdavian (S.M.), *9040*
- adiabatic processes, turbulence, two phase flow, Van Der Welle (R.), *9876*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), power law fluids, squeeze films, Shukla (J.B.), Prasad (K.R.), (et al.), *9352*
- empirical methods, turbulence, turbulence model, Movchan (V.T.), *10469*
- contact stresses, friction (sliding), hardness, lubrication (hydrodynamic), scoring, Drozdov (Yu.N.), Archegov (V.G.), *10888*
- heat transfer, lubricants (liquid), thermal effects, Constantinescu (V.N.), Smith (R.N.), (et al.), *10895*

viscous buckling, nonlinear structures, postbuckling theory, structural stability, Kroplin (B.-H.), *6237*
- jets, orifices, reservoirs, Munson (B.R.), *8529*
- impact jets, oscillations, plates, reynolds number (small), Cruickshank (J.O.), Munson (B.R.), *9526*
- critical flow, films, shear flow, viscous flow, Suleiman (S.M.), Munson (B.R.), *11378*

viscous effects, damping, poiseuille flow, unsteady flow, vibration, Komer (M.), *616*
- heat transfer, hydrodynamic stability, mass transfer, rayleigh taylor instability, surface tension, Ho (S.-P.), *634*
- constitutive equations, rheology, thermal properties, thermodynamic properties, Lebon (G.), Rubi (J.M.), *719*
- compressible flow, finite difference methods, one dimensional flow, Gadzhiev (A.D.), Pisarev (V.N.), *2624*
- compressible flow, grids, numerical methods, two dimensional flow, Kovenya (V.M.), Yanenko (N.N.), *2625*
- entropy, thermodynamic functions, thermodynamic properties, Hsiao (L.), *2774*
- augmentation, energy transport, entropy, heat exchangers, heat transfer, pressure drop, Bejan (A.), Pfister (P.A.) Jr., *2828*
- acoustic waves, nonlinear waves, scattering, sound fields, Woodsum (H.C.), Westervelt (P.J.), *2945*
- extrusion, heating, non newtonian flow, Dubovik (A.V.), *3588*
- drops, surface tension, Sherwood (J.D.), *3622*
- gravitational stabilization, hydrodynamic stability, thin films, Hasegawa (E.), *3703*
- density, measurements (dynamic), vibration, Wenger (A.P.), *3754*
- laminar flow, pipe flow, power law fluids, pressure drop, thermal effects, Gryglaszewski (P.), Nowak (Z.), (et al.), *3804*
- dissipation, shells (fluid-filled), submerged bodies, vibration (free), Su (T.C.), *5217*
- cylindrical bodies, dissipation, oscillating bodies, vibration, Sinyavskii (V.F.), Fedotovskii (V.S.), (et al.), *5233*
- films, fluid-structure interaction, rotating disks, vibration (forced), Anikeev (G.I.), Blokhin (I.L.), (et al.), *6306*

- aerodynamic performance, missiles, stability derivatives, transonic flow, Ericsson (L.E.), *6727*
- drag, models, ship resistance, wakes, Townsin (R.L.), Wynne (J.B.), *7073*
- compressible flow, mathematical models, navier stokes equation, one dimensional flow, Sakurai (A.), Kukuyu (A.), *7685*
- compressible flow, hypersonic flow, numerical methods, streamlines, three dimensional flow, Kim (M.D.), Thareja (R.R.), (et al.), *7691*
- ellipsoids, laplace equation, oscillating bodies, unsteady flow, Geissler (W.), Kienappel (K.), *8539*
- convection, heat sources, thermal instability, Gorlei (V.V.), Shenderovskii (V.A.), *8707*
- drag reduction, pipe flow, polyacrylamide, turbulent flow, weissenberg number, Kwack (E.Y.), Hartnett (J.P.), *8722*
- channel flow, convection (forced), pipe flow, Nazmeev (Yu.G.), Feifer (L.I.), (et al.), *9684*
- detonative ignition, explosions, ignition, self ignition, thermal explosions, Aleksapolskii (N.B.), Naidenov (V.I.), *9836*
- cavities, convection (forced), heat transfer, porous media, Blythe (P.A.), Simpkins (P.G.), *9898*
- navier stokes equation, stratified flow, thermal instability, Makarenko (I.P.), Simuni (L.M.), *10569*
- convection (free), cylindrical bodies, heat transfer, spherical bodies, Ingham (D.B.), *10589*
- capillary flow, heat pipes, wick, Shibayama (S.), Morooka (S.), *10628*
- boundary layer (thermal), heat transfer, rotating disks, Vira (N.R.), Fan (D.-N.), *11552*
- damping, gravity waves (solitary), Segur (H.), *11567*
- augmentation, heat exchangers, heat transfer, tube bundles, Dzyubenko (B.V.), Ievlev (V.M.), *11768*
- damping capacity, design, masts, oscillations, wind loads, Etkin (B.), Hansen (J.S.), *11842*

viscous flow, drag, plates, stokes flow, two dimensional flow, Moon-Uhn Kim, Chang-Ho Son, *573*

- finite difference methods, stream function, vorticity, Cooke (C.H.), *583*
- gravity waves (surface), laplace transform, propagation, waves, Tkachenko (V.A.), *670*
- finite element techniques, fluid mechanics, incompressible flow, newton method, Engelman (M.S.), Strang (G.), (et al.), *1128*
- oscillatory flow, unsteady flow, viscoelastic fluids, Salathe (E.P.), *1485*
- bifurcation, micropolar media, polar fluids, Russo (R.), Padula (M.), *1491*
- finite difference methods, navier stokes equation, rotating bodies, spherical bodies, Dennis (S.C.R.), Ingham (D.B.), (et al.), *1507*
- axisymmetric flow, drops, spherical bodies, stokes flow, Zinchenko (A.Z.), *1509*
- finite difference methods, friction (skin), internal flow, rotating disks, Kullen (A.), *1510*
- incompressible flow, internal flow, rotating cylinders, Bertela (M.), *1516*
- boundary layer, computing techniques, navier stokes equation, recirculation, Brandeis (J.), Rom (J.), *1548*
- elliptical bodies, laminar flow, moving surfaces, noncircular pipes, Lal (K.), Chorlton (F.), *1568*
- micromechanics, polar fluids, rheology, Rajagopal (K.R.), Gupta (A.S.), *1968*
- boundary conditions, hele-shaw cell, penetration, two component flow, Pitts (E.), *2597*
- axial compressors, blades, cascades, transonic flow, Sator (F.G.), *2756*
- compressible flow, flow measurement, pipe flow, Botezatu (N.P.), *2762*
- convection (free), laplace transform, magneto fluid dynamics, oscillatory flow, plates (perforated), Georgantopoulos (G.A.), Douskos (C.N.), (et al.), *2884*
- acoustics, boundary value problems, mathematical methods, reynolds number (high), Geymonat (G.), Sanchez-Palencia (E.), *3104*
- convection, finite element methods (hybrid), least squares, Kanarachos (A.), *3144*
- half space, reservoirs, singularities, streamlines, Hasegawa (E.), Fukuda (H.), *3616*
- navier stokes equation, two dimensional flow, Govindaraju (K.), *3617*
- half space, plane surfaces, stokes flow, Mukherjee (S.), Bhattacharyya (P.), *3619*
- conical bodies, laminar flow, navier stokes equation, rotating bodies, Patni (G.C.), Rawat (M.L.), *3620*
- ducts (variable area), heat transfer, navier stokes equation, sudden expansion, Kharin (B.E.), Dvortsov (V.N.), *3784*
- biomechanics, kidneys, modeling, Radhakrishnamacharya (G.), Chandra (P.), (et al.), *4119*
- navier stokes equation, rheology, statistical continuum mechanics, turbulence (structure), Enz (C.P.), *4126*
- numerical methods, plates (parallel), squeeze films, Aziz (A.), Na (T.Y.), *4581*
- aneurysms, arteries, blood flow, pulsatile flow, Wille (S.O.), *4912*
- eulerian approach, hamilton principle, lagrangian approach, variational methods, Ecer (A.), *5012*
- inlets, viscoelastic fluids, Kim (S.), *5102*
- moment coefficient, rotating bodies, stokes flow, toroids, Bhattacharyya (T.K.), *5406*
- convergence, finite difference methods, fluid mechanics, vortex flow, Krause (E.), *5409*
- dispersion, gravity waves (surface), oscillatory flow, reynolds number (small), ripples, Kamachi (M.), Honji (H.), *5473*
- dilute solutions, polymers, viscosity, Geisler (H.), Muller (H.G.), *6579*
- capillary flow, viscometry, yield condition, Golovanchikov (A.G.), Tyabin (N.V.), *6589*
- boundary layer, navier stokes equation, stability theory, turbulent flow, Solopenko (V.M.), *6615*
- coatings, film flow, finite element techniques, navier stokes equation, Saito (H.), Scriven (L.E.), *6616*
- capillary flow, contact angle, moving surfaces, Benney (D.J.), Timson (W.J.), *6618*
- stresses, surface flow, tensor methods, Moreau (J.J.), *6619*
- cylindrical bodies, friction, rotating bodies, spherical bodies, Greenstein (T.), Zocco (J.G.), *6623*
- dust, noncircular pipes, particle fluid flow, unsteady flow, Dixit (L.A.), *6653*
- hydrodynamic stability, initial value problems, interface waves, liquid liquid interface, Prosperetti (A.), *6701*
- airfoils, compressible flow, flaps, Oskam (B.), *6719*
- constitutive equations, porous media, Williams (W.O.), *7008*
- aneurysms, biomechanics, blood flow, Mirolyubov (S.G.), *7117*
- integral methods, navier stokes equation, plates, rotating disks, Datta (S.), *7670*
- convection, friction (skin), heat transfer, reynolds number (critical), tubes, Addlesee (A.J.), *7671*
- finite element techniques, galerkin method, navier stokes equation, reynolds number (small), Heinrich (J.C.), Marshall (R.S.), *7679*
- boundary layer, finite element techniques, galerkin method, mesh generation, steps, Leone (J.M.) Jr., Gresho (P.M.), *7713*
- channel flow, laminar flow, pressure drop, runge kutta method, wavy walls, Vajravelu (K.), Nayfeh (A.H.), *7714*
- film flow, reynolds number (small), surface waves, Demekhin (E.A.), Shkadov (V.Ya.), *7758*
- airfoils, incompressible flow, stalling, turbulent flow, two dimensional flow, Hegna (H.A.), *7788*
- bodies of revolution, oscillatory flow, spikes, Shang (J.S.), Hankey (W.L.), (et al.), *7794*
- constitutive equations, extension, non newtonian flow, Powell (R.L.), Schwarz (W.H.), *8486*
- perturbation methods, rotating bodies, stokes flow, toroids, Murray (J.C.), *8530*
- cascades, finite difference methods, incompressible flow, separated flow, Luu (T.S.), Ta Phuoc Loc, *8683*
- geophysics, porous media, tectonics, Karakin (A.V.), Lobkovskii (L.I.), *8931*
- deformable bodies, hydroelasticity, stresses, Guz (A.N.), *9010*
- force, spherical bodies, stokes flow, torque, Brenner (H.), *9531*
- plates, singularities, stokes flow, two dimensional flow, velocity profiles, Hasegawa (E.), *9532*
- differential equations (partial), liquid liquid interface, plates, two component flow, Pismen (L.M.), Nir (A.), *9538*
- boundary layer, corners, secondary flow, Mojola (O.O.), *9567*
- blowoff, flames, mathematical models, methane, Mikolaitis (D.), Buckmaster (J.), *9755*
- crossflow, cylindrical bodies, navier stokes equation, numerical methods, vorticity, Kravchenko (V.I.), *10413*
- airfoil theory, design, incompressible flow, Berak (P.), *10504*
- axisymmetric flow, finite element techniques, hydraulic machinery, incompressible flow, swirl flow, Bar-Yoseph (P.), Blech (J.J.), (et al.), *10533*
- crossflow, statistical design, tube bundles, vibration (flow induced), Katinas (V.I.), Lukosevicius (K.K.), (et al.), *10767*
- fracture, poiseuille flow, rocks, Neuzil (C.E.), Tracy (J.V.), *10832*
- creeping flow, heat transfer, nuclear waste, singularities, spherical bodies, Krenk (S.), *11353*
- spherical bodies, stokes flow, unsteady flow, variational methods, Utkina (S.N.), *11364*
- rossby waves, rotating fluids, stratified flow, two component flow, Boyer (D.L.), *11376*
- critical flow, films, shear flow, viscous buckling, Suleiman (S.M.), Munson (B.R.), *11378*
- asymptotic methods, cylindrical bodies, drag, porous media, Verma (P.D.), Vyas (H.K.), *11390*
- airfoils, compressible flow, numerical methods, separated flow, transonic flow, wakes, Le Balleur (J.C.), *11396*
- compressible flow, navier stokes equation, numerical methods, Davis (R.T.), Rubin (S.G.), *11432*
- critical phenomena, pipe flow, thermal explosions, variable fluid properties, Aleksanopolskii (N.B.), Naidenov (V.I.), *11501*
- drops, film flow, hydrodynamic stability, jets, Abramov (Yu.I.), *11592*
- fluid-structure interaction, oscillating bodies, reynolds number (small), Guz (A.N.), *11677*
- blunt bodies, computer programming, delta wings, supersonic flow, Tannehill (J.C.), Venkatapathy (E.), (et al.), *11728*
- induced drag, vortex sheets, wakes, wings, Ryzhov (O.S.), Terentev (E.D.), *11730*

- channel flow, elastoplasticity, magneto fluid dynamics, stability theory, tensor methods, Simkhovich (S.L.), Ionochkina (L.I.), (et al.), *11809*

Vishnevetskii (S.L.), axisymmetric flow, diffusers, entrance region, separated flow, supersonic flow, Pakhomova (Z.S.), *9589*

Vishnevskii (V.K.), see Shvets (Yu.I.), *603*

Vishnevskii (V.M.), computer programming, networks, queue theory, Tverdokhlebov (A.S.), *2106*

Vishnyakov (A.A.), generation, turbulence, vorticity, *6691*

Vishnyakov (V.I.), channel flow, electrical conductivity, magneto fluid dynamics, temperature, theory, Sultanov (I.F.), *11806*

Visintin (A.), see Quarteroni (A.), *5835*

Viskanta (R.), see Bathelt (A.G.), *7853*

Visscher (P.B.), diffusion, discrete systems, equations of motion, hydrodynamics, one dimensional flow, *3635*

Visscher (W.M.), elastic waves, penny shaped crack, scattering, *6347*

visualization, deformation, plastics, surfaces, Sevenhuijsen (P.J.), *484*

- cylindrical bodies, oscillating bodies, secondary flow, Tatsuno (M.), *575*
- hydraulic jump, stratified flow, Hunt (J.C.R.), Snyder (W.H.), *582*
- centrifugal compressors, design criteria, swirl flow, volute casings, Yadav (R.), Yahya (S.M.), *704*
- separated flow, swept wings, Werle (H.), *1618*
- condensation, mixing, modeling, three dimensional flow, Mostofizadeh (C.), Kriegel (E.), (et al.), *1642*
- annular flow, convection, entrance region, heat transfer, hydrogen bubble technique, Ogunba (V.), Barrow (H.), *1690*
- boiling, bubble dynamics, emulsions, nucleation, Mori (Y.H.), Sano (H.), (et al.), *1693*
- coastal engineering, flow measurement, sediment transport, sloping bottom, Honji (H.), Matsunaga (N.), *2589*
- circulation, flow measurement, vorticity, Brasseur (J.C.), Chang (I.-D.), *2599*
- cylindrical bodies, oscillating bodies, secondary flow, Tatsuno (M.), *2604*
- delta wings, pressure distribution, subsonic flow, swept wings, Nekrasova (M.N.), *2732*
- boilers, flow reversal, furnaces, models, Kaji (M.), Sallam (T.M.), (et al.), *2764*
- bubble dynamics, cylindrical bodies, impulse, unsteady flow, velocity profiles, Nagata (H.), Matsui (T.), (et al.), *3633*
- laminar flow, pipelines, pulsatile flow, unsteady flow, Muto (T.), Nakano (K.), *3666*
- duct flow, fluid injection, noncircular pipes, Alimpiyev (V.I.), Kalinina (S.V.), (et al.), *3671*
- axial turbines, blades, cascades, transonic flow, Holliger (K.), *3740*
- bubble dynamics, hydrogen, velocity measurement, wakes, Wilkinson (D.L.), Willoughby (M.A.), *3751*
- bubble dynamics, hydrogen, velocity measurement, Bejan (A.), Yewell (R.B.), *3758*
- convection, heat transfer, holography, interferometry, Faw (R.E.), Dullforce (T.A.), *3807*
- convection (free), laminar flow, lasers, Boyd (R.D.), Vest (C.M.), *3831*
- cylindrical bodies, elliptical bodies, oscillating bodies, unsteady flow, Hansen (S.B.), Taneda (S.), *4684*
- separation, three dimensional flow, transition, two dimensional flow, Werle (H.), *4685*
- channels (closed), counterflow, turbulent flow, vortex flow, Humphrey (J.A.C.), Li (S.), *5397*
- containers (partially filled), space vehicles, spacelab, zero g phenomena, Vreeburg (J.P.B.), Van Den Assem (D.), *5477*
- aerodynamic interference, aerodynamic performance, longitudinal stability, subsonic flow, wing body combinations, Lamar (J.E.), Frink (N.T.), *5494*
- density, moire methods, optical techniques, supersonic flow, Stricker (J.), Kafri (O.), *5512*
- birefringence, bottom irregularities, boundary layer, separation, Karahan (M.E.), Peterson (A.W.), *6598*
- axial compressors, rotors, shock waves, transonic flow, Strazisar (A.J.), Powell (J.A.), *6742*
- cavities, closed conduit flow, convection (free), laser doppler velocimeters, Linthorst (S.J.M.), Schinkel (W.M.M.), (et al.), *6792*
- obscuration, radiant interchange, shape factors, Finkelstein (L.), Weissman (Y.), *6806*
- boundary layer (turbulent), flow irregularities, hot wire, Taneda (S.), *7700*
- reynolds number (small), stability, vortex rings, Takamoto (M.), Izumi (K.), *8525*
- cascades, secondary flow, Kobayashi (H.), Mizutani (M.), *8582*
- cavitation, diesel engines, erosion, injectors, unsteady flow, Bastenhof (D.), *8661*
- flow, photography, Van Dyke (M.), *8667*
- photography, schlieren methods, Kaspar (J.), *9668*
- cavities, convection, heat transfer, interferometry, thermal measurements, Semas (V.), Lee (E.I.), *8769*
- plates, reflection, vortex rings, Schneider (P.E.M.), *9525*
- drag coefficient, particle dynamics, reynolds number (small), spherical bodies, Boillat (J.L.), Graf (W.H.), *9541*
- conical flow, diffusers, rotating bodies, Kikuyama (K.), Murakami (M.), (et al.), *8591*
- coherent structure, mixing layers, turbulent mixing, vortices, Bernal (L.P.), *9698*
- dispersion, floating bodies, gravity waves (surface), oscillatory flow, Ergin (A.), *9633*
- flow, survey, surveys, Merzkirch (W.) ed., *9677, book*
- birefringence, dilute solutions, scattered light, Krishnamurthy (A.R.), Pindera (J.T.), *9678*
- lasers, mixing layers, smoke tunnels, turbulent flow, Mensing (P.), Fiedler (H.), *9679*
- airplane performance, leading edge, stalling, transonic flow, wind tunnels, wings, Pavelka (J.), Tatum (K.E.), *10499*
- annular flow, axial turbines, boundary layer, velocity measurement, Hunter (I.H.), *10527*
- gravity waves (breaking), velocity profiles, wakes, Battjes (J.A.), Sakai (T.), *11588*

Viswanadham (N.), see Warrior (J.), *1151*

- design, large scale systems, regulator problem, Ramakrishna (A.), *11052*

Viswanathan (R.), generators, machine design, retaining rings, rotors, steel, *5372*

Viswanathan (S.P.), helicopters, impedance methods, vibration (forced), vibration isolation, Myers (A.W.), *6300*

Vitale (E.), see Carmignani (C.), *8151*

Vitek (V.), see Wilkinson (D.S.), *2435*

Vitkin (E.I.), see Khodyko (Yu.V.), *5587*

Vito (R.P.), cyclic loading, membranes, stress strain relationships, tissues, Macmanus (R.K.), (et al.), *7112*

- arteries, stress strain relationships, tissues, Hickey (J.), *7113*

Vitvitskii (P.M.), see Panasyuk (V.V.), *2440*

Vivatrat (V.), see Baligh (M.M.), *7447*

Viviand (H.), see Rizzi (A.) eds., *9556, book*

Vjuga (A.A.), orbit mechanics, potential theory, trajectories, *7912*

Vlachinos (A.S.), buckling (nonlinear), frames, limit analysis, postbuckling behavior, Kounadis (A.N.), *9287*

Vlachos (N.S.), see Bicen (A.F.), *707*

Vladaianu (D.), axial pumps, cavitation, noise, reynolds number (high), vibration (flow induced), Marinescu (V.), *5501*

Vladimirov (V.A.), suppression, turbulence, vortex rings, Lugovtsov (B.A.), (et al.), *4647*

- hydrodynamic stability, inviscid fluid, taylor vortices, vorticity, *10409*
- axisymmetric flow, hydrodynamic stability, inviscid fluid, rotating fluids, Tarasov (V.F.), *11373*

Vladimirov (V.I.), composite materials, disclinations, fibers, fracture mechanics, peeling, Priemskii (N.D.), (et al.), *8217*

Vladimirov (V.P.), computer programming, impulsive transfers, orbit correction, reduction, simplex method, trajectory optimization, Aleksandrov (E.V.), *3920*

Vladimirov (V.S.), asymptotic methods, nonlinear mechanics, stochastic systems, surveys, Mitropolsky (Yu.A.), (et al.), *4158*

Vlagov (V.V.), fluid injection, helium, jets, penetration, supersonic flow, Masyakin (N.E.), (et al.), *631*

Vlasov (E.V.), aerodynamic excitation, eddies, jets, noise (aerodynamic), shear flow, turbulence, Ginevskii (A.S.), *2942*

Vlasov (S.M.), boilers, channel flow, dynamic stability, liquid vapor mixture, vibration, Ratnikov (E.F.), (et al.), *10486*

vlasov equation, electric effects, kinetic theory (relativistic), plasma, theory, Milantev (V.P.), *9800*

- electron beams, modeling, pinch effect, relativity, Zharinov (A.V.), Chikhachev (A.S.), *9802*
- existence theorems, plasma, rarefied gases, statistical theory, Kharchenko (A.P.), *11835*

Vocel (J.), additives, dilute solutions, drag reduction, experimental results, micellar additives, Myska (J.), *8581*

Vodak (F.), continuum theory, mixture theories, porous media, *6*

- elastic constants, elastic waves, liquid gas mixture, porous media, *4837*

Voge (V.M.), acceleration, biomechanics, human body, kinematics, *3056*

Vogelesang (L.B.), aluminum alloys, crack growth, crack opening displacement, fatigue, *2423*

- airplane structures, aluminum alloys, bonding, corrosion fatigue, laminates, Marissen (R.), (et al.), *2424*

Vogelpohl (A.), see Rohm (H.-J.), *7876*

Vogt (R.), friction, internal combustion engines, pressure measurement, thermodynamic processes, *3882*

Vohra (D.K.), see Kumar (A.), *1867*

void fraction, critical heat flux, flashing, friction (internal), pipe flow, pressure drop, thermodynamics (nonequilibrium), Miropolskiy (Z.L.), Shneyerova (R.I.), (et al.), *747*

- dispersed flow, liquid vapor mixture, radiation, two phase flow, Ohbe (K.), *939*
- evaporation, two phase flow, Beck (B.T.), Wedekind (G.L.), *2987*
- ductile fracture, materials properties, Melander (A.), Stahlberg (U.), *3465*
- pseudoplastic fluids, two phase flow, Srivastava (R.P.S.), Narasimhamurthy (G.S.R.), *5814*
- anisotropic media, fibers, probability, Komori (T.), Makishima (K.), *6201*

- acoustic measurements, ferrites, nondestructive tests, polycrystalline materials, ultrasonics, Guseva (E.K.), Kovarskaya (E.Z.), (et al.), *6481*
- inclusions, liquid gas mixture, measurements, two phase flow, Shenderov (L.Z.), Kvashnin (A.G.), (et al.), *6977*
- measurements, slug flow, two phase flow, Subbotin (V.I.), Pokhvalov (Yu.Ye.), (et al.), *6978*
- deformation (plastic), heat treatment, pressure, void closure, Keife (H.), Stahlberg (U.), *8369*
- prediction, transient effects, two phase flow, Sun (K.H.), Duffey (R.B.), (et al.), *9879*
- boiling, pipe flow, subcooled boiling, Edelman (Z.), Elias (E.), *10575*
- numerical methods, one dimensional flow, two phase flow, Van Der Welle (R.), *10828*

void growth, metals, nonhomogeneous media, viscoelastic fluids, Taya (M.), Seidel (E.D.), *1195*
- crack growth, creep rupture, diffusion, stress intensity factor, Wilkinson (D.S.), *4487*
- ductile fracture, nucleation, Le Roy (G.), Embury (J.D.), (et al.), *4497*
- nucleation, swell, Clement (C.F.), Wood (M.H.), *7503*

Voinov (O.V.), liquid gas mixture, surface tension, two phase flow, Pukhnachev (V.V.), *6968*
Voith (M.), see Herendi (R.), *2395*
Voitishek (Ye.), see Proshkovets (I.), *6948*
- see Proshkovets (I.), *7634*

volcanology, magnetic field, piezomagnetic field, Sasai (Y.), *973*
Voichinskaya (M.I.), compressible flow, numerical methods, radiating flow, unsteady flow, Chetverushkin (B.N.), *11413*
Volchkov (E.P.), nozzles, nozzles (underexpanded), pressure distribution, viscid inviscid flow, Kozmenko (V.K.), (et al.), *8587*
- aerodynamics, design, injection systems, swirl flow, vortex flow, Kislykh (V.I.), (et al.), *10542*

Voldemarov (A.V.), see Romaniv (O.N.), *7493*
Volkart (P.), aeration, bubble dynamics, entrainment, *8906*
Volker (R.E.), see Guvanasen (V.), *1874*
Volkov (E.P.), measurements, plumes, power plants, smoke stacks, Gribkov (A.M.), *11518*
Volkov (G.S.), fracture criteria, fracture toughness, metals, structural materials, Naumenko (V.P.), *7521*
Volkov (N.P.), see Artamonov (A.T.), *225*
Volkov (S.D.), brittle fracture, brittle materials, stability theory, Dubrovina (G.I.), *3455*
- fracture mechanics, stability theory, tensor methods, triaxial loading, Dubrovina (G.I.), *10292*

Volkov (V.I.), hydrodynamics, packed beds, velocity profiles, Danilov (N.S.), (et al.), *5829*
Volkov (Yu.A.), see Pugachev (A.T.), *10567*
- computing techniques, condensation (filmwise), mixtures, Nikitin (V.M.), *12052*

Voll (L.), combustion, mathematical models, steam, steam zone, Smohel (F.), (et al.), *9766*
Volmir (A.S.), fluid-structure interaction, rotating cylinders, separated flow, Gulyaev (V.V.), (et al.), *2718*
Volmir (E.A.), compression, plates (holed), plates (rectangular), structural stability, Mameeva (E.N.), (et al.), *2301*
Volodin (A.G.), boundary layer, explosions, transition, transition flow, Zelman (M.B.), *1538*
Volodin (V.I.), condensation (filmwise), heat transfer, tubes, Mikhalevich (A.A.), (et al.), *1725*
Vologzhaninov (Yu.I.), photoelasticity, strain measurement, stresses (normal), *7545*
Volos (N.P.), elastic foundations, plates (isotropic), shear, vibration (free), Dovganich (M.I.), *10203*
Voloshanovskii (Yu.P.), experimental mechanics, shells (cylindrical), vibration (free), *3371*
Voloshchenko (A.P.), material testing, materials properties, mechanical properties, strength, testing equipment, Kuzema (Yu.A.), (et al.), *5326*
Voloshchuk (V.M.), climatology, modeling, *4075*
Voloshin (A.), gait, human body, locomotion, shock absorbers, shock waves, Wosk (J.), (et al.), *4117*
- see Wosk (J.), *6025*

Voloshko (A.A.), boiling, bubble dynamics, heat transfer, two phase flow, vaporization, *945*
Volosov (V.N.), computing techniques, conservation laws, difference equations, differential equations (ordinary), fokker-planck equation, plasma, Pekker (M.S.), *10932*
Volosov (V.V.), digital control, drives, hydraulic machinery, Voronova (L.I.), (et al.), *2196*
Volovodov (S.K.), analytical methods, estimation, harmonic balance, harmonic linearization, oscillations, Rozenvasser (E.N.), *4240*
Volovov (V.I.), ocean bed, reflection, underwater acoustics, Ivakin (A.N.), *5758*
Volpert (A.I.), see Vasilev (V.M.), *9828*
volterra equations, inversion, plasticity, Mashchenko (I.P.), Churikov (F.S.), *1095*
- discontinuities, integro differential equations, mathematical methods, nonlinear characteristics, Alzicovici (S.), *1096*
- approximations, convergence, integro differential equations, iterative methods, Vata (P.), *2051*
- contact problems, continuum mechanics, fredholm equations, hydrodynamics, Aleksandrov (V.M.), Kovalenko (E.V.), *4167*
- computing techniques, repetition factor, stability (numerical), Mckee (S.), Brunner (H.), *4184*
- almost periodic solutions, integro differential equations, mathematical models, time delay systems, Alexiades (V.), *4980*
- differential equations (partial), monopoles, nonlinear systems, soliton theory, Laznov (A.N.), Savelev (M.V.), (et al.), *6063*
- numerical methods, viscoelastic materials, Cameron (R.F.), Mckee (S.), *6176*
- aging, computer programming, laminates, viscoelastic materials, Huet (C.), *9250*

volterra series, functional equations, noise (random), stochastic processes, Kenefic (R.), Nuttall (A.), (et al.), *2026*
- linear systems, time varying systems, Lawrence (P.J.), *6127*
- stochastic control, stochastic systems, Adomian (G.), Sibul (L.H.), *10074*
- algorithms, estimation, identification, modeling, nonlinear systems, nonlinear theory, stochastic systems, Fakhouri (S.Y.), *11090*

volumetric meters, lungs, respiratory system, spirometry, Jones (D.P.), O'Connor (S.A.), (et al.), *1962*
Vomel (M.), dielectrics, dynamic testing, transducers, vibration, *9331*
Von Alfthan (C.), mass transfer, molecular diffusion, pipe flow, turbulence, Rantapuska (S.), *11558*
Von Cube (H.L.), air conditioning, heat pumps, heating, Steimle (F.), *10614, book*
Von Gudenberg (J.W.), computing techniques, mathematical methods, newton method, *10050*
Von Roth (W.), beams (composite), biharmonic equation, curved bars, orthotropic materials, Epple (A.), *2248*
Vonderschmidt (R.), see Jarchow (F.), *3575*
Voplikin (A.Kh.), defects, flaw detection, spectral analysis, surface flaws, ultrasonics, Ermolov (I.N.), (et al.), *6492*
Vora (K.H.), see Gupta (J.L.), *7094*
- film thickness, lubrication (hydrodynamic), reynolds equation, squeeze films, *9071*

Vorobev (A.P.), see Artamonov (K.I.), *6921*
Vorobev (S.N.), approximations, convergence, fredholm equations, *2014*
Vorobev (V.I.), see Babin (O.A.), *6969*
Vorobeva (L.S.), conduction (heat), mathematical methods, mathematical models, monte carlo analysis, transient effects, Zhevlakov (G.N.), *6803*
Vorobeychikov (S.E.), continuous systems, discrete systems, identification, iterative methods, least squares, stochastic systems, Konev (V.V.), *8163*
Voronin (A.N.), see Pavlov (V.V.), *2185*
Voronin (S.T.), see Atanov (G.A.), *3665*
Voronkov (N.N.), dynamic analysis, gyrocompasses, gyrodynamics, gyrotheodolites, Kutyrev (V.V.), (et al.), *7148*
Voronkov (V.A.), anisotropic media, conductivity, polymers, thermophysical properties, thin films, Sukhareva (L.A.), (et al.), *10669*
Voronova (L.I.), see Volosov (V.V.), *2196*
Voronovich (A.G.), hamilton principle, internal waves, stratified flow, *4049*
- capillary waves, currents, gravity waves (surface), hydrodynamic stability, Lobanov (E.V.), (et al.), *11590*

Vorontsov (A.N.), see Blagonadezhin (V.L.), *5100*
Vorontsov (E.G.), irrigation, laminar flow, reynolds number (small), Yakhno (O.M.), *4598*
Vorontsov (Ye.G.), boundary roughness, dynamic analysis, film thickness, mathematical models, Yakhno (O.M.), *605*
Voropayev (S.I.), mixing layers, turbulence, Gavrilin (B.L.), (et al.), *2668*
Voros (G.), see Hsieh (R.K.T.), *1058*
Voros (G.M.), conduction (unsteady), nonlinear systems, variational methods, *6079*
Voroshko (P.P.), see Kvitka (A.L.), *4199*
Vorotnikov (V.I.), eigenvalues, linear systems, matrix methods, stability theory, Prokopev (V.P.), *4159*
- differential equations (ordinary), nonlinear systems, stability theory, *10016*

Vorotyntsev (M.A.), boundary conditions, concentration, diffusion, laminar flow, mass transfer, Grafov (V.M.), (et al.), *4730*
Vorozhtsov (E.V.), algorithms, computing techniques, shock waves, Yanenko (N.N.), *6715*
vortex flow, compressible flow, plane flow, rotational flow, streamlines, subsonic flow, Nikolskiy (A.A.), *568*
- axisymmetric flow, navier stokes equation, swirl, vortex breakdown, Nakamura (Y.), Uchida (S.), *1504*
- airfoils, trailing vortices, vortex sheets, wakes, Phillips (W.R.C.), *1506*
- axial flow, heat transfer, laminar flow, velocity profiles, Simmers (D.A.), Coney (J.E.R.), *1566*
- euler equations, flow obstructions, vortex sheets, vorticity, Saffman (P.G.), *2600*
- cavities, pressure measurement, Rockwell (D.), Knisely (C.), *2683*
- axisymmetric flow, inviscid fluid, mixed flow turbines, Zabolotnyi (F.T.), *2758*
- anemometers, flow measurement, laminar flow, Winoto (S.H.), Crane (R.I.), *3552*

- annuli, couette flow, cylindrical bodies, Stuart (J.T.), Diprima (R.C.), *3660*
- hydrodynamic stability, membranes, shear flow, Couder (Y.), *3702*
- inviscid fluid, spherical bodies, unsteady flow, vortices, Mindlin (I.M.), *4579*
- separated flow, simulation, strouhal number, Kiya (M.), Arie (M.), *4609*
- annuli, diffusers, experimental results, Adkins (R.C.), Matharu (D.S.), (et al.), *4628*
- spectral analysis, stratified flow, two dimensional flow, Myers (R.B.), Taylor (T.D.), (et al.), *5396*
- channels (closed), counterflow, turbulent flow, visualization, Humphrey (J.A.C.), Li (S.), *5397*
- error, pitot tube, three dimensional flow, Bubnov (V.A.), Gabdullin (I.Z.), (et al.), *5401*
- convergence, finite difference methods, fluid mechanics, viscous flow, Krause (E.), *5409*
- laminar flow, wind power, So (R.M.C.), *5670*
- discharges, magneto fluid dynamics, metallurgy, models, Boyarevich (V.V.), *5678*
- atmospheric circulation, vorticity, Schubert (W.H.), Hack (J.J.), (et al.), *5932*
- energy dissipation, hydraulic structures, inlet flow, models, Hecker (G.E.), *7664*
- inviscid fluid, stratified flow, vortex breakdown, Shivamoggi (B.K.), Uberoi (M.S.), *7672*
- oscillating bodies, parachutes, payloads, separated flow, stabilization, Doherr (K.-F.), *7798*
- annular flow, boundary layer, cascades, swirl flow, wakes, Tan (C.S.), *7807*
- multifluid flow, three dimensional flow, De Josselin De Jong (G.), *7979*
- half space, porous media, Vaisman (A.M.), *7980*
- channel flow, elliptic equations, hyperbolic equations, unsteady flow, Lyapidevskii (V.Yu.), *8507*
- inviscid fluid, shear flow, velocity profiles, Kida (S.), *8528*
- duct flow, inviscid fluid, Kazhikhov (A.V.), *8567*
- experimental results, slender bodies, vortex shedding, Calarese (W.), *8600*
- airplanes, design, optimization, supersonic flow, transonic flow, wings, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- boundary layer (thermal), bounded media, convection, hydrodynamic stability, porous media, stagnation point, Hsu (C.T.), Cheng (P.), *8711*
- filaments, motion, nonlinear analysis, vortex lines, Kida (S.), *9522*
- annular flow, cyclones, cylindrical bodies, internal flow, inviscid fluid, velocity profiles, Martynov (Yu.V.), *9523*
- capillary flow, closed conduit flow, convection (free), heat transfer, porous media, thermal instability, Catton (I.) eds., Smith (R.N.), *9682, book*
- boundary layer, electrical conductivity, magneto fluid dynamics, numerical analysis, Kalis (Kh.E.), Kolesnikov (Yu.B.), *9786*
- boundary layer, convection, heat transfer, hydrodynamic stability, Moutsoglou (A.), Chen (T.S.), (et al.), *10465*
- environmental tests, flow obstructions, near ground effects, separated flow, siting considerations, wind turbines, Frost (W.), Shieh (C.F.), *10516*
- aerodynamics, design, injection systems, swirl flow, Volchkov (E.P.), Kislykh (V.I.), (et al.), *10542*
- film flow, pressure distribution, velocity profiles, Kislykh (V.I.), Smulski (I.I.), *10543*
- internal flow, rotating disks, secondary flow, unsteady flow, Kurokawa (J.), Toyokura (T.), (et al.), *11377*
- biomechanics, ducts (curved), flow reversal, pressure gradient, pulsatile flow, Chandran (K.B.), Yearwood (T.L.), *11485*
- hydrodynamic stability, pipe flow, swirl flow, Suematsu (Y.), Ito (T.), *11537*
- magneto fluid dynamics, suspensions, thermal effects, two phase flow, Miroshnikov (V.K.), *11818*
- analytical methods, electrical conductivity, magneto fluid dynamics, velocity profiles, Kalis (Kh.E.), Kolesnikov (Yu.B.), *11832*

vortex lines, coordinate systems, geometrical properties, magneto fluid dynamics, three dimensional formulation, Gangwar (S.S.), Babu (R.), *1775*

- aerodynamic loads, rolling motion, sideslip, wings, Javed (M.A.), Hancock (G.J.), *2727*
- laser doppler velocimeters, lift coefficient, wakes, wings, Orloff (K.L.), *2729*
- aerodynamic loads, leading edge, lift, stalling, wings, Anderson (J.D.) Jr., Corda (S.), (et al.), *3737*
- mass transfer, rotating fluids, stratification, vorticity, Gill (A.E.), Smith (J.M.), (et al.), *8020*
- aerodynamic interference, blades, helicopters, noise (aerodynamic), Wicknall (S.E.), Wolf (T.L.), *8648*
- filaments, motion, nonlinear analysis, vortex flow, Kida (S.), *9522*
- compressible flow, lifting-line, potential theory, swept wings, vortex sheets, Cheng (H.K.), Chow (R.), (et al.), *9649*
- aerodynamic interference, three dimensional flow, wind turbines, Schatzle (P.R.), Klimas (P.C.), (et al.), *10518*
- euler equations, inviscid fluid, numerical methods, spherical bodies, Dhanak (M.R.), *11361*

vortex rings, edge effects, jets, Ko (N.W.M.), *2673*

- eddies, nonlinear theory, spectra, turbulence (isotropic), turbulence (structure), Tung (T.C.), Adrian (R.J.), *2687*
- inviscid fluid, unsteady flow, Poppe (W.), *3615*
- suppression, turbulence, Vladimirov (V.A.), Lugovtsov (B.A.), (et al.), *4647*
- elliptical bodies, numerical methods, oscillations, unsteady flow, Dhanak (M.R.), De Bernardinis (B.), *5398*
- jets, vortices, Schneider (P.E.M.), *8670*
- reynolds number (small), stability, visualization, Takamoto (M.), Izumi (K.), *8525*
- ellipsoids, navier stokes equation, numerical methods, Durst (F.), Schonung (B.), *9524*
- plates, reflection, visualization, Schneider (P.E.M.), *9525*
- scattering, sound, Kambe (T.), Oo (U.M.), *11963*

vortex shedding, blunt bodies, cylindrical bodies, oscillations, Graham (J.M.R.), *576*

- design, slender bodies, vehicles, Ericsson (L.E.), Reding (J.P.), *696*
- aerodynamic loads, slender bodies, wakes, Fidler (J.E.), *699*
- galloping, towers, wind loads, Parkinson (G.V.), Wawzonek (M.A.), *867*
- cylindrical bodies, strakes, suppression, Zdravkovich (M.M.), *868*
- fatigue, offshore structures, wave loads, Russo (E.P.), Loiacono (N.J.), (et al.), *2545*
- pipelines, submerged bodies, wave loads, Schrecker (M.), *2584*
- cylindrical bodies, shear layer, Stansby (P.K.), *2676*
- acoustic waves, cylindrical bodies, vibration (flow induced), Okamoto (S.), Hirose (T.), (et al.), *2331*
- cylindrical bodies, elliptical bodies, oscillating bodies, secondary flow, Tatsuno (M.), *3626*
- chimneys, vibration (flow induced), wind loads, Hansen (S.O.), *3905*
- cylindrical bodies, wakes, Oberkampf (W.L.), Owen (F.K.), (et al.), *4638*
- pressure distribution, separated flow, wings, Bublitz (P.), *4682*
- acoustics, energy spectrum, rockets, wave energy, Brown (R.S.), Dunlap (R.), (et al.), *4769*
- initial value problems, stability, turbulent flow, two dimensional flow, vortex street, Aref (H.), Siggia (E.D.), *5399*
- cylindrical bodies, pressure distribution, shear flow, transition flow, Rooney (D.M.), Peltzer (R.D.), *5463*
- atmospheric circulation, vortices, Trischka (J.W.), *5931*
- critical flow, cylindrical bodies, drag coefficient, roughness, strouhal number, wakes, Achenbach (E.), Heinecke (E.), *6521*
- compressible flow, supersonic flow, Mendenhall (M.R.), *6630*
- crossflow, spectra, tube bundles, Katinas (V.I.), Markevicius (A.A.), (et al.), *6706*
- aerodynamic loads, bodies of revolution, subsonic flow, wings, Zhu (P.), Shou (W.), (et al.), *6717*
- plates (perforated), reynolds number (high), sound propagation, turbulent flow, unsteady flow, Howe (M.S.), *6897*
- attenuation, barriers, diffraction, heat exchangers (crossflow), noise (aerodynamic), Howe (M.S.), *6931*
- airfoils, base pressure, compressible flow, Motallebi (F.), Norbury (J.F.), *7736*
- cylindrical bodies, oscillating bodies, separated flow, vibration (self excited), Vaies (N.G.), *7793*
- electromagnetic loading, flow measurement, gases, isotope tracers, liquids, Scott (R.W.W.) ed., *7811, book*
- blunt bodies, galloping, turbulent flow, Nakamura (Y.), Tomonari (Y.), *7905*
- cables, crossflow, fluid-structure interaction, towing cables, vibration (forced), Alexander (C.M.), *8291*
- blunt bodies, cylindrical bodies, strouhal number, Awbi (H.B.), *8535*
- experimental results, slender bodies, vortex flow, Calarese (W.), *8600*
- chimneys, gust loads, resonance, wind loads, Richardson (J.R.), *8535*
- flexible bodies, oscillating bodies, piles, waves, Angrilli (F.), Cossalter (V.), *9512*
- cylindrical bodies, roughness, shear, Rooney (D.M.), Peltzer (R.D.), *9594*
- calibration, design, flow measurement, Glockner (G.), Fock (K.), *9573*
- cylindrical bodies, hydrodynamic stability, vortex streets, Yamamoto (K.), Watanabe (K.), (et al.), *10403*
- cables, cylindrical bodies, submerged bodies, suppression, vibration (flow induced), Every (M.J.), King (R.), (et al.), *10498*
- cables, offshore structures, vibration (flow induced), Griffin (O.M.), Pattison (J.H.), (et al.), *11628*
- acoustics, exhaust gases, Rienstra (S.W.), *11960*
- diffraction, sound, trailing edge, Rienstra (S.W.), *11978*

vortex sheets, airfoils, trailing vortices, vortex flow, wakes, Phillips (W.R.C.), *1506*

- euler equations, flow obstructions, vortex flow, vorticity, Saffman (P.G.), *2600*
- airfoils, flaps, incompressible flow, potential flow, Zaitsev (A.A.), Komarov (A.M.), *3728*
- approximation methods, fredholm equations, vortices, Goralov (D.N.), *4580*
- ducted propellers, elliptical bodies, velocity profiles, George (M.F.), *5400*
- aerodynamic interference, inlets, mathematical models, wings, Shurygin (V.M.), *6723*
- gravity waves (internal), hydrodynamic stability, shear layer, Grimshaw (R.H.J.), *7745*
- aerodynamic performance, incompressible flow, wings, Algazin (V.A.), *7784*
- finite difference methods, simulation, vortices, Bromilow (I.G.), Clements (R.R.), *8542*
- compressible flow, lifting-line, potential theory, swept wings, vortex lines, Cheng (H.K.), Chow (R.), (et al.), *9649*
- hydrodynamic stability, interface phenomena, perturbations, Shankar (P.N.), *10466*

- airfoils, rolling, three dimensional flow, trailing edge, Schwartz (L.W.), *11360*
- blunt bodies, separated flow, two dimensional flow, Lewis (R.I.), *11389*
- induced drag, viscous flow, wakes, wings, Ryzhov (O.S.), Terentev (E.D.), *11730*

vortex tubes, helical flow, uniqueness, Adebiyi (A.), *1508*
- cavitation, geometrical properties, hydraulic turbines, surge, Dorfler (P.), *5498*
- noise, sound generation, vortices, Legendre (R.), *10794*

vortices, laser doppler velocimeters, piston driven flow, unsteady flow, Bicen (A.F.), Vlachos (N.S.), (et al.), *707*
- eddies, stratified flow, Johnson (E.R.), *978*
- airfoil characteristics, finite difference methods, reynolds equation, stratification, trailing vortices, turbulent flow, wakes, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- boussinesq equation, convection (free), nusselt number, unsteady flow, Oertel (H.), Kessler (R.), *1513*
- airplanes, ground effect, simulation, wakes, Wickens (R.H.), *1619*
- airplanes, lift, potential flow, sprays, streamlines, trajectories, Wickens (R.H.), *1620*
- augmentation, wind turbines, Hubbartt (J.E.), *1630*
- flight tests, porous walls, wakes, wings, Smith (H.C.), *2730*
- blunt bodies, flow obstructions, interaction, wakes, Belov (I.A.), *3614*
- annular flow, jets, wakes, Ko (N.W.M.), *3695*
- aerodynamic loads, computer programming, missiles, pressure distribution, supersonic flow, wing body combinations, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- drops, oscillations, Zapryanov (Z.), Chervenivanova (E.E.), *4018*
- bifurcation, cooling towers, drops, plumes, Chen (N.C.J.) Jung (L.), *4058*
- atmospheric circulation, meteorology (physical), Bekoryukov (V.I.), Makarov-Mironov (A.M.), *4060*
- inviscid fluid, spherical bodies, unsteady flow, vortex flow, Mindlin (I.M.), *4579*
- approximation methods, fredholm equations, vortex sheets, Gorelov (D.N.), *4580*
- mixing layers, turbulence, turbulence model, Kiya (M.), Arie (M.), (et al.), *4651*
- oceanography, Mcwilliams (J.C.), Flierl (G.R.), *4856*
- air, entrainment, suction, wells, Anwar (H.O.), Amphlett (M.B.), *5389*
- orifices, propellants, space vehicles, spinning bodies, Pasley (G.F.), *5404*
- atmospheric circulation, vortex shedding, Trischka (J.W.), *5931*
- jets, vortex rings, Schneider (P.E.M.), *6670*
- bed load, piers, river beds, scour, Qadar (A.), *7649*
- containers, flow irregularities, rotating fluids, spin-up, stratified flow, Greenspan (H.P.), *7674*
- inertial waves, numerical analysis, rotational flow, Thompson (R.O.R.Y.), *7766*
- airfoils, lift, slots, unsteady flow, wakes, Howe (M.S.), *7783*
- cavitation, models, noise measurements, propellers (marine), Latorre (R.), *8518*
- corners, modeling, pressure change, Conlisk (A.T.), Rockwell (D.), *8536*
- finite difference methods, simulation, vortex sheets, Bromilow (I.G.), Clements (R.R.), *8542*
- hydrodynamic stability, mathematical models, Dhanak (M.R.), *8604*
- couette flow, hydrodynamic stability, rotating bodies, spherical bodies, Hocking (L.M.), *8605*
- cavitation, modeling, turbomachinery, Billet (M.L.), *8660*
- ultrasonics, velocity measurement, wind tunnels, Engler (R.H.), Schmidt (D.W.), (et al.), *8663*
- eddies, Flierl (G.R.), Larichev (V.D.), (et al.), *8979*
- solid-fluid interaction, stability, stratification, tornados, Nikulin (V.V.), *9528*
- coherent structure, mixing layers, turbulent mixing, visualization, Bernal (L.P.), *9598*
- computer programming, conical flow, delta wings, Vigevano (L.), *9650*
- atmospheric circulation, meteorology (physical), Mcwilliams (J.C.), *9934*
- annuli, incompressible flow, jet flaps, singular integral equations, wings, Belotserkovskii (S.M.), Lifanov (I.K.), *10496*
- leading edge, lifting surfaces, separated flow, slender wings, Wagner (B.), *10505*
- noise, sound generation, vortex tubes, Legendre (R.), *10794*
- dispersion relation, flow irregularities, surface waves, Keller (J.J.), Escudier (M.P.), *11583*
- cascades, centrifugal compressors, compressible flow, three dimensional flow, Murata (S.), Miyake (Y.), (et al.), *11744*
- jets, transforms, wakes, Ko (N.W.M.), Leung (K.C.), *11955*

vorticity, finite difference methods, stream function, viscous flow, Cooke (C.H.), *583*
- containers (partially filled), coriolis forces, sloshing, spinning bodies, El-Raheb (M.), Wagner (P.), *673*
- convergence, euler equations, mathematical methods, reynolds number (high), Heid (O.H.), *1121*
- cavitation inception, orifices, reynolds number, Yamaguchi (A.), Suzuki (T.), *2586*
- circulation, flow measurement, visualization, Brasseur (J.C.), Chang (I.-D.), *2599*
- euler equations, flow obstructions, vortex flow, vortex sheets, Saffman (P.G.), *2600*
- flow obstructions, inviscid fluid, shear flow, two dimensional flow, Shankar (P.N.), Sinha (U.N.), *2609*
- conformal mapping, mixed flow compressors, turbomachinery, Lewis (R.I.), Fairbairn (G.W.), *2754*
- lifting bodies, separation, trailing edge, unsteady flow, Zaitsev (A.A.), Tyurev (V.V.), *2913*
- navier stokes equation, stagnation point, stream function, unsteady flow, Da Cunha (D.M.), Nee (V.W.), *3525*
- finite difference methods, internal flow, navier stokes equation, two dimensional flow, Shay (W.A.), *4586*
- finite difference methods, navier stokes equation, reynolds number (small), stream function, Rubin (S.G.), Khosla (P.K.), *4588*
- linear theory, potential flow, three dimensional flow, Hart (R.W.), *5402*
- circulation, currents, oceanography, Bryden (H.L.), *5918*
- circulation, ocean air interaction, oceanography, Briggs (W.L.), *5921*
- atmospheric circulation, vortex flow, Schubert (W.H.), Hack (J.J.), (et al.), *5932*
- generation, turbulence, Vishnyakov (A.A.), *6691*
- inviscid fluid, similarity methods, stratified flow, Yih (C.-S.), *7655*
- galerkin method, navier stokes equation, rotating disks, stream function, Adams (M.L.), Szeri (A.Z.), *7665*
- diffusion, finite difference methods, separated flow, two dimensional flow, unsteady flow, Porthouse (D.T.C.), Lewis (R.I.), *7678*
- characteristic methods, euler equations, finite element techniques, Bardos (C.), Bercovier (M.), (et al.), *7680*
- flow obstructions, navier stokes equation, three dimensional flow, Kitchens (C.W.) Jr., Gerber (N.), (et al.), *7711*
- mass transfer, rotating fluids, stratification, vortex lines, Gill (A.E.), Smith (J.M.), (et al.), *8020*
- circulation, ocean air interaction, oceanography, Welander (P.), *8031*
- circulation, conservation laws, theorems, Mobbs (S.D.), *8526*
- integral methods, submerged bodies, wave loads, Horton (T.E.), Feifarek (M.J.), *8629*
- convection (free), enclosure flow, finite element techniques, mathematical models, stream function, Reddy (J.N.), Satake (A.), *8726*
- bottom irregularities, oceanography, rotating fluids, stratification, Eliassen (A.), *8973*
- circulation, eddy diffusivity, oceanography, Harrison (D.E.), *8977*
- meteorology (synoptic), Lewis (J.M.), *8991*
- eddy diffusivity, rotating fluids, turbulence (geophysical), Haidvogel (D.B.), Held (I.M.), *9004*
- boundary conditions, navier stokes equation, numerical methods, stability (numerical), stokes flow, Quartapelle (L.), Valz-Gris (F.), *9527*
- jets, mixing layers, Martinez-Val (R.), *9597*
- hydrodynamic stability, inviscid fluid, taylor vortices, Vladimirov (V.A.), *10409*
- crossflow, cylindrical bodies, navier stokes equation, numerical methods, viscous flow, Kravchenko (V.I.), *10413*
- blunt bodies, heat transfer, hypersonic flow, Zemlyanskii (B.A.), Lunev (V.V.), (et al.), *10428*
- bottom irregularities, coriolis forces, oceanography, tides, Zimmerman (J.T.F.), *10958*
- circulation, eddies, oceanography, Holland (W.R.), Rhines (P.B.), *10960*
- euler equations, stratified flow, variational methods, Saltanov (N.V.), *11372*
- kelvin-helmholtz instability, numerical methods, shear flow, Shoucri (M.M.), *11391*
- reynolds stresses, strain rate, turbulence (isotropic), turbulence model, Siggia (E.D.), *11541*
- compressible flow, spectra, turbulence, Moiseev (S.S.), Tur (A.V.), (et al.), *11544*

Vos (R.G.), see Jones (R.E.), *5027*

Voskresenskii (G.P.), aerodynamics, compressible flow, numerical methods, supersonic flow, three dimensional flow, Chushkin (P.I.), *10421*

Voss (D.A.), see Mastro (R.A.), *4615*

Voveris (A.V.), beams, dynamic response, flexure, thin walled structures, vibration (forced), Kalinin (V.S.), *8296*

Vovk (I.V.), acoustic waves, diffraction, reflection, *4784*

Vovkodav (I.F.), disks, piezoelectric devices, travelling waves, Talatynova (E.K.), *6328*

Voyiadjis (G.Z.), dynamic analysis, flexure, plates (isotropic), vibration (free), Baluch (M.H.), *368*
- see Baluch (M.H.), *4378*

Voyt (S.S.), deformation, ocean bed, tsunamis generation, Lobedev (A.N.), (et al.), *10954*

Vozlinskii (V.I.), gyroscopic stabilization, perturbation methods, stability theory, *1074*

Vreeburg (J.P.B.), containers (partially filled), space vehicles, spacelab, visualization, zero g phenomena, Van Den Assem (D.), *5477*

Vrij (A.), see Feijter (J.A.), *6584*

vtol, engines, jets, near ground effects, Lummus (J.R.), *687*
- airplanes, control, flight control, simulation, Tinling (B.E.), Cole (G.L.), *1166*
- flight control, landing devices, state space techniques, Guy (C.R.), *1627*
- design, flight control, Lebacqz (J.V.), Radford (R.C.), *2161*
- aerodynamic interference, flight (unsteady), ground effect, jets, moving surfaces, Kamman (J.H.), Hall (C.L.), (et al.), *9668*
- airplane performance, design, propulsion, stol, turbofan engines, Glasgow (E.R.), Skarshaug (R.E.), *11742*

Vujanovic (B.), dynamic analysis, hamiltonian equations, nonlinear analysis, *8095*
Vujicic (V.A.), dynamic analysis, energy conservation, lagrange equations, mathematical methods, *1985*
Vukelich (S.R.), afterbodies, mathematical models, supersonic flow, wing body combinations, Williams (J.E.) Jr., *2739*
Vukobratovic (M.), control, large scale systems, nonlinear systems, synthesis, Stokic (D.), *4242*
Vukobratovic (M.K.), control, decoupling, design, large scale systems, manipulators, nonlinear systems, Stokic (D.M.), *11049*
Vulfson (M.N.), dynamic analysis, frequency response, vibration (forced), *3345*
Vvedenskaya (A.V.), earthquakes, mantle, mechanisms, Golubeva (N.V.), *7027*
Vyalyshev (A.I.), experimental methods, plates, sound fields, vibration, Dubinin (A.I.), (et al.), *11954*
Vyas (H.K.), see Verma (P.D.), *11390*
Vyshedkevich (I.U.), plasticity, shells (conical), shells (of revolution), *10155*
Vytchikov (Yu.S.), conduction (heat), gas turbines, thermal stresses, Khorolskii (V.M.), *3998*

W

Waas (G.), foundations, layered media, seismic loading, soil structure interaction, *4847*

Wachspress (E.L.), approximations, computer programming, finite element techniques, higher order theories, shape functions, *4192*

Wachter (J.), aerodynamic performance, centrifugal compressors, compressible flow, geometrical properties, reynolds number, Wohrl (B.), *5499*

- automatic control, balancing, pneumatic components, three dimensional flow, velocimeters, Heneka (A.), (et al.), *6739*
- see Beckmann (J.), *7399*
- see Schulz (B.), *8135*
- centrifugal compressors, stalling, surge, turbomachinery, Kohn (E.), (et al.), *8658*

Wachutka (H.), deformation, finite element methods, flaw detection, holography, inhomogeneities, interferometry, nondestructive tests, Kordisch (H.), (et al.), *5339*

Wada (H.), nonlinear analysis, plates (nonlinear), shells (nonlinear), structural stability, Taki (Y.), (et al.), *5162*

- cylindrical bodies, half space, reflection, torsional waves, *6353*
- beams, elastic foundations, transient effects, vibration (torsional), *7410*
- boundary conditions, cylindrical bodies, elastic foundations, vibration (forced), vibration (torsional), *8322*

Wada (S.), grease, lubrication (elastohydrodynamic), squeeze films, Tsukijihara (M.), *3045*

- bearings (journal), lubrication (hydrodynamic), thermal effects, turbulent flow, Hashimoto (H.), (et al.), *4109*
- film thickness, lubrication (elastohydrodynamic), rolling contact, rotating cylinders, squeeze films, *5987*

Waddington (D.), see Leipholz (H.H.E.), *9289*

Wadhwa (S.S.), bearings (gas lubricated), bearings (journal), lubrication (hydrodynamic), lubrication (hydrostatic), Sinhasan (R.), (et al.), *1935*

Wadia (A.R.), compressible flow, nozzles, numerical methods, shock waves, transonic flow, Payne (F.R.), *2615*

- axial turbines, blades, leaks, numerical analysis, rotors, Booth (T.C.), *7891*

Wagdi (M.N.), estimation, kalman filters, nonlinear systems, quasilinearization, stochastic processes, *2098*

Wagg (A.R.), see Tomlinson (J.R.), *7580*

Wagner (B.), base flow, compressible flow, jets, supersonic flow, White (R.A.), *7689*

- leading edge, lifting surfaces, separated flow, slender wings, vortices, *10606*

Wagner (H.D.), composite materials, elastic constants, glass fibers, laminates, materials properties, Fischer (S.), (et al.), *10128*

Wagner (H.G.), see Haynes (B.S.), *9744*

Wagner (L.Y.), magneto fluid dynamics, pool boiling, Lykoudis (P.S.), *741*

Wagner (P.), see El-Raheb (M.), *673*

- see El-Raheb (M.), *2936*

Wagner (R.L.), see Robertson (G.H.), *5751*

Wagstaff (R.A.), arrays, noise, underwater acoustics, *3966*

- noise, ocean, underwater acoustics, *5740*

Wahab (M.A.), see Davies (H.G.), *4412*

Wahlund (P.), see Gustafsson (B.), *4593*

Waine (B.R.), see Garss (F.K.), *2517*

Wait (R.), corners, crack opening displacement, cracks, finite element techniques, singularities, *2074*

Wakao (N.), dispersion, fluidized beds, gas solid interface, thermal diffusion, Shiozawa (B.), (et al.), *5541*

Wake (G.C.), see Bazley (N.W.), *9743*

Wakeham (W.A.), see Assael (M.J.), *8675*

wakes, blunt bodies, oscillations, similarity methods, Griffin (O.M.), *629*

- aerodynamic loads, slender bodies, vortex shedding, Fidler (J.E.), *689*
- airfoil characteristics, finite difference methods, reynolds equation, stratification, trailing vortices, turbulent flow, vortices, Hecht (A.M.), Bilanin (A.J.), (et al.), *1505*
- airfoils, trailing vortices, vortex flow, vortex sheets, Phillips (W.R.C.), *1506*
- base flow, cylindrical bodies, Moral (T.), *1573*
- airplanes, ground effect, simulation, vortices, Wickens (R.H.), *1619*
- models, propellers (marine), ships, Zborowski (A.), Nginh (N.M.), *1921*
- conformal mapping, existence theorems, flow obstructions, potential flow, Hilbig (H.), *2008*
- rotors, turbulence (freestream), Hah (C.), Lakshminarayana (B.), *2663*
- boundary layer, shear layer, stability theory, turbulence (structure), Taneda (S.), *2692*
- laser doppler velocimeters, lift coefficient, vortex lines, wings, Orloff (K.L.), *2729*
- flight tests, porous walls, vortices, wings, Smith (H.C.), *2730*
- aerodynamic loads, lifting bodies, nonuniform flow, Gluck (D.), *2737*
- blunt bodies, flow obstructions, interaction, vortices, Belov (I.A.), *3614*
- boundary layer, interference, Kanemoto (T.), Toyokura (T.), (et al.), *3683*
- annular flow, jets, vortices, Ko (N.W.M.), *3695*
- buildings, turbulence (geophysical), Steely (S.L.) Jr., Frost (W.), *3707*
- bubble dynamics, hydrogen, velocity measurement, visualization, Wilkinson (D.L.), Willoughby (M.A.), *3751*
- jets, pressure gradient, Antonia (R.A.), Phan-Thien (N.), *4635*
- cylindrical bodies, vortex shedding, Oberkampf (W.L.), Owen (F.K.), (et al.), *4638*
- aerodynamic interference, cylindrical bodies, flutter, Tsui (Y.T.), Tsui (C.C.), *4752*
- cylindrical bodies, turbulent flow, Sreenivasan (K.R.), *5449*
- critical flow, cylindrical bodies, drag coefficient, roughness, strouhal number, vortex shedding, Achenbach (E.), Heinecke (E.), *6621*
- measurements, turbulent flow, Sreenivasan (K.R.), *6668*
- airfoils, flutter, one dimensional flow, oscillating bodies, transonic flow, unsteady flow, Mccroskey (W.J.), *6716*
- aerodynamic interference, pressure gradient, thermal effects, wings, Peacock (R.E.), Hashem (A.A.F.), *6720*
- drag, models, ship resistance, viscous effects, Townsin (R.L.), Wynne (J.B.), *7073*
- cylindrical bodies, end effects, reynolds number (small), Slaouti (A.), Gerrard (J.H.), *7732*
- airfoils, unsteady flow, Ho (C.-M.), Chen (S.-H.), *7735*
- chemical reactions, experimental methods, mixing layers, turbulence (structure), Breidenthal (R.), *7756*
- airfoils, lift, slots, unsteady flow, vortices, Howe (M.S.), *7783*
- drag, induced drag, optimization, subsonic flow, wings, Kuhlman (J.M.), *7786*
- aerodynamic performance, downwash, helicopters, hovering, rotors, Andrew (M.J.), *7796*
- annular flow, boundary layer, cascades, swirl flow, vortex flow, Tan (C.S.), *7807*
- aerodynamic interference, axial fans, noise (aerodynamic), turbofan engines, Shaw (L.M.), Glaser (F.W.), *7894*
- friction (skin), planing surfaces, plates, Payne (P.R.), *8045*
- canals, couette flow, ships, Kulczyk (J.), *8048*
- channel flow, duct flow, laminar flow, shock waves, Byrkin (A.P.), Shchennikov (V.V.), *8568*
- turbulence (free), two dimensional flow, Pal (S.), Raj (R.), *8597*
- fans, hot wire, incompressible flow, rotors, turbomachinery, Lakshminarayana (B.), Govindan (T.R.), (et al.), *8863*
- bubble dynamics, shape, Bhaga (D.), Weber (M.E.), *8906*
- asymptotic methods, boundary layer (three dimensional), parabolic equations, ships, Mori (K.), *9016*
- concentration, diffusion, drops, peclet number, Zhivotyagin (A.F.), *9539*
- boundary layer, wind tunnels, Bario (F.), Charnay (G.), (et al.), *9592*
- trailing edge, turbulence (structure), velocity profiles, Hah (C.), Lakshminarayana (B.), *9596*
- aerodynamic interference, propellers, transonic flow, wings, Rizk (M.H.), *9656*
- aerodynamic interference, base pressure, blunt bodies, jets, Gai (S.L.), Kapoor (K.), *9657*
- developing flow, ducts, turbulent flow, Elliott (C.J.), Townsend (A.A.), *10455*
- annular flow, axial compressors, blades, boundary layer, mixing, Davino (R.M.), Lakshminarayana (B.), *10522*
- aerodynamic interference, axial compressors, axial turbines, cascades, Mitchell (N.A.), *10524*
- gas liquid interaction, jets, mass transfer, Karlsson (H.T.), Aberg (S.), (et al.), *10686*
- cavitation, hull propeller interaction, propellers (marine), water tunnels, Rutgersson (O.), *10880*
- airfoils, compressible flow, numerical methods, separated flow, transonic flow, viscous flow, Le Balleur (J.C.), *11395*
- aerosols, chemically reactive flow, compressible flow, hypersonic flow, particle fluid flow, Dmitriev (L.M.), Markachev (Yu.E.), *11408*
- air, approximation methods, radiation, Pilyugin (N.N.), Tikhomirov (S.G.), (et al.), *11516*
- blades, rotors, turbulence, turbulence (structure), Lakshminarayana (B.), Reynolds (B.), *11553*
- gravity waves (breaking), velocity profiles, visualization, Battjes (J.A.), Sakai (T.), *11586*
- induced drag, viscous flow, vortex sheets, wings, Ryzhov (O.S.), Terentev (E.D.), *11730*
- axial compressors, blades, hot wire, three dimensional flow, Reynolds (B.), Lakshminarayana (B.), *11738*
- jets, transforms, vortices, Ko (N.W.M.), Leung (K.C.), *11956*

Waklya (S.), axisymmetric flow, connected bodies, drag, spherical bodies, stokes flow, *7689*

Walburn (F.J.), blood flow, blood vessels, cardiovascular system, transition flow, Stein (P.D.), *1956*

- aorta, bifurcation, blood flow, pulsatile flow, Stein (P.D.), *4915*

Walczak (S.), see Pelczewski (W.), *199*

Walczak (W.), bending, plates (nonlinear), plates (rectangular), postbuckling behavior, shear, Jakubowski (S.), *332*

Walden (R.W.), boussinesq equation, convection, hysteresis, thermal diffusion, Ahlers (G.), *9534*

Waldheim (W.), see Schwarz (E.), *2993*

Waldron (K.J.), see Sun (J.W.H.), *5375*

- see Kumar (A.), *8469*

Waldvogel (J.), kepler orbits, special functions, three body problem, variational methods, *9814*

Walenta (Z.A.), boundary layer, reflection, shock tubes, shock waves, *9642*
Walford (T.L.H.), bearings (ball), bearings (roller), damping, stiffness, Stone (B.J.), *4114*
Walicka (A.), see Walicki (E.), *1562*
Walicki (E.), analysis, laminar flow, micropolar media, slots, Walicka (A.), *1562*
Walker (A.C.), see Elsharkawi (K.), *3335*
- axial loading, collapse, shells (cylindrical), shells (stiffened), Sridharan (S.), *6264*

Walker (A.W.), measurements (dynamic), random excitation, vibration (random), *2325*
- acoustic measurements, noise, shallow water, underwater acoustics, *5750*

Walker (I.W.), artificial satellites, n body problems, stability theory, three body problem, Emslie (A.G.), (et al.), *4756*
Walker (J.D.A.), see Conlisk (A.T.), *9535*
Walker (M.W.), see Luh (J.Y.S.), *9186*
Walker (N.), see Mills (N.J.), *9417*
Walker (P.S.), knees, plasticity, prosthetic devices, wear, Ben-Dov (M.), (et al.), *4921*
Walker (S.), boundary elements, fluid-structure interaction, shells (of revolution), *8512*
Walker (V.), see Ibrahim (M.B.), *9611*
Walker (W.R.), dynamic testing, experimental methods, vibration isolation, *394*
Wall (D.J.N.), cavities, dynamic response, sh waves, stress concentration, Varadan (V.V.), (et al.), *1306*
Wall (T.F.), boilers, coal, combustion products, flyash, particles, radiation, Lowe (A.), (et al.), *10708*
wall jets, heat transfer, matched asymptotic expansions, reynolds number (high), second order analysis, Afzal (N.), *592*
- buoyant flow, prediction, turbulent flow, Ljuboja (M.), Rodi (W.), *1571*
- conical flow, experimental results, Sharma (R.N.), *1575*
- finite difference methods, hydrodynamic stability, taylor-gortler instability, Kobayashi (R.), Fujisawa (N.), *1577*
- transonic flow, wings, Malmuth (N.D.), Murphy (W.D.), (et al.), *2658*
- jet engines, noise, noise abatement, trailing edge, Joshi (M.C.), Yu (J.C.), *4806*
- channel flow, crossflow, erosion, river beds, scour, Rajaratnam (N.), *6596*
- impingement, jets, Kotansky (D.R.), Glaze (L.W.), *8599*
- similarity methods, ventilation, El-Taher (R.M.), *10453*
- turbulence model, turbulent flow, Launder (B.E.), Rodi (W.), *10469*

Wallace (F.J.), see Kao (T.K.), *8805*
walled structures, box-shaped structures, structures, Lainoff (S.M.), *5354*
- discharges, high pressure, measurements, plasma, Kiparenko (G.F.), Kozyukov (A.V.), *5690*
- channel flow, end effects, magneto fluid dynamics, numerical methods, Sarma (P.R.L.), Mittal (M.L.), (et al.), *10752*
- boundary layer (control), jet boundaries, laminar mixing, magneto fluid dynamics, Kiryushchenko (E.V.), Sheryazdanov (G.B.), *11813*

Waller (H.), see Gossmann (E.), *7377*
- see Gossmann (E.), *9330*

Wallis (G.B.), liquid gas mixture, tubes, two phase flow, Karlin (A.S.), (et al.), *1843*
- critical flow, nuclear reactors, two phase flow, *2990*

Wallis (K.F.), see Chan (W.-Y.T.), *1100*
Wallman (P.H.), nonlinear systems, observers, process control, *1164*
Wallmann (T.), see Lambertz (J.), *7808*
walls, impact, missiles, punch problems, Sliter (G.E.), *510*
- cylindrical bodies, stokes flow, two dimensional flow, Jeffrey (D.J.), Onishi (Y.), *572*
- buildings (tall), finite difference methods, tokamak, Liauw (T.-C.), Luk (W.-K.), *2539*
- multistory frames, plates (folded), shear walls, Kristek (V.), *2542*
- measurements (dynamic), shear layer, shear stress, Tennant (M.H.), Pierce (F.J.), (et al.), *2761*
- convection, liquids, magneto fluid dynamics, stability, Kuang (V.Z.), Kan (N.Z.), *2878*
- cylindrical bodies, free boundary, gravity waves (surface), two dimensional flow, Boucher (G.), *3531*
- boundary conditions, computing techniques, slots, Cooke (C.H.), *3665*
- dispersed flow, shear flow, suspensions, Brunn (P.), *4008*
- excavation, prediction, rocks, sliding, stability, Priest (S.D.), *4467*
- boundary layer (turbulent), channel flow, preston tubes, shear stress, Kiske (S.), Vasanta Ram (V.), (et al.), *4599*
- aerodynamic interference, lift, spherical bodies, turbulent flow, Willetts (B.B.), Murray (C.G.), *4670*
- collision models, particle dynamics, particle fluid flow, stagnation point, Matsufuji (H.), Hasegawa (E.), *6047*
- design (optimum), dynamic programming, foundations, Ladany (S.P.), *6511*
- shear walls, structural analysis, Smith (B.S.), Abate (A.), *6527*
- complex variables, cylindrical bodies, irrotational flow, two dimensional flow, Petrila (T.), *6614*
- dynamic loads, explosions, Zhdan (S.A.), *7434*
- fluidized beds, heat transfer, Sokolov (A.V.), Baskakov (A.P.), (et al.), *7994*
- corrections, green function, inviscid fluid, potential flow, wall effects, Barche (J.), *8523*
- conformal mapping, irrotational flow, plates, porous surfaces, Proenek (W.J.), Rokicki (J.), *8541*
- aerodynamic interference, drag, spherical bodies, wind tunnels, Awbi (H.B.), Tan (S.H.), *8672*
- boundary layer, generators, insulation, magneto fluid dynamics, Rankin (R.R.), Self (S.A.), (et al.), *8815*
- analytical methods, earth pressure, experimental results, soil mechanics, Roth (W.H.), Crandall (L.), *9364*
- aerodynamic interference, channel flow, pressure measurement, Heikal (H.), *10538*
- ducts (variable area), experimental methods, liquid metals, magneto fluid dynamics, Holroyd (R.J.), *10734*
- ducts, sound propagation, Cummings (A.), *10786*
- flow fields, force, nonlinear theory, plates, singularities, Sozou (C.), Pickering (W.M.), *11386*
- axial turbines, blades, heat transfer, pressure measurement, Dunn (M.G.), Hause (A.), *11798*
- damping, ducts, sound fields, vibration, Loh (H.-T.), Reethof (G.), *11928*
- bubble dynamics, collapse, Shima (A.), Sato (Y.), *12043*
- bubble dynamics, collapse, Sato (Y.), Shima (A.), *12048*

Walls (J.D.), see Nur (A.M.), *7969*
Walston (W.H.) Jr., see Warnick (W.L.), *1218*
Walter (P.L.), algorithms, data analysis, measurements, systems, *3489*
Walters (G.A.), see Templeman (A.B.), *3418*
Walters (K.), see Manero (O.), *2647*
Walters (R.A.), finite element techniques, hydrodynamics, matrix methods, simulation, *7221*
- boundary conditions, estuaries, finite element techniques, gravity waves (shallow water), Cheng (R.T.), *11611*

Walters (W.P.), erosion, jets, penetration, water, Scott (B.R.), *1011*
Walton (I.C.), end effects, hydrodynamic stability, rotating cylinders, stability theory, taylor vortices, *2695*
Walton (T.E.) Jr., coastal engineering, currents, sediment transport, surf, *2690*
Waltrup (P.J.), combustion, design, geometrical properties, scramjets, supersonic flow, Billig (F.S.), (et al.), *8809*
- see Billig (F.S.), *8810*

Wambeganss (M.W.), dynamic response, nuclear reactors, vibration (flow induced), Mulcahy (T.M.), *383*
Wambugu (N.W.), see Grieve (R.J.), *2398*
Wan (F.Y.M.), buckling, dimpling, shells (shallow), shells (spherical), *8269*
Wang (A.S.D.), composite materials, crack growth, crack initiation, delamination, fracture mechanics, Crossman (F.W.), *6436*
Wang (B.-C.), algorithms, estimation, identification, Luus (R.), *132*
Wang (C.-C.), see Pop (J.J.), *4421*
Wang (C.-H.), see Ying (L.-A.), *1089*
- asymptotic behavior, conservation laws, mathematical methods, *6071*

Wang (C.-Y.), contact problems, elastica, folding, rolling, strips, *1221*
- film flow, reynolds number (small), sloping bottom, wavy walls, *1511*
- beams (cantilever), large displacement, *2261*
- beam columns, critical load, Drachman (B.), *5172*
- elasticity (nonlinear), sheet metal, springs, *8234*
- optimization, pressure, strings, *10148*

Wang (C.C.), dynamic analysis, eigenvalues, vibration (free), vibration (torsional), *7412*
Wang (C.S.), boundary layer (atmospheric), ocean air interaction, spray flow, wind-wave interaction, Street (R.L.), *986*
Wang (C.Y.), see Watson (L.T.), *301*
- contact problems, elasticity (nonlinear), sheet metal, shells (thin), *6167*
- see Greenwell (R.N.), *9577*
- see Watson (L.T.), *10140*
- see Watson (L.T.), *10143*

Wang (D.-J.), modal analysis, shells (of revolution), vibration, Ren (J.-G.), (et al.), *5220*
Wang (D.-P.), circulation, estuaries, finite difference methods, oceanography, two dimensional flow, Kravitz (D.W.), *2594*
- bottom irregularities, coasts, diffraction, oceanography, surface waves, *10859*

Wang (J.H.), bubble dynamics, rotating disks, swirl flow, Yang (W.-J.), *4019*
Wang (K.), see Tang (R.J.), *9398*
Wang (K.-F.), airfoils, beams (cantilever), flexure, torsion, *9259*
Wang (K.C.), boundary layer (three dimensional), elliptical bodies, impulsive propulsion, separated flow, Fan (Z.Q.), *8580*
Wang (K.L.), dynamic loads, film thickness, gears (spur), lubrication (elastohydrodynamic), surfaces, temperature, Cheng (H.S.), *2561*
Wang (L.), see War g (M.), *4155*
- computing techniques, finite element techniques, fourier series, matrix methods, structural analysis, *8145*

Wang (M.), differential equations (ordinary), limit cycles, singularities, Wang (L.), *4155*
Wang (M.E.), jet engines, noise abatement, sound propagation, wings, *4770*
Wang (S.), cylindrical bodies, oscillating bodies, virtual mass, wave generation, *11668*
Wang (S.T.), buckling, buckling (local), flexure, torsion, Pao (H.Y.), *334*
Wang (T.-S.), see Horowitz (I.), *4268*

Wang (Z.G.), aluminum alloys, cyclic loading, deformation, macroscopic characterization, metallography, microstructures, Ke (T.S.), *8429*
Wankiewicz (A.), porous media, pressure measurement, snow, *5908*
Wanless (P.), see Caldwell (J.), *5037*
Wanner (G.), see Gottwald (B.A.), *8141*
Warburton (G.B.), dynamic response, optimization, vibration isolation, *7416*
Warburton (P.M.), joints, rocks, statistical theory, stereological interpretation, *7451*
- joints, rocks, statistical theory, stereological interpretation, *7452*

Ward (D.S.), cooling, heating, solar collectors, solar distillation, *2834*
Ward (G.H.) Jr., cooling towers, evaporation, *10655*
Ward (P.), see Robinson (J.), *2067*
Ward (P.R.B.), measurements, optical analysis, rivers, sediment transport, Chikwanha (R.), *4574*
Ward (S.N.), modeling, tsunamis generation, *4850*
- modeling, tsunamis generation, *5897*

Wardlaw (A.B.) Jr., fins, missiles, numerical methods, shock layer, supersonic flow, Solomon (J.M.), *9551*
Warming (R.F.), see Steger (J.L.), *2621*
Warnick (W.L.), beams, bending, lateral stability, twisting, Walston (W.H.) Jr., *1218*
warping, beams (torsional), torsion, Gay (D.), Boudet (R.), *3289*
- beams (thin section), shear loading, shells (cylindrical), thin walled structures, Kholoptsev (V.V.), *4373*

Warren (M.L.), see Schiller (S.R.), *6822*
Warren (W.E.), boreholes, contact problems, liners, shells (long), *2270*
Warren (W.J.), see Crossman (F.W.), *6437*
Warrington (R.O.), see Powe (R.E.), *755*
Warrior (J.), discrete systems, optimal control, regulator problem, Viswanadham (N.), *1151*
Warsi (S.A.), see Usmani (R.A.), *60*
- see Usmani (R.A.), *2044*

Warwaruk (J.), see Taylor (G.), *2523*
Washizu (K.), elasticity (nonlinear), energy methods, strain energy, variational methods, *243*
- see Nakayama (T.), *5483*
- see Hansoka (M.), *9441*
- see Nakayama (T.), *11640*

Wasowski (J.J.), see Smolinska (B.), *1396*
Wassner (L.), evaporation, film cooling, film flow, heat transfer, liquid vapor interface, *6779*
Wasyyng (A.), see Brady (B.H.G.), *8150*
Watanabe (E.), see Niwa (Y.), *4388*
Watanabe (K.), elastic foundations, inclusions, large displacement, plates, *3303*
- burmester configuration, four bar linkage, kinematics, mechanisms, *6654*
- half space, moving loads, transient effects, *8331*
- see Yamamoto (K.), *10403*
- adaptive systems, distributed parameters, filters, stochastic systems, Yoshimura (T.), (et al.), *11084*

Watanabe (M.), see Jirka (G.H.), *5825*
Watanabe (N.), see Hayashikawa (T.), *3358*
Watanabe (T.), beams, dynamic response, vibration (nonlinear), *2315*
- see Miyazaki (N.), *10284*

Watanabe (Y.), see Ito (H.), *2656*
- see Nanbu (K.), *3646*

water, cutting, jets, rocks, Rehbinder (G.), *431*
- steam, thermal properties, thermodynamic properties, transport properties, Straub (J.) eds., Scheffler (K.), *723, book*
- boiling, convection (forced), critical heat flux, Katto (Y.), *744*
- cooling, evaporation, heat transfer, mass transfer, Arefyev (K.M.), Averkiyev (A.G.), *802*
- condensation, nonequilibrium effects, Davydov (L.M.), Pirumov (U.G.), *810*
- erosion, jets, penetration, Walters (W.P.), Scott (B.R.), *1011*
- choked flow, free boundary, gravity, waterfall, Simpson (H.C.), Rooney (D.H.), (et al.), *1517*
- critical region, heavy water, saturation, vapor pressure, Hill (P.G.), Macmillan (R.D.C.), *1655*
- optimization, power generation, water supply systems, Ponomarenko (V.S.), Boychuk (L.M.), *2184*
- algorithms, modeling, networks, Rahal (C.M.), Sterling (M.J.H.), (et al.), *2596*
- electric spark discharge, machining (electrochemical), Jeswani (M.L.), *3428*
- boiling, drops, nucleate boiling, Mao (J.R.), Tunc (C.Y.), *3791*
- boiling, critical heat flux, heat transfer, impact jets, impingement cooling, jets, Ishigai (S.), Nakanishi (S.), (et al.), *3792*
- additives, permeability, polymers, porous media, Bakhitov (G.G.), Ogandzhanyants (V.G.), (et al.), *4022*
- bearings (journal), chatter, elastomers, vibration, Krauter (A.I.), *4890*
- constitutive equations, equations of state, high pressure, Juza (J.), Sifner (O.), (et al.), *5521*
- convection (forced), leidenfrost phenomenon, transition boiling, Ragheb (H.S.), Chang (S.C.), (et al.), *5544*
- drops, reflection, scattered light, Popov (Yu.A.), *5583*
- blades, cooling, gas turbines, high temperature, El-Masri (M.A.), Louis (J.F.), *5657*
- boiling, high pressure, hydrocarbons, nucleation, Avedisian (C.T.), Glassman (I.), *6771*
- cavities, convection (free), cooling, heat transfer, laminar flow, transient effects, Robillard (L.), Vasseur (P.), *7844*
- disks, viscometry, Kestin (J.), Shankland (J.R.), *8666*
- buoyancy, density, plumes, Mollendorf (J.C.), Johnson (R.S.), (et al.), *9599*
- drag coefficient, impact, spherical bodies, surfaces, Moghisi (M.), Squire (P.T.), *9629*
- bubble dynamics, entrainment, two phase flow, Salih (A.M.A.), *9878*
- equations of state, molecular theory, surface tension, Guerrero (M.I.), Davis (H.T.), *10653*
- absorption, adhesives, bonded joints, composite materials, laminates, optical techniques, swelling stresses, Sargent (J.P.), Ashbee (K.H.G.), *11343*
- ballistics, cylindrical bodies, ricochet, rotating cylinders, water surface, Bai (Y.L.), Johnson (W.), *11652*
- bubbly flow, cavitation inception, choked flow, sodium, Kamiyama (S.), Yamasaki (T.), *11753*

water hammer, bubbly flow, impulse, steam, Gruel (R.L.), Huber (P.W.), (et al.), *1596*
- existence theorems, hyperbolic equations, uniqueness, Barbu (V.), Morosanu (G.), *2006*
- noise, power generation, two phase flow, Papadakis (C.) eds., Scarton (H.), *5476, book*
- oscillating bodies, pipe flow, valves, Thomann (H.), *5478*
- closure, finite element techniques, valves, Watt (C.S.), Hobbs (J.M.), (et al.), *6709*
- surveys, Martin (C.S.), *7764*
- compressional waves, hydraulic machinery, numerical methods, Lecerf (J.P.), *9624*
- attenuation, pipelines, pressure gradient, Thielen (H.), Burmann (W.), *10487*
- numerical methods, pipe flow, unsteady flow, Wylie (E.B.), Streeter (V.L.), *11598*
- piping systems, valves, vibration (flow induced), Silva (M.A.G.), *11603*
- dispersion relation, ducts, flexible walls, Tait (R.J.), Moodie (T.B.), (et al.), *11604*
- boiling, piping systems, two phase flow, Wilkinson (D.H.), Dartnell (L.M.), *12102*

water pollution, digital control, rivers, Gourishankar (V.), Lawal (M.A.), *2174*
- crossflow, discharges, dispersion, rivers, Roman (P.), *3609*
- rocks, storage, transport phenomena, Hohlfelder (J.J.), Hadley (G.R.), *4030*
- air pollution, monitoring, Nazarov (I.M.), Fridman (Sh.D.), *4095*
- estuaries, finite difference methods, free boundary, hydraulics, lakes, Fischer (H.B.) ed., *4577, book*
- mathematical models, process control, stochastic systems, wastewater treatment, Tanthapanichakoon (W.), Himmelblau (D.M.), *5046*
- currents, dispersion, surface waves, turbulence (geophysical), Ergin (A.), *5903*
- dispersion, mixing, rivers, Shen (H.T.), *5911*
- contamination, discharges, environmental control, estuaries, rivers, Smith (R.), *7657*
- contamination, dispersion, finite element techniques, lakes, Salmon (J.R.), Liggett (J.A.), (et al.), *7661*
- channel flow, diffusion coefficient, rivers, West (J.R.), Cotton (A.P.), *11777*

water tunnels, bubble dynamics, cavitation flow, laminar flow, ogives, separation, Arakeri (V.H.), Carroll (J.A.), (et al.), *563*
- bodies of revolution, boundary layer, laminar flow, transition flow, Lauchle (G.C.), Eisenhuth (J.J.), (et al.), *1541*
- flow measurement, meters, pressure measurement, yawing, Takamatsu (Y.), Takahara (H.), (et al.), *1641*
- air, axisymmetric flow, cavitation, separation, Holl (J.W.), Carroll (J.A.), *6904*
- cavitation, hulls, propellers (marine), rudders, towing tanks, Rutgersson (O.), *8044*
- bodies of revolution, cavitation inception, laminar flow, separation, Pan (S.-S.), Yand (Z.-M.), (et al.), *8514*
- bodies of revolution, cavitation inception, separation, transition, Huang (T.T.), *8516*
- bodies of revolution, cavitation inception, reynolds number, turbulence (free-stream), Murai (H.), Ihara (A.), *10397*
- cavitation, hull propeller interaction, propellers (marine), wakes, Rutgersson (O.), *10880*

Waterhouse (R.B.) ed., corrosion fatigue, fatigue, fretting, surveys, wear, *1358, book*
Waterman (H.A.), see Oosterbroek (M.), *6592*
Waters (E.O.), design criteria, flanges, machine elements, pressure vessels, Schneider (R.W.), *3570*
watersheds, flood flow, hydrology, Kopylov (A.P.), *1897*
- hydrology, roughness, runoff, Ellis (F.W.), Ramsey (F.V.), (et al.), *3013*
- hydrology, rainfall, Hjelmfelt (A.T.) Jr., *4042*
- modeling, Mein (R.G.), Brown (B.M.), *5913*
- iterative methods, networks, Divenot (A.), *8136*

waterways, boundary roughness, rivers, Motayed (A.K.), Krishnamurthy (M.), *3598*
- experimental methods, turbulence, Griffith (O.F.) III, Grimwood (C.), *8618*

Watson (J.G.), ocean, sound propagation, stochastic processes, underwater acoustics, Siegmann (W.L.), (et al.), *895*

Watson (L.), convergence, design (optimum), mathematical methods, newton method, Yang (W.H.), *56*
Watson (L.T.), large displacement, rings, Wang (C.Y.), *301*
- see Kamat (M.P.), *7188*
- beams, beams (heavy), large displacement, Wang (C.Y.), *10140*
- beams (flexural), large displacement, nonlinear analysis, springs, Wang (C.Y.), *10143*

Watson (N.), see Kyrtatos (N.), *703*
- diesel engines, fuel jets, injection systems, thermodynamic processes, Kamel (M.), *2969*
- see Kamel (M.), *11797*

Watt (C.S.), closure, finite element techniques, valves, water hammer, Hobbs (J.M.), (et al.), *6700*
Watts (J.W.) III, pressure gradient, reservoirs, simulation, *8946*
Wauer (J.), benard-rayleigh problem, cellular flow, convection (benard), thermal excitation, *758*
- beams, distributed parameters, dynamic analysis, vibration isolation, *2357*
- beams (prestressed), buckling, flexural loading, variational methods, *8229*

Wauer (J.C.), airplanes, flight path, fuel economy, optimization, simulation, Bruckner (J.M.H.), (et al.), *6729*
Waugh (R.E.), blood, cell behavior, experimental methods, membranes, plastic behavior, La Celle (P.L.), *1949*
wave absorbers, acoustics, transducers, Cavanagh (E.), Cook (B.D.), *1809*
- focusing, laser plasma interaction, propagation, theory, Sodha (M.S.), Sinha (S.K.), (et al.), *2904*
- compressible flow, cylindrical bodies, damping, oscillating bodies, rods, Lin (W.H.), Chen (S.S.), *3931*
- baffles, barriers, flexural waves, viscoelastic materials, Ko (S.-H.), *4764*
- arrays, submerged bodies, three dimensional flow, Thomas (G.P.), Evans (D.V.), *10489*
- ducts, submerged bodies, virtual mass, wave energy, Thomas (J.R.), *11602*
- floating bodies, oscillating bodies, wave energy, Evans (D.V.), *11645*

wave energy, energy, energy (alternative sources), solar energy, wood, Veziroglu (T.N.) ed., *1985, book*
- gravity waves (breaking), gravity waves (surface), turbulent mixing, Thompson (R.O.R.Y.), *2708*
- acoustic waves, barriers, diffraction, transmission, Czarnecki (S.), Engel (Z.), (et al.), *3933*
- diffusers, modes, plane waves, scattering, Strube (H.W.), *3949*
- acoustic measurements, acoustics, error, Seybert (A.F.), *3969*
- acoustic measurements, ultrasonics, Bindal (V.N.), Kumar (A.), *3975*
- acoustics, energy spectrum, rockets, vortex shedding, Brown (R.S.), Dunlap (R.), (et al.), *4769*
- ocean waves, random loading, salter duck, wave engines, Serman (D.D.), Mei (C.C.), *9631*
- acoustic waves, nonlinear theory, plasma, stability theory, Khiet (T.), Abdel-Gawad (H.), *9803*
- strings, travelling waves, Benumof (R.), *10136*
- gravity waves (internal), ocean waves, wave interactions, Orlanski (I.), Cerasoli (C.P.), *11588*
- ducts, submerged bodies, virtual mass, wave absorbers, Thomas (J.R.), *11602*
- floating bodies, ocean waves, oscillating bodies, wave engines, Masubuchi (M.), Shinomiya (Y.), *11638*
- floating bodies, oscillating bodies, wave absorbers, Evans (D.V.), *11645*

wave engines, dynamic response, flexural waves, shells (cylindrical), vibration, Fuller (C.R.), *374*
- dynamic analysis, strings, vibration (free), vibration (nonlinear), Cabannes (H.), *8290*
- beams, dynamic analysis, plates (nonhomogeneous), Reismann (H.), Yamaguchi (T.), *8297*
- membranes, plates (circular), plates (holed), vibration (free), Lin (W.H.), *8301*
- energy dissipators, oscillatory flow, pipe exit, pipe flow, Knott (G.F.), Flower (J.O.), *8588*
- ocean waves, random loading, salter duck, wave energy, Serman (D.D.), Mei (C.C.), *9631*
- floating bodies, ocean waves, oscillating bodies, wave energy, Masubuchi (M.), Shinomiya (Y.), *11638*

wave equations, mathematical theory, scattering, Lax (P.D.), Phillips (R.S.), *35*
- nonlinear waves, one dimensional waves, shock waves, Lardner (R.W.), *36*
- conduction (unsteady), heat transfer, heat transfer (combined modes), Sieniutycz (S.), *1082*
- inverse problems, mathematical methods, scattering, time domain techniques, Burridge (R.), *1088*
- cauchy problem, nonlinear systems, parabolic equations, Menzala (G.P.), *1090*
- finite element techniques, nonlinear mechanics, shock waves, time dependence, Cella (A.), Lucchesi (M.), (et al.), *1130*
- acoustics, Ursell (F.), *1825*
- acoustics, parabolic equations, Desanto (J.A.), Perkins (J.S.), (et al.), *1826*
- cauchy problem, hyperbolic equations, isentropic processes, shock, Hoff (D.), *2011*
- bessel functions, layered media, one dimensional waves, Kard (P.), *4163*
- elastic waves, energy splitting, hyperbolic equations, radon transform, transforms, Costa (D.G.), Strauss (W.A.), *4165*
- boundary conditions, computing techniques, hyperbolic equations, Bayliss (A.), Turkel (E.), *4187*
- acoustics, sound propagation, Mccoy (J.J.), *4812*
- beams, vibration (forced), Dixit (L.A.), *5206*
- dynamic response, rods, shear stress, vibration, Kiyasbeli (T.N.), *5207*
- acoustic waves, dynamic stresses, flexural waves, plates, reflection, shear, Dubbeldav (P.S.), Rudgers (A.J.), *5209*
- green function, layered media, sound propagation, underwater acoustics, Dinapoli (F.R.), Deavenport (R.L.), *5767*
- numerical methods, sloping bottom, sound propagation, underwater acoustics, Lee (D.), Papadakis (J.S.), *5788*
- asymptotic behavior, hyperbolic equations, magneto fluid dynamics, Gustafson (B.), *6080*
- sound propagation, spectra, underwater acoustics, Stickler (D.C.), Ammicht (E.), *6909*
- cauchy problem, nonlinear waves, Menzala (G.P.), Strauss (W.A.), *7171*
- moving media, supersonic flow, uniqueness, Manwell (A.R.), *8109*
- nonlinear waves, self excitation, stability theory, van der pol equations, Lardner (R.W.), Nicklason (G.), *9103*
- computing techniques, integro differential equations, Gladkov (A.A.), *9115*
- acoustic loading, fluid-structure interaction, shells (cylindrical), Gordienko (V.I.), Kubenko (V.D.), (et al.), *9336*
- combustion, flame propagation, Mieva (T.P.), Merzhanov (A.G.), (et al.), *9764*
- aerothermoacoustics, incompressible flow, sound generation, Meecham (W.C.), *9944*
- acoustic waves, finite difference methods, parabolic equations, underwater acoustics, Lee (D.), Botseas (G.), (et al.), *10043*
- computer programming, computing techniques, finite element techniques, propagation, Okrouhlik (M.), *10069*
- acoustic waves, boundary value problems, moving media, subsonic flow, Krasilshchikova (E.A.), *10798*
- acoustics, caustics, Stickler (D.C.), Ahluwalia (D.S.), (et al.), *12003*

wave generation, gravity waves, oscillations, pressure distribution, Chee-Seng (L.), *672*
- experimental results, gravity waves, gravity waves (cnoidal), nonlinear waves, Chakraborti (S.K.), *678*
- biomechanics, gallstones, hydroelastic waves, organs, travelling waves, wave interactions, Wu (Y.P.), Wong (G.R.), (et al.), *1045*
- plane waves, pressure distribution, stratified flow, Dotsenko (S.F.), *1600*
- asymptotic methods, flow irregularities, kelvin waves, ocean waves, reflection, Haines (C.R.), *1603*
- fluid boundaries, froude number, gravity waves (internal), hydrofoils, Bukreev (V.I.), *4659*
- electric effects, ocean, sound generation, Harker (K.J.), Fraser-Smith (A.C.), *5720*
- piezoelectrics, sound generation, vibration, Kinh (N.V.), Pajewski (W.), *5783*
- cavities, viscoelastic materials, Pal (P.C.), *6340*
- design, gravity waves (surface), theory, wavemakers, Hudspeth (R.T.), Chen (M.-C.), *7653*
- plates, shells (cylindrical), shells (fluid-filled), Bagdoev (A.G.), Movsisyan (L.A.), *9334*
- half space, rayleigh waves, scattering, surface flaws, Witos (F.), *10229*
- gravity waves, nonlinear analysis, swell, wave interactions, Foda (M.A.), Mei (C.C.), *11577*
- channels, finite difference methods, ships, three dimensional formulation, Ohring (S.), *11580*
- floating bodies, gravity waves (surface), oscillating bodies, Martin (P.A.), *11585*
- acceleration, gravity waves (surface), pressure distribution, Pramanik (A.K.), *11599*
- gravity waves (internal), moving source, submerged bodies, Gorodtsov (V.A.), Teodorovich (E.V.), *11620*
- cylindrical bodies, oscillating bodies, virtual mass, Wang (S.), *11668*

wave interactions, existence theorems, plasma, wave packets, Shulman (E.I.), *5*
- finite amplitude, solitary waves, surveys, Phillips (O.M.), *662*
- nonlinear waves, ocean waves, stratified waves, Petrov (V.V.), *663*
- circulation, currents, Leibovich (S.), *666*
- internal waves, spectra, surface waves, Basovich (A.Ya.), *669*
- bending (elastic), moment distribution, ship design, Loukakis (T.A.), Grivas (S.B.), *994*
- biomechanics, gallstones, hydroelastic waves, organs, travelling waves, wave generation, Wu (Y.P.), Wong (G.R.), (et al.), *1045*
- gravity waves (internal), gravity waves (surface), ocean waves, Dysthe (K.B.), Das (K.P.), *1589*
- channels, gravity waves (internal), shear flow, stratified flow, Grimshaw (R.), *1601*
- analytical methods, plasma, slabs, waveguides, Phalswal (D.R.), Singh (Y.P.), (et al.), *2901*
- crack propagation, fracture mechanics, photoelasticity (dynamic), Rossmanith (H.P.), Shukla (A.), *3481*
- elastic bodies, floating structures, mooring, Yamamoto (T.), Yoshida (A.), (et al.), *4100*
- finite amplitude, gravity waves (surface), Demchenko (R.I.), Yakovlev (V.V.), *4655*

- acoustic waves, elastic bodies, resonance, Fiorito (R.), Madigosky (W.), (et al.), *4779*
- dynamic properties, nonlinear analysis, vibration (random), Gurbatov (S.N.), *5153*
- diffraction, gravity waves (surface), submerged bodies, Belyaev (V.A.), *5475*
- gravity waves (internal), nonlinear analysis, rossby waves, Ripa (P.), *7761*
- floating structures, linear theory, mooring, nonlinear theory, Natvig (B.J.), Pendered (J.W.), *8049*
- harmonic analysis, interaction, nonlinear analysis, resonance, Verheest (F.), *8114*
- embankments, finite difference methods, nonlinear waves, reflection, Nasser (M.S.), *8511*
- asymptotic methods, diffraction, ocean waves, ships, slender bodies, Beck (R.F.), Troesch (A.W.), *9012*
- gravity waves, nonlinear waves, schrodinger equation, Malik (S.K.), Singh (M.), *9621*
- compressional waves, ocean bed, sedimentation, shear waves, Fryer (G.J.), *10237*
- nonlinear analysis, resonance, scattering, three wave resonance, Kaup (D.J.), *10482*
- gravity waves (internal), hydrodynamic stability, stratified flow, Koop (C.G.), Redekopp (L.G.), *10483*
- gravity waves (finite depth), gravity waves (solitary), nonlinear waves, unsteady flow, Fenton (J.D.), Rienecker (M.M.), *11560*
- dam-failure, dams, failure, gravity waves (shallow water), Marshall (G.), Menendez (A.N.), *11564*
- gravity waves (internal), nonlinear analysis, resonance, Liu (A.K.), Kubota (T.), (et al.), *11566*
- gravity waves (internal), gravity waves (surface), wind-wave interaction, Segur (H.), *11570*
- gravity waves, nonlinear analysis, swell, wave generation, Foda (M.A.), Mei (C.C.), *11577*
- gravity waves (internal), ocean waves, wave energy, Orlanski (I.), Cerasoli (C.P.), *11588*
- dam breaks, dams, modeling, Chen (C.-L), Armbruster (J.T.), *11613*
- resonance, scattering, Ma (Y.-C.), *11621*
- nonlinear waves, sound, Bakhvalov (N.S.), Zhileikin (Ya.M.), (et al.), *12007*
- boundary value problems, diffraction, ships, slender bodies, Liapis (N.), Faltinsen (O.M.), *12086*

wave loads, attenuation, breakwater, floating bodies, mooring, Yamamoto (T.), *526*

- buried structures, ocean bed, pipelines, porous media, potential flow, Macpherson (H.), *562*
- hydrodynamic pressure, offshore structures, sensitivity, Shyam Sunder (S.), Connor (J.J.), *1451*
- offshore structures, pipe laying, pipelines, sensitivity, Rammant (J.P.), Backx (E.), *1453*
- cylindrical bodies, drag coefficient, gravity waves (surface), submerged bodies, virtual mass, Koterayama (W.), *1594*
- buoys, damping, oscillating bodies, Cavaleri (L.), Mollo-Christensen (E.), *1607*
- cylindrical bodies, ducts, pressure measurement, wavemakers, Knott (G.F.), Flower (J.O.), *1636*
- dynamic analysis, offshore structures, statics, Sarpkaya (T.), Isaacson (M.), *2543, book*
- fatigue, offshore structures, vortex shedding, Russo (E.P.), Loiacono (N.J.), (et al.), *2545*
- pipelines, submerged bodies, vortex shedding, Schrecker (M.), *2584*
- optimization, oscillating bodies, salters duck, wave machines, Tanaka (H.), Saito-O (M.), *2713*
- dynamic response, floating structures, offshore structures, random loading, Etok (E.U.), Kirk (C.L.), *3556*
- drift, floating structures, nonlinear analysis, Pinkster (J.A.), *3714, book*
- numerical methods, ocean bed, pipelines, Efthymiou (M.), Narayanan (R.), *3718*
- dynamic analysis, loads, seismic loading, structural analysis, thermal effects, Brebbia (C.A.) eds., Gould (P.L.), (et al.), *4536, book*
- bridges, dynamic analysis, floating structures, stochastic processes, Langen (I.), Sigbjornesson (R.), *5356*
- geometric nonlinearities, offshore structures, pipes, underwater structures, Felippa (C.A.), Chung (J.S.), *6534*
- offshore structures, reliability analysis, safety, Bea (R.G.), *6535*
- damping capacity, dynamic analysis, offshore structures, random loading, Vandiver (J.K.), *6536*
- drag, offshore structures, random loading, Tung (C.C.), *6538*
- concrete, gravity platforms, offshore structures, Bangash (Y.), *6539*
- dynamic response, frequency domain techniques, gravity platforms, offshore structures, stochastic processes, vibration (random), Sigbjornsson (R.), Smith (E.K.), *7614*
- drag coefficient, nonlinear analysis, offshore structures, virtual mass, Debnath (L.), Rahman (M.), *7767*
- experimental results, ocean waves, pipelines, submerged bodies, Grace (R.A.), Zee (G.T.Y.), *7769*
- offshore structures, spectral loading, stochastic processes, structural response, Spidsoe (N.), Sigbjornsson (R.), *8460*
- integral methods, submerged bodies, vorticity, Horton (T.E.), Feifarek (M.J.), *8629*
- cylindrical bodies, gravity waves (surface), submerged bodies, Koterayama (W.), *8632*
- offshore structures, structural response, Dominguez (J.), Alarcon (E.), *9459*
- oscillating bodies, pipelines, submerged bodies, virtual mass, Efthymiou (M.), Narayanan (R.), *10394*
- fatigue, offshore structures, stochastic processes, vibration (forced), Sigbjornsson (R.), *11334*
- nonlinear analysis, ocean waves, spectra, Sharma (J.N.), Dean (R.G.), *11663*
- ocean waves, offshore structures, Huntington (S.W.), Gilbert (G.), *11670*
- flexible bodies, hulls, ocean waves, Bishop (R.E.D.), Price (W.G.), (et al.), *12084*

wave machines, optimization, oscillating bodies, salters duck, wave loads, Tanaka (H.), Saito-O (M.), *2713*

wave trains, breakwater, models, submerged bodies, Abdul Khader (M.H.), Rai (S.P.), *677*

- gravity waves (surface), gravity waves (trochoidal), phase velocity, Shuleykin (V.V.), *1588*
- fredholm equations, gravity waves, green function, hulls, potential flow, Noblesse (F.), *9944*
- gravity waves, nonlinear analysis, shear flow, stratified flow, Liu (A.K.), *11562*

waveguides, hodograph methods, seismic waves, velocity profiles, Burmin (V.Yu.), *963*

- acoustics, ducts, modes, nonhomogeneous media, Felsen (L.B.), *1804*
- analytical methods, plasma, slabs, wave interactions, Phalswal (D.R.), Singh (Y.P.), (et al.), *2901*
- acoustic waves, reflection, scattering, transmission, Bostrom (A.), *3932*
- nonhomogeneous media, sound propagation, Canevet (G.), *3948*
- acoustic measurements, optical techniques, transducers, Carome (E.F.), Koo (K.P), *3980*
- anisotropic media, harmonic waves, Fraser (W.B.), *4450*
- acoustic waves, response, scattering, Smith (P.W.) Jr., *4797*
- atmospheric circulation, gravity waves, Dvoryakovskiy (V.P.), Petrukhin (N.S.), (et al.), *4865*
- acoustic waves, finite element methods, Oliver (W.A.), Dong (S.B.), (et al.), *5771*
- sound propagation, underwater acoustics, Ahluwalia (D.S.), Reiss (E.L.), (et al.), *6924*
- elastic bodies, fluid-structure interaction, sound propagation, Levitskii (L.A.), *6928*
- density, nonlinear characteristics, plasma (toroidal), tokamak, Krapchev (V.B.), Theilhaber (K.S.), (et al.), *8829*
- elastic waves, torsional waves, Muller (P.), *9333*
- edge effects, harmonic waves, propagation, wedges, Grinchenko (V.T.), Meleshko (V.V.), *10228*
- deformation (finite), nonlinear waves, plates (rectangular), Sugimoto (N.), Majima (Y.), *11156*
- eigenvalues, sound propagation, underwater acoustics, Arnold (J.M.), *11895*
- acoustic waves, layered media, reflection, transmission, viscoelasticity, Stepanishen (P.R.), Strozeski (B.), *11966*

wavemakers, cylindrical bodies, ducts, pressure measurement, wave loads, Knott (G.F.), Flower (J.O.), *1636*

- design, gravity waves (surface), theory, wave generation, Hudspeth (R.T.), Chen (M.-C.), *7653*
- frequency response, mathematical models, spectra, Hudspeth (R.T.), Leonard (J.W.), *7809*
- channels, hinged bodies, moment coefficient, pressure, Hudspeth (R.T.), Leonard (J.W.), (et al.), *9511*

wavemaking resistance, green theorem, linear theory, ship resistance, Odabasi (A.Y.), *5961*

- boundary value problems, froude number, hulls, nonlinear theory, ship resistance, Maruo (H.), *5969*
- boundary value problems, green function, integral methods, ship resistance, Noblesse (F.), *9008*
- asymptotic methods, irrotational flow, ship resistance, slender bodies, Adachi (H.), *10879*
- gravity waves (internal), nonhomogeneous media, radial waves, singularities, Gorodtsov (V.A.), *11380*

waves, gravity waves (surface), laplace transform, propagation, viscous flow, Tkachenko (V.A.), *670*

- discontinuities, polytropic processes, shock waves, Ruggeri (T.), *679*
- cylindrical bodies, hydromagnetic stability, liquids, perturbations, Arkhipenko (V.I.), Barkov (Yu.D.), (et al.), *851*
- boundary layer (turbulent), combustion, discharges, magneto fluid dynamics, Okazaki (K.), Mori (Y.), (et al.), *857*
- dilatancy, granular media, Cowin (S.C.), Nunziato (J.W.), *1304*
- condensation (filmwise), laminar flow, theory, Sofrata (H.), *1724*
- pipelines, pneumatic transport, slug flow, two phase flow, Tomita (Y.), Jotaki (T.), (et al.), *1839*
- hulls, lateral stability, rolling motion, ship design, Burcher (R.K.), *1922*
- asymptotic methods, shells (cylindrical), Protsenko (A.M.), *2360*
- elasticity (nonlinear), large displacement, Ziv (M.), *2362*
- in-plane displacement, measurements, moire methods, photoelasticity, propagation, Basehore (M.L.), Post (D.), *2472*

- acoustic waves, jets, Thwaites (S.), Fletcher (N.H.), *2669*
- gravity, magneto fluid dynamics, stability theory, theory, Kochar (G.T.), Jain (R.K.), *2891*
- beams, vibration, Pesko (F.), *2932*
- continuum mechanics, mechanics, solid mechanics, Strelkov (S.P.), *3074, book*
- continuum mechanics, jump conditions, moving surfaces, singular waves, Beda (G.), *4127*
- mixtures, suspensions, viscoelastic waves, D'Anna (A.), De Socio (L.M.), (et al.), *4130*
- continuum theory, ferrous metals, magnetoelasticity, Maugin (G.A.), *4140*
- dispersion relation, modes, nonlinear characteristics, plasma, Franklin (R.N.), Edgley (P.D.), (et al.), *4750*
- excitation, inhomogeneities, perturbations, plasma, Chang (M.), *4751*
- cylindrical bodies, scattering, Goel (G.C.), Jain (D.L.), *4803*
- characteristic methods, hyperbolic equations, unsteady flow, Kluwick (A.), *4964*
- concrete, nondestructive tests, radio waves, Laine (E.F.), Dines (K.A.), (et al.), *5262*
- asymptotic behavior, bubble dynamics, chemically reactive flow, liquid gas mixture, modulated systems, Bagdoev (A.G.), Oganyan (G.G.), *5488*
- axial compressors, rotors, stalling, three dimensional flow, Al-Daini (A.J.), Railly (J.W.), *5500*
- holography, underwater acoustics, Wu (W.-T.), *5743*
- porous media, variational methods, Bedford (A.), *5837*
- random media, scattering, Chow (P.L.) eds., Kohler (W.E.), (et al.), *6043, book*
- galactic system, gravity, Lau (Y.Y.), Lin (C.C.), *6044*
- dispersion, finite element techniques, galerkin method, korteweg de vries equation, Sanz-Serna (J.M.), Christie (I.), *6088*
- composite structures, dynamic analysis, plasticity, Skovoroda (A.R.), Shapiro (G.S.), *6195*
- bimodulus materials, elastodynamics, interface cracks, stress intensity factor, Hanzawa (H.), Kishida (M.), (et al.), *6451*
- nonhomogeneous media, scattering, Krylov (V.V.), *6900*
- dispersion, fast fourier transform, pressure change, tubes, Moodie (T.B.), Haddow (J.B.), *6913*
- drift waves, moored vessels, mooring, ship dynamics, Flower (J.O.), *7077*
- hydrodynamic stability, mixtures, polar fluids, Straughan (B.), *7141*
- composite materials, dynamic behavior, laminates, mixture theories, Benveniste (Y.), Aboudi (J.), *7142*
- cables, elastoplasticity, Adylov (K.A.), *7428*
- compressible flow, one dimensional flow, Steketee (J.A.), *7779*
- diffraction, optical techniques, ultrasonics, Riley (W.A.) Jr., *7947*
- analogies, complex variables, conduction (heat), Dunne (E.G.), Mugler (D.H.), *8089*
- mathematical methods, particles, random media, Furutsu (K.), *8339*
- impact, rods, viscoelastic waves, Gaiduk (S.I.), *8343*
- displacement, holography, lasers, modulated systems, optical techniques, Gilbert (J.A.), Herrick (J.W.), *8424*
- approximations, expansion, magneto plasma dynamics, radiation, Shyam (R.), Sharma (J.), (et al.), *8823*
- collision models, heat transfer, plasma, propagation, Namikawa (T.), Hamabata (H.), *8828*
- metals, phase changes, shock waves, vaporization, Goloveiko (A.G.), Martynikhina (V.I.), *8874*
- flexible bodies, oscillating bodies, piles, vortex shedding, Angrilli (F.), Cossalter (V.), *9512*
- barriers, impact, magneto fluid dynamics, streams, Berkovskii (B.M.), Bashtovoi (V.G.), (et al.), *9798*
- dynamic properties, elastic waves, porous media, stratification, Barzam (V.A.), *9897*
- atmospheric circulation, heat transfer (atmospheric), simulation, Lordi (N.J.), Kasahara (A.), (et al.), *9929*
- atmospheric circulation, heat transfer (atmospheric), simulation, Hsu (C.-P.F.), *9930*
- boundary value problems, green function, integral methods, magneto fluid dynamics, Aleksandrova (A.A.), Khiznyak (N.A.), *10749*
- hall effect, korteweg de vries equation, plasma, turbulence (transport), Granik (A.T.), *10758*
- adiabatic processes, discontinuities, plasma, theory, Menon (V.V.), Sharma (V.D.), *10759*
- random media, stochastic systems, Liu (K.C.), *11168*
- finite amplitude, fluid-structure interaction, plates, Hasegawa (E.), *11646*
- isothermal processes, kinetic theory, numerical methods, plasma, Musher (S.L.), *11836*
- annular flow, convection, plasma, theory, Shivamoggi (B.K.), *11837*
- bubble dynamics, two phase flow, Gasenko (V.G.), Nakoryakov (V.E.), (et al.), *12030*

wavy walls, laminar flow, numerical methods, oscillatory flow, Matsunaga (N.), Kaneko (A.), (et al.), *602*

- channel flow, leaks, two dimensional flow, Hasegawa (E.), Fukuoka (N.), *609*
- film flow, reynolds number (small), sloping bottom, Wang (C.-Y.), *1511*
- acoustic waves, reflection, Wirgin (A.), *2951*
- pipe flow, resonance, unsteady flow, Latinopoulos (P.), Tolikas (D.K.), *3711*
- hydrology, roughness, turbulent flow, Melekhova (N.A.), Mikhailova (N.A.), *5915*
- channel flow, laminar flow, pressure drop, runge kutta method, viscous flow, Vajravelu (K.), Nayfeh (A.H.), *7714*
- pipe flow, rotational flow, turbulent flow, Silberman (E.), *7717*

Wawzonek (M.A.), see Parkinson (G.V.), *867*

Way (M.E.), see Brown (T.D.), *1035*

Wazzan (A.R.), boundary layer, reynolds number, shape factors, transition, turbulence, Gazley (C.) Jr., (et al.), *1540*

wear, abrasion, cutting, metals, microstructures, Ramalingam (S.), Wright (P.K.), *435*

- contact stresses, continuum mechanics, friction, lubrication (elastohydrodynamic), rolling contact, Cheng (H.S.) eds., Keer (L.M.), *596, book*
- debris, friction (sliding), high speed, lubricants (liquid), lubrication (boundary), Conor (P.C.), Mcrobie (D.E.), *997*
- debris, friction, friction (solid solid), Suh (N.P.), Sin (H.-C.), *998*
- contact problems, friction, roughness, surface profiles, kragelskii (I.V.), *1002*
- friction (sliding), lubricants (solid), polymers, Sviridenok (A.I.), Savkin (V.G.), *1004*
- adhesion, contact resistance, metals, roughness, Chowdhury (S.K.R.), Pollock (H.M.), *1007*
- friction (sliding), lubrication (boundary), metals, Rabinowicz (E.), *1008*
- friction (sliding), metals, work hardening, x ray techniques, Sasada (T.), Norose (S.), (et al.), *1009*
- cutting, tool wear, Sewailem (M.R.), *1010*
- film thickness, gears (spur), lubricants (liquid), oil films, Hirano (F.), Ichimaru (K.), (et al.), *1016*
- additives, friction, lubricants (liquid), lubrication (boundary), Kragelskii (I.V.), Rybakova (L.M.), (et al.), *1021*
- additives, bearings (journal), graphite, polymers, Korshak (V.V.), Gribova (I.A.), (et al.), *1023*
- gears, lubrication (elastohydrodynamic), oil films, rolling contact, Flamand (L.), Foucher (D.), (et al.), *1027*
- corrosion fatigue, fatigue, fretting, surveys, Waterhouse (R.B.) ed., *1358, book*
- friction, lubrication, survey, Rundesanstalt Fur Materialprufung, *1925, book*
- friction (sliding), high speed, Carignan (F.J.), Rabinowicz (E.), *1926*
- abrasion, particle size, sliding, Bayer (R.G.), *1927*
- abrasion, erosion, hardness, particle size, Misra (A.), Finnie (I.), *1928*
- cutting, friction, Childs (T.H.C.), Kinsella (F.H.), *1929*
- ductility, erosion, particles, Humphrey (J.A.C.), *1930*
- hardness, roughness, surfaces, Ryzhov (E.V.), Gorlenko (O.A.), *1932*
- polymers, roughness, surface profiles, Ryzhov (E.V.), *1933*
- abrasion, hardening, tillage implements, Wingate-Hill (R.), *1934*
- contact stresses, fatigue, gear teeth, kinematics, surface profiles, Huston (R.L.), Coy (J.J.), *2558*
- abrasion, indentation, plastic flow, ploughing, De Vathaire (M.), Delamare (F.), (et al.), *3035*
- friction, leaks, lubrication (hydrostatic), seals, Lebeck (A.O.), *3036*
- failure, friction (sliding), scuffing, sliding, thermoelasticity, Durkee (D.B.), Cheng (H.S.), *3037*
- abrasion, cavitation, erosion, impact, Preece (C.M.) ed., *3038, book*
- cams, sliding, Dyson (A.), *3040*
- additives, aluminum alloys, corrosion, lubrication (boundary), Poole (W.), Sullivan (J.L.), *3041*
- friction (rolling), friction (sliding), lubrication (boundary), steel, Aksenov (A.F.), Belyanskii (V.P.), (et al.), *3042*
- friction (sliding), gears, lubrication (elastohydrodynamic), transmissions, Drozdov (Yu.N.), *3049*
- contact problems, friction (solid solid), Galin (L.A.), Goryacheva (I.G.), *3246*
- erosion, heat treatment, particles, steel, Salik (J.), Buckley (D.H.), *3504*
- abrasion, brittle materials, ductility, friction (sliding), hardness, Beckmann (G.), Westermier (G.), *4106*
- auger analysis, electron spectroscopy, spectroscopy, surfaces, Mathieu (H.J.), Landolt (D.), (et al.), *4116*
- ductility, hardness, steel, Sorokin (G.M.), Oleinikov (N.E.), (et al.), *4516*
- abrasion, deformation (plastic), friction (sliding), metals, Miyoshi (K.), Buckley (D.H.), *4891*
- ferrography, Pocock (G.), Courtney (S.J.), *4893*
- fretting, hardness, oxidation, steel, Kayaba (T.), Iwabuchi (A.), *4894*
- knees, plasticity, prosthetic devices, Walker (P.S.), Ben-Dov (M.), (et al.), *4921*
- abrasion, stress strain relationships, textiles, trials, Raheel (M.), *5136*
- aluminum alloys, crack initiation, fatigue, fractographic tests, fretting, Leadbeater (G.), Kovalevskii (V.V.), (et al.), *5290*
- abrasion, hardness, heat treatment, mechanical properties, steel, Sorokin (G.M.), Milancheva (N.V.), *5334*
- adhesion, chemical reactions, friction, lubricants, lubrication, Buckley (D.H.), *5972, book*
- friction (sliding), heat transfer (direct contact), polymers, Kar (M.K.), Bahadur (S.), *5973*
- electron microscopy, friction (sliding), particles, polymers, Belin (M.), Mansot (J.L.), (et al.), *5975*
- gas turbines, particles, Mucklow (P.A.), *5976*
- abrasion, erosion, particles, Rabinowicz (E.), *5977*

- bearings, friction, lubrication, machine design, Cameron (A.), Ettles (C.M.Mc.), *7078, book*
- friction (sliding), lubricants (liquid), metals, scoring, viscosity, Drozdov (Yu.N.), Archegov (V.G.), *7081*
- bearings (liquid lubricated), friction, lubrication (boundary), Habig (K.-H.), Broszeit (E.), (et al.), *7084*
- forging, friction, steel, Felder (E.), Montagut (J.L.), *7086*
- abrasion, metals, Bhansali (K.), Miller (A.E.), *7087*
- fatigue, mesh generation, surface profiles, thin films, El-Sherbiny (M.G.), Salem (F.B.), *7088*
- aluminum alloys, copper, delamination, finite element methods, friction (sliding), Ohmae (N.), Tsukizoe (T.), *7089*
- experimental methods, friction (sliding), steel, Play (D.), *7090*
- cold working, friction (rolling), friction (sliding), lubrication (boundary), Sethuramiah (A.), Shukla (B.M.), (et al.), *7096*
- cavitation, erosion, rotating disks, testing equipment, Nikulin (V.A.), Konovalov (V.M.), (et al.), *7573*
- deformation (plastic), friction (sliding), surface profiles, Mikhin (N.M.), Frolov (S.V.), (et al.), *8050*
- friction (sliding), heat transfer (direct contact), thermal contact resistance, Amosov (A.P.), *8051*
- brittle materials, erosion, particle size, Marshall (D.B.), Evans (A.G.), (et al.), *8052*
- hardness, machinery, particles, Grosse (S.), *8053*
- entropy, strain energy, thermodynamics, Klamecki (B.E.), *8054*
- adhesion, cutting, diffusion, magnetic field, tool wear, Muju (M.K.), Ghosh (A.), *8055*
- elastomers, friction (solid fluid), seals, surfaces, Varga (G.), Toth (O.), *8477*
- bearings, lubricants, machinery, prediction, Godet (M.), *9017*
- friction (sliding), metallography, metals, Blau (P.J.), *9019*
- failure, hardness, rolling contact, thermal effects, Rozeanu (L.), Pnueli (D.), *9022*
- diesel engines, prediction, probability theory, Lausch (W.), Biemann (W.), (et al.), *9024*
- abrasion, friction (sliding), lubrication (boundary), Jahanmir (S.), *9947*
- carbides, coatings, friction (sliding), gases, high pressure, lubricants (gas), Skinner (J.), *9948*
- ferrography, lubricants (liquid), lubrication, particles, Kjer (T.), *9949*
- abrasion, friction (sliding), metals, Spurr (R.T.), *9951*
- additives, antiwear films, chemical reactions, fatigue, films, lubrication (elastohydrodynamic), rolling contact, Sakurai (T.), *9961*
- additives, friction (rolling), friction (sliding), lubrication (boundary), Martin (J.-M.), Georges (J.-M.), *9979*
- energy conservation, friction, lubrication, tribology, Jost (H.P.), Schofield (J.), *9980*
- biological joints, friction, prosthetic devices, tribology, Dumbleton (J.H.), *10882*
- computer analysis, holography, roughness, surface profiles, Groves (D.), Lalor (M.J.), (et al.), *10897*
- fracture mechanics, friction (solid solid), models, stress intensity factor, Rosenfield (A.R.), *12090*

weather forecasting, finite difference methods, forecasting, Kalenkovich (E.E.), *989*

- atmospheric circulation, clouds, forecasting, Falkovich (A.I.), *1903*
- atmospheric circulation, forecasting, Anzhina (G.I.), Mashkovich (S.A.), *1914*
- forecasting, heat transfer (atmospheric), Shteinbok (D.B.), *3022*
- atmospheric circulation, finite difference methods, Penenko (V.V.), Obraztsov (N.N.), *4055*
- atmospheric circulation, climatology, Kontarev (G.P.), *4059*
- atmospheric circulation, cyclones, Shakins (N.P.), *4062*
- forecasting, meteorology (physical), Ivakhnenko (A.G.), Rao (M.G.), *4067*
- atmospheric circulation, climatology, meteorology (physical), ocean air interaction, Marchuk (G.I.), *4069*
- atmospheric circulation, heat transfer (atmospheric), meteorology (physical), Dymnikov (V.P.), Ishimova (A.V.), *4070*
- forecasting, meteorology (physical), ocean air interaction, Ryasin (V.A.), *4071*
- forecasting, meteorology (physical), weather satellites, Gubanova (S.I.), Mashkovich (S.A.), (et al.), *4078*
- forecasting, meteorology (physical), Belousov (S.L.), *4083*
- balloons, data acquisition, meteorology, Dushkin (P.K.), Belov (A.I.), (et al.), *4090*
- ice, icebergs, oceanography, surface flow, Gebhart (B.), Audunson (T.), *5953*
- meteorology (physical), numerical methods, Matsumura (T.), Ookochi (Y.), *5956*
- boundary conditions, forecasting, meteorology (physical), Gordin (V.A.), Dolmatov (B.K.), *5957*
- meteorology (physical), Romov (A.I.), *5958*
- forecasting, meteorology, precipitation, Kenzhibaev (A.T.), Petrichenko (I.A.), *12082*

weather satellites, forecasting, meteorology (physical), weather forecasting, Gubanova (S.I.), Mashkovich (S.A.), (et al.), *4078*

- meteorology, Hinkley (E.D.), *4888*
- artificial satellites, communication satellites, trajectory optimization, Contant (J.-M.), Winkels (H.-M.), (et al.), *7925*
- artificial satellites, manned satellites, reentry, Rex (D.), *10780*
- surface waves, velocity measurement, wave height, wind, Martsinkevich (L.M.), *12083*

Weaver (D.S.), damping, tube bundles, vibration (flow induced), virtual mass, El-Kashlan (M.), *2712*

- creep buckling, experimental methods, tube bundles, vibration (flow induced), El-Kashlan (M.), *3715*

Weaver (R.L.), acoustic waves, boundary conditions, scattering, Pao (Y.-H.), *4782*

web openings, cellular structures, elastic behavior, plates (anisotropic), shear lag, Evans (H.R.), Shanmugam (N.E.), *3292*

- beams (composite), beams (variable cross section), concrete, fracture mechanics, stress analysis, Swartz (S.E.), Eliufoo (K.S.), *3294*

Webb (D.R.), condensation, mass transfer, multicomponent flow, tubes, Sardesai (R.G.), *7870*

Webb (D.R.) eds., energy conversion, fluid power, hydraulics, Papadakis (D.N.), *7800, book*

Webb (R.L.), augmentation, fins, heat exchangers, *785*

- augmentation, condensation, convection (forced), fins, heat exchangers, *2827*
- see Scott (M.J.), *9613*

Webb (S.E.), elastoplasticity, large displacement, nonlinear theory, plates (stiffened), Dowling (P.J.), *6227*

Webber (J.P.H.), see Thomas (I.T.), *11117*

Weber (C.), see Van Nieuwland (J.M.), *5775*

Weber (H.), bifurcation, computing techniques, differential equations (ordinary), perturbation theory, *5015*

- elastodynamics, elastoplasticity, plates (annular), rotating disks, Dreher (A.), *10161*

Weber (J.E.), geostrophic flow, hydrodynamic stability, stratified flow, *2684*

Weber (M.E.), see Bhaga (D.), *8906*

- nonlinear waves, shock waves, sonic booms, sound propagation, supersonic flow, Donn (W.L.), *11916*

Weber (R.), artificial satellites, cables, flexible bodies, space vehicle structures, tethered systems, Wehrli (R.), *4758*

Webster (D.A.), acoustic waves, nonlinear waves, shock waves, Blackstock (D.T.), *2704*

Webster (R.L.), geometric nonlinearities, iterative methods, nonlinear analysis, structural analysis, *7198*

Webster (W.D.) Jr., approximations, computing techniques, finite element techniques, interpolation, isoparametric elements, *3133*

Wedekind (G.L.), see Beck (B.T.), *2987*

wedges, elasticity (linear), singularities, stress concentration, stresses, Dempsey (J.P.), *238*

- boundary value problems, edge cracks, Kipnis (L.A.), *240*
- combined loading, slip line methods, Collins (I.F.), *271*
- failure, rocks, Lucas (J.M.), *428*
- cavitation flow, free boundary, singularities, Sotina (N.B.), Fominykh (V.V.), *1503*
- acceleration, compressible flow, supersonic flow, Bulakh (B.M.), *1521*
- crack opening displacement, crack propagation, energy-release rate, Yatomi (C.), *2448*
- conical bodies, shock waves, stability theory, supersonic flow, Rusanov (V.V.), Sharakshanae (A.A.), *2680*
- bimodulus materials, interface cracks, Vainshelbaum (V.M.), Goldshtein (R.V.), (et al.), *3475*
- finite element techniques, fracture mechanics, stress intensity factor, three dimensional formulation, torsion, Tseng (A.A.), Berry (J.T.), *3477*
- acoustic waves, barriers, diffraction, Poruchikov (V.B.), *3936*
- composite structures, stress concentration, Dempsey (J.P.), Sinclair (G.B.), *4335*
- conical bodies, deformation, flexible bodies, pressure distribution, supersonic flow, Belyaev (N.M.), Khrushch (V.K.), *4585*
- acoustic waves, barriers, diffraction, Borovikov (V.A.), *4780*
- boundary value problems, laplace equation, mellin transform, singular integral equations, transforms, Chakrabarti (A.), *4979*
- diffraction, elastic waves, Israilov (M.Sh.), *5245*
- estuaries, stratified flow, Grubert (J.P.), *5392*
- air water entry, cavities, fredholm equations, inviscid fluid, Kuznetsov (A.V.), *5957*
- anisotropic media, composite materials, edge effects, stress concentration, Ting (T.C.T.), Chou (S.C.), *7269*
- interaction, shock tubes, shock waves, Beryozkina (M.K.), Syshchikova (M.P.), (et al.), *7778*
- nonlinear materials, porous media, viscoelastic materials, Kolokolchikov (V.V.), *8194*
- indentation, machinability, slip line methods, Petryk (H.), *8406*
- rarefied gases, Tiem (D.H.), *8555*
- boundary layer, fluid injection, oscillators, supersonic flow, Komienko (E.S.), Shmanenkov (V.N.), *8562*
- hulls, hydroelasticity, penetration, ship slamming, Gorshkov (A.G.), Vakalov (G.N.), *8628*
- joints, limit analysis, rocks, Chan (H.C.), Einstein (H.), *9372*
- crack opening displacement, dislocations, Maiti (M.), Paramguru (R.), *9396*
- channel flow, channels (divided), flow obstructions, poiseuille flow, Zamir (M.), Camiletti (S.E.), *9575*

- convection (forced), laminar flow, non newtonian flow, unsteady flow, Gorla (R.S.R.), *9706*
- edge effects, harmonic waves, propagation, waveguides, Grinchenko (V.T.), Meleshko (V.V.), *10228*
- diffraction, shock waves, Pekurovskii (L.E.), *10494*
- acoustic waves, acoustics, barriers, diffraction, Bhattacharyya (S.), *10800*
- impact, plates (sandwich), Rimskii (V.K.), Sabodash (P.F.), *11176*
- discontinuities, discrete systems, granular media, Trollope (D.H.), Burman (B.C.), *11330*
- bubbly flow, cavitation flow, compressible flow, Tetsuo (N.), Khan (O.F.), *11420*
- channels, leading edge, missiles, supersonic flow, Chushkin (O.I.), *11732*

Wedig (W.), cracks, mathematical methods, nonlinear analysis, random excitation, stochastic systems, *360*
- beams, mathematical methods, random excitation, vibration (random), *361*
- cracks, flaw detection, spectral analysis, vibration (nonlinear), Brautgam (H.), *5205*

Wedzicha (B.L.), dynamic behavior, dynamic testing, transducers (displacement), Miles (R.E.), *489*

Weeks (G.E.), composite structures, elastic behavior, missiles, random loading, stochastic systems, viscoelasticity, Cost (T.L.), *7301*
- computing techniques, flexible bodies, launching, rockets, spinning bodies, Cost (T.L.), *7922*

Wehage (R.A.), computing techniques, dynamic analysis, mathematical methods, Haug (E.J.), *10197*

Wehrli (R.), see Weber (R.), *4758*

Wei (R.-J.), absorption, mass transfer, sound, Wu (J.-R.), *6996*

Wei (R.P.), aluminum alloys, crack growth, fatigue, overloads, Fenelli (N.E.), (et al.), *1405*
- corrosion fatigue, crack growth, environmental tests, fatigue, Simmons (G.W.), *7477*

Wei (S.), crack tip geometry, fracture, fracture toughness, plane strain, specimen design, Tingshi (Z.), (et al.), *10338*

Wei (Y.-J.P.), see Shieh (L.-S.), *9158*

weibull statistics, life expectancy, reliability analysis, stochastic systems, Ishikawa (H.), Tanimoto (T.), (et al.), *47*
- beams, shear strength, wood structures, Liu (J.Y.), *1433*
- beams (sandwich), composite materials, fatigue, wood, Kyanka (G.H.), *3280*
- probability, stochastic processes, wind loads, Simiu (E.), Filliben (J.J.), *4171*
- curve fitting, fatigue, high temperature, life expectancy, Hasegawa (N.), Hirose (M.), (et al.), *5283*
- biaxial loading, brittle fracture, fracture, stochastic processes, Matsuo (Y.), *5295*
- composite materials, fatigue, graphite, life expectancy, resins, Shimokawa (T.), Hamaguchi (Y.), *6203*
- beams, brittle fracture, failure, probability, Kittl (P.), Camilo (G.M.), *6443*
- endurance limit, estimation, fatigue, Sakai (T.), Iwaya (T.), (et al.), *7511*
- cements, copper, interface cracks, stochastics, Kittl (P.), Galleguillos (E.), *8225*

Weidlinger (P.), see Parnes (R.), *969*

weighted residual methods, finite element techniques, galerkin method, probability theory, Bergman (L.A.), Heinrich (J.C.), *10033*
- dynamic response, heat exchangers (crossflow), mathematical models, numerical methods, Terasaka (H.), Kanoh (H.), (et al.), *10618*
- convection, diffusion, Jensen (O.K.), Finlayson (B.A.), *10694*

Weiland (C.), blunt bodies, compressible flow, supersonic flow, transonic flow, *11394*

Weiland (J.), see Kirk (J.), *865*

Weiland (R.H.), see Do (D.D.), *5626*

Weill (A.), dies, extrusion, polymers, *8495*

Weilmuenster (K.J.), blunt bodies, finite difference methods, shock waves, supersonic flow, Graves (R.A.) Jr., *4594*

Weimer (A.W.), fluidized beds, gasification, particle size, Clough (D.E.), *5845*
- fluidized beds, gasification, particle size, Clough (D.E.), *7987*

Weimer (F.C.), see Hemami (H.), *1063*

Weinberg (H.), layered media, ocean bed, sound propagation, *11896*

Weinberg (N.L.), see Flanagan (R.P.), *918*

Weiner (A.M.), see Rogers (P.H.), *1614*

Weinert (W.), calibration, nozzles, supersonic flow, wind tunnels, *6743*

Weinitschke (H.J.), axisymmetric loading, membranes, nonlinear theory, *4371*

Weinstein (M.), hydrodynamic stability, multiple scales, nonlinear theory, poiseuille flow, *6678*

Weinstock (J.), atmosphere, shear flow, specira, stratified flow, turbulence (geophysical), *9607*

weirs, gates, hodograph methods, Han (T.Y.), Chow (W.L.), *3600*
- canals, discharges, flumes, head, Bos (M.G.), Reinink (Y.), *3601*
- channel flow, free boundary, jets, mixing, velocity measurement, Naib (S.K.A.), *4576*
- aeration, cavitation flow, separation, Berman (Ya.R.), *6605*
- models, scale effects, siphons, surface tension, Goldring (B.T.), *7542*
- discharges, internal flow, irrotational flow, orifices, Cranfield (R.R.), *10390*
- aeration, free boundary, gravity waves, jets, Rogala (R.), *10392*
- basins, channel flow, critical flow, rotating bodies, Shen (C.Y.), *11614*

Weiser (A.), collocation, computer programming, elliptic equations, finite element methods, galerkin method, rayleigh ritz method, Eisenstat (S.C.), (et al.), *6096*

Weisman (J.), liquid gas mixture, pipelines, transition, two phase flow, Duncan (D.), (et al.), *1850*

Weiss (B.), see Mullner (H.), *444*

Weiss (H.), design, estimation, kalman filters, tracking, Moore (J.B.), *119*
- see Bimboim (M.H.), *5520*

Weiss (R.), see De Hoog (E.R.), *3099*

Weissman (Y.), see Finkelstein (L.), *6806*

Weissmann (G.F.), bending, damping, fatigue, material testing, metals, *6421*

Weitsman (Y.), adhesives, bonded joints, nonlinear materials, viscoelastic materials, *2227*
- bonded joints, residual stresses, thermal stresses, *2975*

Welander (P.), circulation, ocean air interaction, oceanography, vorticity, *8031*

Welaya (Y.), see Kuo (C.), *8043*

Welbourn (D.B.), automobiles, casting, computer aided design, tools, Cox (G.M.A.), *3426*

welded joints, offshore structures, residual stresses, shells (cylindrical), White (J.D.), *529*
- deformation, life expectancy, low cycle fatigue, resistance, Daunis (M.A.), Daunene (S.A.), *1352*
- bending, ductility, tests, Welding Research Council, *1475*
- aluminum alloys, fracture toughness, porosity, porous media, Mccarthy (W.A.) Jr., Lamba (H.), (et al.), *1476*
- flaw detection, microprocessors, nondestructive tests, ultrasonics, Rose (J.L.), Nestleroth (J.B.), (et al.), *2481*
- rails, stress analysis, thermal effects, Edel (K.-O.), *2526*
- cracks, flaw detection, nondestructive tests, pressure vessels, radiography, x ray techniques, Ruescher (E.H.), Graber (H.C.), *3507*
- aluminum alloys, deformation (plastic), stress concentration, Demina (N.I.), Zastolskaya (Z.K.), (et al.), *3584*
- bonded joints, shear strength, Bolshakov (A.P.), Novikov (S.A.), (et al.), *3585*
- casting, flaw detection, radiography, x ray techniques, Closier (M.J.), *5318*
- elastoplasticity, plates (circular), thermal loading, work hardening, Makhnenko (V.I.), Oleinik (V.A.), (et al.), *5796*
- corrosion fatigue, crack growth, environmental tests, steel, Davis (D.A.), Czyryca (E.J.), *6428*
- brazed joints, creep rupture, soldering, Williams (J.A.), *6429*
- nondestructive tests, reflection, surface flaws, ultrasonics, Perevalov (S.P.), Raikhman (A.Z.), *6489*
- deformation, fracture, welding, Daunis (M.A.), Brazhenas (A.P.), *6567*
- flaw detection, stainless steel, ultrasonics, Tomlinson (J.R.), Wagg (A.R.), (et al.), *7580*
- cracks, flaw detection, time domain techniques, ultrasonics, Silk (M.G.), Lidington (B.H.), (et al.), *7583*
- bending, butt welding, fatigue, welding, Lawnicki (J.J.), Cutler (V.C.), *7638*
- computing techniques, residual stresses, Brust (F.W.), Rybicki (E.F.), *8367*
- beams, buckling (experimental), lateral stability, statistical design, Fukumoto (Y.), Itoh (Y.), *9285*
- aluminum alloys, tension, ultrasonic welding, Renshaw (T.), Sarrantonio (A.), *9486*
- elastoplasticity, explosives, stress relieving, Petushkov (V.G.), Fadeenko (Yu.I.), *10382*

welded structures, beams, fatigue, steel, textiles, Bardell (G.R.), Kulak (G.L.), *495*
- aluminum alloys, control, structural analysis, structures, welding, Papazoglou (V.J.), Masubuchi (K.), *2173*
- collapse, columns, failure, framed structures, structural analysis, Kanba (T.), Kanatani (H.), (et al.), *6244*
- fatigue, seismic loading, Kaneta (K.), Kohzu (I.), *7045*
- dugdale model, fracture criteria, fracture mechanics, pipelines, De Wit (R.), Smith (J.H.), *7531*

welding, cyclic loading, fracture mechanics, missiles, Hrisafovic (N.), Lodey (J.P.), *1394*
- aluminum alloys, control, structural analysis, structures, welded structures, Papazoglou (V.J.), Masubuchi (K.), *2173*
- cracking, elastoplasticity, finite element techniques, stress concentration, Karppi (R.A.J.), Toyoda (M.), (et al.), *2461*
- hopkinson bar, materials properties, radioactivity, reactor structures, strain rate, temperature, tension, Albertini (C.), Montagnani (M.), (et al.), *2488*
- electroslag welding, nondestructive tests, surfaces, Ries (H.), Brezina (P.), (et al.), *2571*
- forming, materials properties, nuclear reactors, pressure vessels, structural materials, Nichols (R.W.) ed., *3564, book*
- buckling, cold working, shells (cylindrical), shells (stiffened), stiffened structures, Bushnell (D.), *6262*
- holes, residual stresses, shafts, stress relieving, Bush (A.F.), Kromer (F.J.), *6467*
- deformation, fracture, welded joints, Daunis (M.A.), Brazhenas (A.P.), *6567*
- composite materials, explosive welding, Khanov (A.M.), Yakovlev (I.V.), *6569*
- bending, butt welding, fatigue, welded joints, Lawnicki (J.J.), Cutler (V.C.), *7639*
- conduction (heat), electron beam welding, Miyazaki (T.), Giedt (W.H.), *8735*
- heat transfer, liquid metals, magneto fluid dynamics, models, Atthey (D.R.), *8818*
- liquid metals, magneto fluid dynamics, mixing, unsteady flow, Chernysh (V.P.), Shalda (L.M.), *10754*

Welding Research Council, bending, ductility, tests, welded joints, *1475*
Well (K.H.), aerodynamic performance, airplanes, maneuverability, optimization, stalling, Faber (B.), (et al.), *9660*
Weller (R.A.), mixing layers, ocean air interaction, velocity measurement, velocity profiles, *7067*
Wellford (L.C.), computing techniques, iterative methods, nonlinear structures, relaxation methods, structural analysis, Sen (H.), *8131*
Wellford (L.C.) Jr., iterative methods, linear equations, nonlinear systems, Vahdani (B.), *6108*
- finite element techniques, nonlinear structures, postbuckling behavior, Dib (G.M.), *6240*
- compressible flow, finite element techniques, stability (numerical), transonic flow, Hafez (M.M.), *6629*
- finite element methods (hybrid), finite element techniques, fluid mechanics, free boundary, sloshing, solitary waves, Ganaba (T.H.), *9146*

Wellmann (J.), compressible flow, drag, entropy, supersonic flow, wave drag, *1522*
wells, air, entrainment, suction, vortices, Anwar (H.O.), Amphlett (M.B.), *5389*
- drainage, groundwater, hydraulics, Ollos (G.), *7975*
- phase changes, pressure change, Fair (W.B.) Jr., *7985*
- geothermal reservoirs, storage, Miller (C.W.), *7996*
- geothermal reservoirs, nonlinear characteristics, two phase flow, Sorey (M.L.), Grant (M.A.), (et al.), *9903*
- finite difference methods, mathematical models, reservoirs, three dimensional formulation, Trimble (R.H.), Mcdonald (A.E.), *10059*
- asymptotic methods, boundary layer, buoyant flow, convection (free), stokes flow, De Socio (L.M.), Gaffuri (G.), (et al.), *10568*

Wells (W.R.), airplanes, frequency response, lateral stability, unsteady flow, Banda (S.S.), (et al.), *6730*
- airplanes, algorithms, lift, longitudinal stability, unsteady effects, Keskar (D.A.), *11735*

Wellstead (P.E.), adaptive systems, control, optimal control, pole placement, Edmunds (J.M.), (et al.), *186*
Welsh (W.), algorithms, boundary value problems, computing techniques, discontinuities, Ojika (T.), *9122*
Welskopf (H.), see Siemer (H.), *7328*
Welton (P.J.), cylindrical bodies, elastic bodies, scattering, ultrasonics, De Billy (M.), (et al.), *3950*
Welygan (D.G.), contact angle, drops, surface profiles, surface tension, viscosity, Burns (C.M.), *8491*
Wen (S.-L.), gravity waves (surface), sloping bottom, theorems, uniqueness, Sastry (M.S.K.), *11571*
Wen (Y.-K.), see Baber (T.T.), *9106*
Wendroff (B.), see Dendy (J.E.) Jr., *3875*
Wendt (J.F.) ed., fluid mechanics, lasers, lasers (gasdynamic), *1643, book*
Wenger (A.P.), density, measurements (dynamic), vibration, viscous effects, *3754*
Wenglarz (R.A.), axial turbines, blades, cascades, combustion products, erosion, particles, synthetic fuels, Menguturk (M.), *8907*
Wenston (P.R.), boundary value problems, differential equations (partial), iterative methods, *4162*
Wentz (W.H.) Jr., airfoil characteristics, flaps, pressure distribution, Fiscko (K.A.), *3730*
Wereldsma (R.), girders, ship design, vibration (flow induced), *4087*
- hull propeller interaction, hydroelasticity, structural response, vibration (flow induced), *9943*

Werle (H.), separated flow, swept wings, visualization, *1618*
- separation, three dimensional flow, transition, two dimensional flow, visualization, *4685*

Werle (M.J.), see Srivastava (B.N.), *11428*
- see Vatsa (V.N.), *11517*

Wernerowski (K.), bearings (gas lubricated), bearings (thrust), lubricants (gas), reynolds equation, vibration, *9966*
- bearings (gas lubricated), deformation, diaphragms, pressure distribution, *8967*

Wesolowski (Z.), crack propagation, cracks, discontinuities, infinite medium, time dependence, *6452*
- see Seeger (A.), *10935*

Wesson (R.L.), creep, earthquakes, faults, prediction, water levels, *9906*
West (H.H.), see Geschwindner (L.F.) Jr., *4409*
West (J.M.), glass fibers, mechanical properties, polymers, Majumdar (A.J.), (et al.), *291*
West (J.R.), channel flow, diffusion coefficient, rivers, water pollution, Cotton (A.P.), *11777*
Westerfield (E.C.), see Stewart (J.L.), *3954*
Westermier (G.), see Beckmann (G.), *4106*
Westermo (B.D.), beams, dynamic response, vibration (free), *4410*
- cylindrical bodies, fluid-structure interaction, submerged bodies, tube bundles, *6703*

Westervelt (P.J.), see Woodsum (H.C.), *2945*
Westin (H.), girders, hulls, ships, torsion, *10876*
Weston (D.E.), sound propagation, underwater acoustics, *5727*
- see Tindle (C.T.), *5747*
- ducts, sound propagation, underwater acoustics, *7933*
- acoustic waves, modes, reflection, underwater acoustics, Tindle (C.T.), *11913*

Westphal (L.C.), adaptive systems, design, linear systems, observers, *4323*
Westphal (R.V.), boundary layer, flow reversal, heat tracer, incompressible flow, shear stress, two dimensional flow, velocity measurement, Eaton (J.K.), (et al.), *8664*
Westwater (J.W.), see Woodruff (D.W.), *10576*
Westwood (A.R.C.), see Mills (J.J.), *8353*
Wetherhold (R.C.), composite materials, data analysis, failure, reliability, triaxial loading, *2245*
Weverbergh (M.), see Naert (P.A.), *3215*
Weymouth (L.J.), containment, nuclear reactors, reliability, structure, testing equipment, vessels, *488*
Whalley (P.B.), see Hewitt (G.F.), *948*
- helical flow, liquid gas mixture, tubes, two phase flow, *1845*

Whatham (J.F.), bending (elastic), bends, pressurized pipes, shells (cylindrical), shells (thin), *6220*
Wheeler (A.A.), crystals, freezing, heat transfer, mass transfer, *5613*
Wheeler (J.D.), ice mechanics, loads, offshore structures, probabilistic design, *3524*
Wheeler (L.T.), cavities, infinite medium, stress concentration, Kunin (I.A.), *8188*
Wheeler (M.F.), see Ewing (R.E.), *9904*
wheels, dynamic testing, measurements (dynamic), rails, Ahlbeck (D.R.), Harrison (H.D.), *16*
- derailment, dynamic analysis, railroads, statistical design, Cherchas (D.B.), *1062*
- contact problems, friction (rolling), tires, Browne (A.L.) eds., Tsai (N.T.), *1454, book*
- contact stresses, rails, Kumar (S.), Rajkumar (B.R.), *1455*
- contact stresses, tires, Jenkins (J.T.), *1458*
- dynamic stability, rails, vibration (parametric), Korb (J.), *1986*
- railroads, web design, Esaulov (V.P.), *2282*
- highways, loads, soils, Corapcioglu (M.Y.), Ural (A.N.), *3416*
- dynamic response, rails, stability derivatives, Burton (T.D.), *4147*
- finite element methods, stress analysis, turbines, Golovin (O.A.), Matveev (A.P.), (et al.), *4384*
- dynamic response, kinematics, railroads, De Pater (A.D.), *4941*
- derailment, dynamic analysis, experimental mechanics, rails, Sweet (L.M.), Karmel (A.), *6056*
- articulated vehicles, kinematics, sliding, slipping, vehicles, Dudzinski (P.), *8096*
- dynamic stability, rotating bodies, Goncharenko (V.I.), Lobas (L.G.), (et al.), *9088*
- adhesion, friction (rolling), rails, rolling contact, Furmanik (K.), *9978*

whirling shafts, bearings (journal), damping, lubrication (hydrodynamic), surface profiles, Garner (D.R.), Lee (C.S.), (et al.), *3052*
- bearings (journal), lubricants (liquid), lubrication (hydrodynamic), reynolds equation, Murata (S.), Miyake (Y.), (et al.), *5995*
- bearings (gas lubricated), bearings (journal), dynamic behavior, lubrication (hydrostatic), Mori (A.), Aoyama (K.), (et al.), *8066*
- bearings (journal), bearings (tilted pad), lubrication (hydrodynamic), Malik (M.), Sinhasan (R.), (et al.), *10376*

Whitbeck (R.F.), analytical methods, digital control, frequency domain techniques, frequency response, Didaleusky (D.G.J.), (et al.), *4258*
White (C.C.) III, computer aided manufacturing, operations research, optimization, process control, *3216*
White (D.), caustics, sound propagation, underwater acoustics, *11911*
White (D.L.), elastoplasticity, trusses, uniqueness, Hodge (P.G.) Jr., *4541*
White (D.N.), blood flow, doppler effect, experimental methods, spine, Ketelaars (C.E.J.), (et al.), *6024*
White (G.C.), see Duthie (G.), *10163*
White (J.D.), offshore structures, residual stresses, shells (cylindrical), welded joints, *529*
White (J.E.), cylindrical waves, layered media, rocks, Tongtaow (C.), *5241*
- convection (forced), frost, plates, Cremers (C.J.), *10660*

White (J.L.), see Tanaka (H.), *7639*
- constitutive equations, particulate flow, polymers, viscoelastic fluids, Tanaka (H.), *7645*
- constitutive equations, creeping flow, plastic flow, viscoelastic fluids, *8086*

White (J.W.), airfoil characteristics, complex variables, incompressible flow, potential flow, two dimensional flow, *7785*
White (L.W.), boundary conditions, boundary value problems, control, controllability, parabolic equations, pseudoparabolic equations, *4205*
White (R.A.), see Velinsky (S.A.), *3384*
- see Korst (H.H.), *3681*
- see Wagner (B.), *7689*
- see Korst (H.H.), *9658*

White (R.G.), compression, dynamic behavior, plates (isotropic), vibration (forced), Teh (C.E.), *369*
White (R.K.), see Marnell (P.), *5996*
White (R.N.), containment, reinforced concrete, seismic loading, slabs, stiffness, strength, Perdikaris (P.C.), (et al.), *1462*
White (W.), eddy diffusivity, ocean, oceanography, Bernstein (R.), *8019*
White (W.R.), see Bettess (R.), *7656*

Whitehead (J.A.) Jr., energy conversion, ocean, rotating fluids, singularities, sinks, stratified flow, Gershenfeld (N.), *10411*
Whitelaw (J.H.), see Morse (A.), *706*
- see Morse (A.P.), *1758*
- see Khan (Z.A.), *2665*
- see Taylor (A.M.K.P.), *3673*

Whitfield (D.L.), boundary layer (turbulent), separation, viscid inviscid flow, Swafford (T.W.), (et al.), *6638*
Whitfield (J.D.), aerodynamic performance, data acquisition, digital analog computation, wind tunnels, Pate (S.R.), (et al.), *4689*
Whiting (R.D.), bodies (liquid filled), inertial waves, reynolds number, rotating cylinders, *11684*
Whitman (A.M.), see Clark (A.V.) Jr., *11634*
Whitman (R.V.), buildings, earthquake engineering, Heger (F.J.), (et al.), *5896*
Whitney (A.K.), see Chung (J.S.), *8626*
Whitney (D.E.), automation, computer aided manufacturing, machinery, manipulators, robotics, *10093*
Whitney (W.J.), blades, design, performance, turbines, Moffitt (T.P.), (et al.), *3742*
Whittaker (J.M.), dynamic analysis, lagrange equations, *1982*
Whittaker (V.N.), see Ibrahim (S.I.), *10275*
Whitten (B.T.), see Ben-Dor (G.), *3760*
Whitten (R.C.), airplanes, chemical reactions, ozone, upper atmosphere, Borucki (W.J.), (et al.), *4065*
Whittenberger (J.D.), creep, dispersion hardening, mechanical properties, nickel alloys, tensile strength, *3500*
Whittle (M.W.), see Thurston (A.J.), *9071*
Whitton (P.N.), see Fox (M.J.H.), *3387*
Whorlow (R.W.), biomechanics, rheology, shear flow, viscometry, *2578, book*
Whyte (R.H.), ballistics (exterior), flight tests, missiles, subsonic flow, Winchenbach (G.L.), (et al.), *6722*
wick, electro fluid dynamics, heat pipes, heat transfer, liquid vapor interface, Bologa (M.K.), Kozhukhar (I.A.), (et al.), *791*
- convection, heat pipes, heat transfer, liquid vapor interface, Frolov (V.F.), Vernikov (E.M.), (et al.), *1717*
- solar distillation, solar energy, Sodha (M.S.), Kumar (A.), (et al.), *2833*
- heat pipes, Semena (M.G.), *5600*
- capillary flow, heat pipes, viscous effects, Shibayama (S.), Morooka (S.), *10628*
- condensers, heat pipes, vapor gas interface, variable thermal properties, Van Der Vooren (J.), Delil (A.A.M.), (et al.), *10629*
- condensers, contact fronts, heat pipes, variable thermal properties, Van Der Vooren (J.), Sanderse (A.), *10630*

Wickens (R.H.), airplanes, ground effect, simulation, vortices, wakes, *1619*
- airplanes, lift, potential flow, sprays, streamlines, trajectories, vortices, *1620*

Widener (M.W.), acoustic measurements, transducers, ultrasonics, *3983*
Widera (G.E.O.), asymptotic behavior, layered media, shells, tubes, Johnson (M.W.), (et al.), *289*
Widnall (S.E.), aerodynamic interference, blades, helicopters, noise (aerodynamic), vortex lines, Wolf (T.L.), *8648*
Wiederrich (J.L.), cams, design criteria, modal analysis, vibration, *6555*
- see Kwong (C.W.), *7627*

Wielopolski (P.), binary flow, critical region, liquid vapor mixture, mixtures, thermodynamic properties, *11759*
wiener-hopf technique, interface cracks, propagation, semi infinite media, viscoelasticity, Sills (L.B.), Benveniste (Y.), *1376*
- computing techniques, eigenvalues, electromagnetic waves, radiation, Siewert (C.E.), *2031*
- algorithms, lyapunov's functions, stochastic control, tracking, trajectories, Afanasev (V.N.), Danilina (A.N.), *2137*
- crack propagation, photoelasticity, stress intensity factor, Bandyopadhyay (S.N.), Deysarker (H.K.), *2430*
- interface cracks, refraction, shear cracks, Kuliev (V.D.), *2452*
- crack propagation, stress intensity factor, strips, viscoelasticity (dynamic), Popelar (C.H.), Atkinson (C.), *3468*
- propagation, quenching, Caflisch (R.E.), Keller (J.B.), *6973*
- group theory, hilbert space, integro differential equations, mathematical methods, transport phenomena, Van Der Mee (C.V.M.), *8118*
- crack branching, interface cracks, stress intensity factor, transforms, Kuliev (V.D.), *8417*
- design, filters, kalman filters, optimization, Melnikov (B.G.), *9180*

Wierschem (T.), control, design, position control, servomechanisms, state space techniques, *9190*
- control, design, hydraulic machinery, position control, state space techniques, *9191*

Wierum (F.A.), see Grissom (W.M.), *2839*
Wierzcholski (K.), bearings (journal), bearings (magnetic), ferrofluids, magneto fluid dynamics, non newtonian flow, *1026*
- see Pytko (S.), *4900*
- bearings (journal), magnetic fluids, magneto fluid dynamics, roughness, surfaces, *6000*

Wiesel (W.), periodic orbits, planetary satellites, resonance, solar system, stability theory, *872*
Wiesel (W.E.), floquet theory, lunar theory, periodic orbits, periodic orbits, planetary satellites, planetary satellites, solar system, solar system, *6876*
Wiesner (T.J.), foundations, piles, scale models, soil structure interaction, soils, Brown (P.T.), *3409*
Wigeland (R.A.), honeycomb structures, turbulence (freestream), wind tunnels, Tan-Atichat (J.), *10540*
Wigglesworth (C.J.), see Sengupta (A.K.), *10241*
Wight (J.K.), see Scribner (C.F.), *4038*
Wiin-Nielsen (A.C.), see Kallen (E.), *8987*
Wijk (G.), rocks, sclerography, tests, *5270*
- point load test, rocks, tensile strength, *7453*
- rocks, strength, tensile strength, *10263*

Wilbur (P.J.), argon, ionic propulsion, thrusters, xenon, Kaufman (H.R.), *5666*
Wilby (C.B.), slabs, ultimate strength, *4367*
Wilby (P.G.), aerodynamic interference, airplane structures, fuselages, geometrical properties, helicopters, rotors, Young (C.), (et al.), *4673*
Wilcock (D.F.), bearings (thrust), lubrication (hydrodynamic), lubrication (hydrostatic), turbulence, *9029*
Wilcox (R.E.), doppler effect, sound speed, tracking, underwater acoustics, *5762*
Wilcox (W.R.), see Meyyappan (M.), *12038*
Wild (G.), absorption, bubble dynamics, two component flow, two phase flow, Schlunder (N.), (et al.), *1864*
Wilde (D.J.), see Papalambros (P.), *1474*
Wildheim (J.), dynamic properties, rotating bodies, vibration, *1288*
Wiley (J.T.), see Barron (R.M.), *8892*
Wilhelm (M.), alloys, crystals, cyclic loading, fatigue, stress strain relationships, *2241*
Wilhelmson (R.B.), see Klemp (J.B.), *4885*
Wilk (K.), see Petela (R.), *3863*
Wilke (H.), hydrodynamic stability, interfaces, surface tension, *7747*
Wilkesmann (H.), see Winter (H.), *2557*
Wilkins (B.J.S.), crack growth, fracture mechanics, rocks, strength, time dependence, *8352*
Wilkinson (D.H.), see Cranfield (R.R.), *9625*
- boiling, piping systems, two phase flow, water hammer, Dartnell (L.M.), *12102*

Wilkinson (D.L.), bubble dynamics, hydrogen, velocity measurement, visualization, wakes, Willoughby (M.A.), *3751*
Wilkinson (D.S.), fracture mechanics, microcracks, stress analysis, stress intensity factor, Vitek (V.), *2435*
- crack growth, creep rupture, diffusion, stress intensity factor, void growth, *4457*

Wilkinson (T.L.), bolted joints, design, mechanical joints, wood, Rowlands (R.E.), *5378*
- composite structures, finite element techniques, plates (holed), wood structures, Rowlands (R.E.), (et al.), *7214*

Wilkinson (W.L.), see Jarzebski (A.B.), *10443*
Wilkowski (G.M.), bending, cracks, j-integral, material testing, pipes, stability theory, Zahoor (A.), (et al.), *10301*
Wilks (G.), see Hunt (R.), *1532*
- see Hunt (R.), *4696*

Wille (S.O.), axisymmetric flow, finite element techniques, navier stokes equation, two dimensional flow, *3145*
- aneurysms, arteries, blood flow, pulsatile flow, viscous flow, *4912*
- arteries, blood flow, navier stokes equation, stenoses, *4918*

Willebrand (J.), currents, ocean air interaction, oceanography, rossby waves, spectra, wind-wave interaction, Philander (S.G.H.), (et al.), *9000*
Willems (J.C.), automatic control, feedback, pole placement, stability, Commault (C.), *11037*
- design, feedback, state space techniques, *11040*

Willems (J.L.), algorithms, design, discrete systems, observers, optimal control, *191*
Willetts (B.B.), aerodynamic interference, lift, spherical bodies, turbulent flow, walls, Murray (C.G.), *4670*
Williams (A.O) Jr., eigenvalues, modes, ocean, sound propagation, *10782*
Williams (B.G.), see Christensen (E.J.), *6887*
Williams (D.P.), cyclic loading, elastoplasticity, structural analysis, work hardening, Topper (T.H.), *1201*
Williams (E.W.), approximations (higher order), ducts (variable area), pipe flow, viscoelastic fluids, Javadpour (S.H.), *2646*
Williams (F.A.), see Linan (A.), *8787*
Williams (F.W.), beams, buckling, columns, elastic foundations, *3326*
- see Howson (W.P.), *3327*
- cladding, multistory frames, structural analysis, *5360*
- buckling, frames, structural stability, *10173*

Williams (G.O.), see Worcester (P.F.), *11903*
Williams (G.P.), discharges, flood flow, rivers, sediment transport, *2580*
Williams (J.A.), brazed joints, creep rupture, soldering, welded joints, *6429*
- elastoplasticity, extensometers, fracture toughness, Carlson (K.W.), *10279*

Williams (J.E.) Jr., see Vukelich (S.R.), *2739*
Williams (J.H.), flaw detection, glass fibers, laminates, liquid crystals (cholesteric), nondestructive tests, thermography, Mansouri (S.H.), (et al.), *7574*
Williams (J.H.) Jr., composite materials, loss factor, ultrasonics, viscoelastic waves, Lee (S.S.), (et al.), *5140*
- see Lee (S.S.), *5247*
- delamination, flaw detection, inclusions, nondestructive tests, thermography, Mansouri (S.H.), (et al.), *7579*

- composite structures, crack arrest, crack propagation, dynamic fracture, finite difference methods, Lee (S.S.), (et al.), *8409*
- see Kousiounelos (P.N.), *10303*

Williams (J.R.), acoustic measurements, acoustics, filters, spectral analysis, Ricker (G.G.), *1824*
- acoustics, discrete systems, filters, fourier transform, spectral analysis, *5790*

Williams (K.R.), creep, dislocations, grain boundaries, microstructures, steel, *8430*

Williams (R.G.), caustics, diffraction, gravity waves (surface), refraction, Darbyshire (J.), (et al.), *5481*

Williams (R.I.T.), see Kolias (S.), *9427*

Williams (R.J.), dynamic analysis, kinematics, mechanisms (planes), Rupprecht (S.), *4942*

Williams (R.T.), finite element methods, gravity waves (shallow water), numerical methods, Zienkiewicz (O.C.), *6707*

Williams (R.W.), see Ozturk (Y.), *6591*

Williams (W.O.), constitutive equations, porous media, viscous flow, *7008*

Williams (W.S.), see Johnson (M.W.), *6008*

Williamson (J.W.), see Harris (S.D.), *660*

Williamson (W.E.) Jr., ballistics (terminal), drag coefficient, optimization, recovery systems, reentry, *1793*
- see Mcdowell (J.L.), *3924*
- algorithms, gliding trajectory, numerical methods, optimal control, oscillations, trajectory optimization, *5061*

Willie (S.O.), bifurcation, numerical analysis, separation, two dimensional flow, *622*

Willis (J.R.), see Bedding (R.J.), *1295*
- composite materials, dynamic analysis, elasticity (nonhomogeneous), hamilton principle, variational methods, *4174*

Willmert (K.D.), see Khan (M.R.), *11318*

Willmott (A.J.), see Schmidt (F.W.), *9730, book*

Willoughby (A.A.), crack opening displacement, elastoplasticity, fracture criteria, j-integral, Pratt (P.L.), (et al.), *8401*

Willoughby (M.A.), see Wilkinson (D.L.), *3751*

Wills (C.B.), see Markatos (N.-C.G.), *8537*

Willumeit (H.-P.) ed., dynamic behavior, dynamic response, vehicles, *2546, book*

Wilms (E.V.), boundary conditions, half space, thermoelasticity, Cohen (H.), *6939*

Wilson (A.D.), fatigue, materials properties, offshore structures, steel, toughness, *2413*

Wilson (D.A.), see Mishra (R.N.), *2145*

Wilson (D.L.), see Garrott (W.R.), *5020*

Wilson (D.R.), see Harloff (G.J.), *1634*

Wilson (D.W.), composite materials, flaw detection, laminates, liquid crystal, thermography, Charles (J.A.), *7576*

Wilson (H.W.), cladding, creep, nuclear fuels, nuclear radiation, Hsieh (H.J.), (et al.), *8883*

Wilson (J.C.), buildings, earthquake effects, fatigue, floors, multistory frames, *970*

Wilson (N.W.), convection (free), ice, melting, models, Lee (J.J.), *4728*

Wilson (P.M.), see Boffey (D.A.), *8056*

Wilson (S.A.), see Hale (D.A.), *535*

Wilson (T.A.), see Holger (D.K.), *9848*

Winchenbach (G.L.), see Whyte (R.H.), *6722*

wind, channels, mixing layers, screens, turbulence, Kit (E.), Berent (E.), (et al.), *559*
- acoustic measurements, atmospheric circulation, flow measurement, Makarova (T.I.), *1919*
- currents, mooring, ship motion, stability theory, Sorheim (H.-R.), *3032*
- aerosols, laser velocimeter, turbulence (geophysical), velocimeters, velocity measurement, Matvienko (G.G.), Samokhvalov (I.V.), *4093*
- boundary layer (atmospheric), structures, wind loads, wind turbines, Deaves (D.M.), *4604*
- flow obstructions, irrotational flow, perturbations, two dimensional flow, upper atmosphere, Blank (A.D.), *5396*
- noise, noise measurements, rainfall, vegetation, Miller (L.N.), *5791*
- boundary layer (atmospheric), clouds, diffusion, shear flow, turbulence (geophysical), Skhirtladze (G.I.), Yurchak (B.S.), *7061*
- boundary layer (atmospheric), buildings (tall), wind tunnels, Dye (R.C.F.), *7063*
- boundary layer (atmospheric), buildings (tall), Cermak (J.E.), *7068*
- buildings, buildings (tall), pressure distribution, probability theory, Holmes (J.D.), *7069*
- entrainment, mixing layers, shear stress, stratification, Kranenburg (C.), *7652*
- electric spark discharge, low density flows, velocity measurement, Brown (J.H.), Good (R.E.), *8662*
- aerodynamic interference, design, inlet flow, models, wind tunnels, Eckert (W.T.), Mort (K.W.), *8669*
- gravity waves, magneto fluid dynamics, planetary atmospheres, shear flow, El Mekki (O.M.), *8822*
- convection (forced), cooling, heat transfer (atmospheric), solar collectors, Ramsey (J.W.), Charmchi (M.), *10637*
- ocean air interaction, surface waves, Liu (T.-F.), Ma (F.-S.), *10968*
- dissipation, drag coefficient, ocean air interaction, reynolds stresses, Large (W.G.), Pond (S.), *10872*
- plumes, turbulence model, Green (A.E.S.), Singhal (R.P.), (et al.), *10875*
- boundary layer (turbulent), dispersion, inhomogeneities, Durbin (P.A.), Hunt (J.C.R.), *11520*
- coherent structure, lakes, loch ness, mixing layers, Thorpe (S.A.), Hall (A.J.), *11521*
- aerodynamics, disks, trajectories, Frohlich (C.), *11731*
- surface waves, velocity measurement, wave height, weather satellites, Martsinkevich (L.M.), *12083*

wind generation, boundary layer (turbulent), flow measurement, wind tunnels (environmental), Katayama (T.), Gotoh (S.), (et al.), *4603*
- coastal engineering, computer programming, modeling, three dimensional flow, Koutitas (C.), O'Connor (B.), *7662*

wind loads, buildings (tall), modal control, structural design, Chang (J.C.H.), Soong (T.T.), *222*
- loads, torsion, Kareem (A.), *515*
- bridges (box girder), cable stayed bridges, dynamic response, Smith (I.J.), *519*
- galloping, towers, vortex shedding, Parkinson (G.V.), Wawzonek (M.A.), *867*
- cooling towers, shells, Harnach (R.), Niemann (H.-J.), *1450*
- aerodynamic interference, smoke stacks, strakes, vibration (flow induced), wind tunnels, Ruscheweyh (H.), *2910*
- dynamic response, structural response, vibration (torsional), Foutch (D.A.), Safak (E.), *3378*
- cladding, gust loads, panels, Greenway (M.E.), *3551*
- combustors, design, turbojet engines, Shou (Z.Q.), *3748*
- chimneys, vibration (flow induced), vortex shedding, Hansen (S.O.), *3905*
- deformation, optical instruments, towers, Neuerburg (W.), *3906*
- galloping, towers, turbulence (freestream), wind tunnels, Kwok (K.C.S.), Melbourne (W.H.), *3907*
- aerodynamics, bridges (suspension), gust loads, stochastics, Sigbjornsson (R.), Hjorth-Hansen (E.), *3911*
- probability, stochastic processes, weibull statistics, Simiu (E.), Filliben (J.J.), *4171*
- buildings (tall), oscillations, structural stability, vibration, vibration (flow induced), Soong (T.T.), Skinner (G.T.), *4328*
- cooling towers, experimental mechanics, shells, Niemann (H.-J.), Ruhwedel (J.), *4542*
- boundary layer (atmospheric), structures, wind, wind turbines, Deaves (D.M.), *4604*
- shells (cylindrical), shells (thin), structural stability, Brendel (B.), Ramm (E.), (et al.), *5183*
- dynamic response, towers, Musio (G.), *5362*
- roofs, Hazelwood (R.A.), *5363*
- damping, dynamic behavior, experimental results, framed structures, multistory frames, Lam (L.C.H.), Lam (R.P.), *6529*
- cables, dynamic response, electric power, towers, vibration (forced), Matheson (M.J.), Holmes (J.D.), *6872*
- earthquake resistant structures, isolation, Kelly (J.M.), Chitty (D.E.), *7046*
- buildings, design, structural analysis, Simiu (E.), Filliben (J.J.), *7795*
- buildings, field tests, multistory frames, pressure distribution, wind tunnels, Lam (R.P.), Lam (L.C.H.), *7908*
- deformation, pressure measurement, towers, Neuerburg (W.), *7909*
- ballistics (exterior), launching, trajectory optimization, Churchyard (J.N.), *7929*
- beams (thin section), structural analysis, Capurso (M.), *8264*
- chimneys, gust loads, resonance, vortex shedding, Richardson (J.R.), *8835*
- bridges, deflections, wind bracing, Beguin (G.H.), *9453*
- aerodynamic loads, drag, vegetation, wind tunnels (environmental), wood, Johnson (R.C.) Jr., Ramey (G.E.), (et al.), *9662*
- buildings, pressure distribution, unsteady flow, wind tunnels (environmental), Holmes (J.D.), Best (R.J.), *9663*
- dynamic response, gust loads, magnetic levitation, modeling, suspension systems, vehicles, Garg (D.P.), Barrows (T.M.), *10768*
- aerodynamic loads, solar collectors, Randall (D.E.), Mcbride (D.D.), (et al.), *10874*
- probability, wind pressure, Stathopoulos (T.), *11326*
- damping capacity, design, masts, oscillations, viscous effects, Etkin (B.), Hansen (J.S.), *11842*

wind power, energy conversion, solar collectors, solar energy, Kreider (J.F.), Kreith (F.), *2831, book*
- laminar flow, vortex flow, So (R.M.C.), *5670*
- design, propellers, wind turbines, Moretti (P.M.), Thresher (R.W.), *6855*
- power generation, wind turbines, Howell (W.E.), Todd (C.J.), *9001*

wind pressure, probability, wind loads, Stathopoulos (T.), *11326*

wind tunnels, airplane performance, flight tests, spin recovery, Tischler (M.B.), Barlow (J.B.), *692*
- aerodynamic interference, blockage, transonic flow, Chan (Y.Y.), *714*
- numerical methods, porous walls, transonic flow, Karlsson (K.R.), Sedin (Y.C.-J.), *1520*
- interference, porous walls, three dimensional flow, transonic flow, wall effects, Parker (R.L.) Jr., Sickles (W.L.), *1647*
- boundary layer (atmospheric), injection, modeling, velocity measurement, Sluman (T.J.), Van Maanen (H.R.E.), (et al.), *1648*

- axisymmetric flow, contraction, nozzles, Tulapurkara (E.G.), *2768*
- airfoils, lift, porous walls, two dimensional flow, Sawada (H.), *2769*
- ludwig tubes, transonic flow, unsteady flow, Takashima (K.), *2770*
- airfoils, oscillating bodies, pressure distribution, transonic flow, Benetka (J.), Pernica (Z.), *2771*
- balance system, calibration, Dubois (M.), *2772*
- aerodynamic interference, smoke stacks, strakes, vibration (flow induced), wind loads, Ruscheweyh (H.), *2910*
- modeling, plumes, simulation, Korst (H.H.), White (R.A.), (et al.), *3681*
- airplanes, drag reduction, winglets, wings, Gilkey (R.D.), *3729*
- cooling, drag, nacelle, wings, Corsiglia (V.R.), Katz (J.), (et al.), *3731*
- aerodynamics, drag coefficient, spoilers, trucks, vehicles, Menneron (J.-C.), *3732*
- airplane performance, stability derivatives, transonic flow, Langhans (R.A.), Flechner (S.G.), *3736*
- cryogenics, injectors, transonic flow, Mignosi (A.), Faulmann (D.), (et al.), *3763*
- airfoils, boundary layer, supercritical flow, transonic flow, Spaid (F.W.), Stivers (L.S.) Jr., *3764*
- galloping, towers, turbulence (freestream), wind loads, Kwok (K.C.S.), Melbourne (W.H.), *3907*
- aerodynamic performance, airplanes, flight control, flutter, Winther (B.A.), Shirley (W.A.), (et al.), *4326*
- boundary layer, modeling, reynolds number (high), turbomachinery, Blair (M.F.), Bailey (D.A.), (et al.), *4688*
- aerodynamic performance, data acquisition, digital analog computation, Whitfield (J.D.), Pate (S.R.), (et al.), *4689*
- automatic control, cryogenics, simulation, Thibodeaux (J.J.), Balakrishna (S.), *5063*
- aerodynamic interference, automobiles, blockage, flexible walls, models, Stafford (L.G.), *5513*
- aerodynamic interference, control, flexible walls, influence coefficients, Dowell (E.H.), *5514*
- cryogenics, ejectors, injection systems, Blanchard (A.), Dor (J.-B.), (et al.), *5515*
- design, wind turbines, Vinayagalingam (T.), *5667*
- bodies of revolution, pressure distribution, Smits (A.J.), Las (S.P.), (et al.), *6624*
- airfoils, compressible flow, porous walls, transonic flow, Blynskaya (A.A.), Lifhits (Yu.B.), *6628*
- calibration, nozzles, supersonic flow, Weinert (W.), *6743*
- aeroelasticity, buildings, design, vibration (forced), Templin (J.T.), Cooper (K.R.), *6871*
- boundary layer (atmospheric), buildings (tall), wind, Dye (R.C.F.), *7063*
- aerodynamic loads, axial compressors, inviscid fluid, stress analysis, unsteady flow, Lambertz (J.), Wallmann (T.), (et al.), *7808*
- aerodynamic heating, convection, heat transfer, surface temperature, thermography, Balageas (D.L.), Ory (D.), *7816*
- buildings, field tests, multistory frames, pressure distribution, wind loads, Lam (R.P.), Lam (L.C.H.), *7908*
- roughness, snow, Kikuchi (T.), *7959*
- aerodynamic interference, afterbodies, airplanes, jet engines, Fanning (A.E.), Lucas (E.J.), *8642*
- ultrasonics, velocity measurement, vortices, Engler (R.H.), Schmidt (D.W.), (et al.), *8663*
- aerodynamic interference, design, inlet flow, models, wind, Eckert (W.T.), Mort (K.W.), *8669*
- automatic control, flexible walls, transonic flow, two dimensional flow, Goodyer (M.J.), Wolf (S.W.D.), *8670*
- compressible flow, contraction, turbulence, velocity profiles, Winter (K.G.), Boyd (C.), *8671*
- aerodynamic interference, drag, spherical bodies, walls, Awbi (H.B.), Tan (S.H.), *8672*
- boundary layer, wakes, Bario (F.), Charnay (G.), (et al.), *9592*
- flexible walls, laser doppler velocimeters, transonic flow, Davis (S.S.), *9680*
- balance system, blowdown, rolling motion, supersonic flow, Murthy (H.S.), *9681*
- airplane performance, leading edge, stalling, transonic flow, visualization, wings, Paveika (J.), Tatum (K.E.), *10499*
- airplane performance, design, flight tests, leading edge, spin recovery, Dicarlo (D.J.), Stough (H.P.) III, (et al.), *10512*
- blades, helicopters, three dimensional flow, unsteady flow, wings, Monnerie (B.), Philippe (J.-J.), *10514*
- aerodynamic interference, fins, hypersonic flow, pressure distribution, projectiles, sabot discard, Schmidt (E.M.), *10517*
- honeycomb structures, turbulence (freestream), Wigeland (R.A.), Tan-Atichat (J.), *10540*
- oscillatory flow, unsteady flow, variable area flow, Retelle (J.P.) Jr., Mcmichael (J.M.), (et al.), *10541*
- airplanes, design, rolling motion, spin recovery, Bihrle (W.) Jr., Bowman (J.S.) Jr., *11734*

wind tunnels (environmental), computing techniques, simulation, Lee (K.D.), *1126*

- boundary layer (turbulent), flow measurement, wind generation, Katayama (T.), Gotoh (S.), (et al.), *4603*
- blunt bodies, flow measurement, separation, shear layer, Castro (I.P.), *6642*
- evaporation, heat transfer, thermal diffusion, Reijnhart (R.), Rose (R.), *6826*
- gages, particle fluid flow, precipitation, snow, Haasz (A.A.), Raimondo (S.), *9002*
- aerodynamic loads, drag, vegetation, wind loads, wood, Johnson (R.C.) Jr., Ramey (G.E.), (et al.), *9662*
- buildings, pressure distribution, unsteady flow, wind loads, Holmes (J.D.), Best (R.J.), *9663*

wind turbines, control, propellers, Cheney (M.C.), *713*

- computer aided design, dynamic stresses, mathematical models, Kaza (K.R.V.), Janetzke (D.C.), *866*
- augmentation, vortices, Hubbartt (J.E.), *1630*
- boundary layer (atmospheric), structures, wind, wind loads, Deaves (D.M.), *4604*
- aerodynamic performance, chimneys, tornados, Ayad (S.S.), *5502*
- design, wind tunnels, Vinayagalingam (T.), *5667*
- design, dynamic analysis, Kehl (K.), Keim (W.), (et al.), *5696*
- design, propellers, wind power, Moretti (P.M.), Thresher (R.W.), *6855*
- blades, propellers, spectra, vibration (forced), Akesson (B.), Sandstrom (S.), *6870*
- power generation, wind power, Howell (W.E.), Todd (C.J.), *9001*
- irrigation, power generation, pumps, Clark (R.N.), Nelson (V.), (et al.), *9667*
- environmental tests, flow obstructions, near ground effects, separated flow, siting considerations, vortex flow, Frost (W.), Shieh (C.F.), *10516*
- aerodynamic interference, three dimensional flow, vortex lines, Schatzle (P.R.), Klimas (P.C.), (et al.), *10518*
- aerodynamic interference, aerodynamics, airfoils, blades, rotors, Klimas (P.C.), *10520*
- axial turbines, geometrical properties, internal flow, Igra (O.), *11754*

wind-wave interaction, boundary layer (atmospheric), drag coefficient, ocean air interaction, ocean waves, Ariel (N.Z.), Byutner (E.K.), (et al.), *983*

- boundary layer (atmospheric), ocean air interaction, spray flow, Wang (C.S.), Street (R.L.), *986*
- doppler effect, scattering, surface waves, Tuteur (F.B.), Tung (H.), (et al.), *1646*
- ocean air interaction, surface waves, Makin (V.K.), Chalikov (D.V.), *1902*
- shallow water, surface waves, Bitner (E.M.), *3014*
- surface waves, Lake (B.M.), Yuen (H.C.), *3020*
- numerical methods, turbulence (geophysical), Chalikov (D.V.), *4657*
- oceanography, probability theory, surface waves, Matushevskii (G.V.), *4855*
- hydrodynamic stability, ocean air interaction, shear flow, surface waves, Kawai (S.), *4857*
- ocean waves, oceanography, Leblond (P.H.), Mysak (L.A.), *4860*
- internal waves, ocean air interaction, oceanography, Pelinovskiy (Y.N.), *4863*
- energy transport, ocean air interaction, surface waves, Makin (V.K.), *4887*
- hydrodynamic stability, thin films, Hasegawa (E.), Taniyama (N.), *5458*
- hydrodynamic stability, nonlinear analysis, Fabrikant (A.L.), *5474*
- gravity waves, gravity waves (surface), ocean waves, spectra, surface waves, Naeser (H.), *8018*
- spectra, surface waves, Komen (G.J.), *8026*
- boundary layer (atmospheric), shear flow, turbulence (geophysical), Chao (S.P.), *8034*
- lakes, mixing layers, reservoirs, Imberger (J.), Hamblin (P.F.), *8519*
- gravity waves (surface), ocean waves, oceanography, spectra, surface waves, Komen (G.J.), *8998*
- currents, ocean air interaction, oceanography, rossby waves, spectra, Willebrand (J.), Philander (S.G.H.), (et al.), *9000*
- eigenvalue problems, gravity waves (surface), harbors, Papa (L.), *9620*
- boundary layer (atmospheric), spectra, turbulence (geophysical), Antonia (R.A.), Chambers (A.J.), *9939*
- gravity waves (internal), gravity waves (surface), wave interactions, Segur (H.), *11570*
- ocean waves, spectra, swell, Joseph (P.S.), Kawai (S.), (et al.), *12073*
- data analysis, ocean air interaction, Talagrand (O.), *12081*

winding, elasticity (linear), orthotropic materials, sheet metal, Yagoda (H.P.), *236*

windows, experimental mechanics, space shuttle, structural analysis, Dote (H.), Theodore (K.T.), *6547*

Wineman (A.), see Rajagopal (K.R.), *259*

Winer (W.O.), see Bair (S.), *1940*

- see Gecim (B.), *1941*
- see Koye (K.A.), *5988*

wing body combinations, aerodynamic performance, reynolds number, supersonic flow, Stallings (R.L.) Jr., Lamb (M.), (et al.), *1628*

- afterbodies, mathematical models, supersonic flow, Vukelich (S.R.), Williams (J.E.) Jr., *2739*
- propulsion, two dimensional flow, unsteady flow, Couchet (G.), *2740*
- panels, pressure distribution, transonic flow, Jain (R.K.), Redeker (G.), (et al.), *2741*
- interaction, propellers, thrust, unsteady flow, Mccormick (B.W.), Aljabri (A.S.), (et al.), *2759*
- aerodynamic loads, computer programming, missiles, pressure distribution, supersonic flow, vortices, Dillenius (M.F.E.), Nielsen (J.N.), *3738*
- airplanes, flight path, optimization, rockets, supersonic flow, Large (E.), *4671*

- aerodynamic interference, aerodynamic performance, longitudinal stability, subsonic flow, visualization, Lamar (J.E.), Frink (N.T.), *5494*
- aerodynamic interference, canard, controllability, tails, Agnew (J.W.), Hess (J.R.) Jr., *6724*
- balance system, flight, flying platforms, gliders, models, strain gages, Ramachandra (S.M.), *8651*
- aerodynamics, bodies of revolution, drag, supersonic flow, Vasilchenko (V.I.), *11397*

Wingate-Hill (R.), abrasion, hardening, tillage implements, wear, *1934*

Wingerath (K.), see Mihelcic (M.), *10052*

wings, aerodynamics, boundary layer (three dimensional), numerical methods, turbulence, Humphreys (D.A.), *646*
- airplanes, separated flow, separation, spin recovery, Feistel (T.W.), Anderson (S.B.), (et al.), *690*
- camber, drag, minimization, Sachs (G.), *1623*
- aerodynamic loads, aeroelasticity, unsteady flow, Dunn (H.J.), *1631*
- transonic flow, wall jets, Malmuth (N.D.), Murphy (W.D.), (et al.), *2658*
- aerodynamic loads, rolling motion, sideslip, vortex lines, Javed (M.A.), Hancock (G.J.), *2727*
- hypersonic flow, pressure distribution, Golubkin (V.N.), *2728*
- laser doppler velocimeters, lift coefficient, vortex lines, wakes, Orloff (K.L.), *2729*
- flight tests, porous walls, vortices, wakes, Smith (H.C.), *2730*
- aerodynamic interference, jet propulsion, lift, Maarsingh (R.A.), *2735*
- aerodynamic performance, flaps, mathematical models, Ovchinnikov (V.A.), Osorgin (V.D.), (et al.), *2736*
- aerodynamic performance, aerodynamics, numerical methods, subsonic flow, An (J.-G.), *2747*
- aerodynamics, computing techniques, transonic flow, Ballhaus (W.F.), Bailey (F.R.), *2748*
- airplanes, drag reduction, wind tunnels, winglets, Gilkey (R.D.), *3729*
- cooling, drag, nacelle, wind tunnels, Corsiglia (V.R.), Katz (J.), (et al.), *3731*
- aerodynamic loads, leading edge, lift, stalling, vortex lines, Anderson (J.D.) Jr., Corda (S.), (et al.), *3737*
- aerodynamics, elliptical bodies, lifting surfaces, three dimensional flow, Kida (T.), *4668*
- pressure distribution, separated flow, vortex shedding, Bublitz (P.), *4682*
- jet engines, noise abatement, sound propagation, Wang (M.E.), *4770*
- boundary layer, noise, stability, Mangiarotty (R.A.), *4808*
- aerodynamic loads, bodies of revolution, subsonic flow, vortex shedding, Zhu (P.), Shou (W.), (et al.), *6717*
- aerodynamic interference, pressure gradient, thermal effects, wakes, Peacock (R.E.), Hashem (A.A.F.), *6720*
- aerodynamic interference, inlets, mathematical models, vortex sheets, Shurygin (V.M.), *6723*
- oscillatory flow, subsonic flow, two dimensional flow, Lottati (I.), Nissim (E.), *7782*
- aerodynamic performance, incompressible flow, vortex sheets, Algazin (V.A.), *7784*
- drag, induced drag, optimization, subsonic flow, wakes, Kuhlman (J.M.), *7786*
- airplanes, design, optimization, supersonic flow, transonic flow, vortex flow, Lamar (J.E.), Schemensky (R.T.), (et al.), *8639*
- aerodynamic performance, airplanes, design, geometrical properties, Larson (E.S.), *9648*
- design, potential flow, three dimensional flow, transonic flow, Henne (P.A.), *9653*
- aerodynamic interference, aerodynamic performance, missiles, moving surfaces, surface waves, Putilin (S.I.), *9655*
- aerodynamic interference, propellers, transonic flow, wakes, Rizk (M.H.), *9656*
- annuli, incompressible flow, jet flaps, singular integral equations, vortices, Belotserkovskii (S.M.), Lifanov (I.K.), *10496*
- airplane performance, leading edge, stalling, transonic flow, visualization, wind tunnels, Pavelka (J.), Tatum (K.E.), *10499*
- blades, helicopters, three dimensional flow, unsteady flow, wind tunnels, Monnerie (B.), Philippe (J.-J.), *10514*
- finite difference methods, perturbation theory, slender wings, transonic flow, Van Der Vooren (J.), Huizing (G.H.), (et al.), *11729*
- induced drag, viscous flow, vortex sheets, wakes, Ryzhov (O.S.), Terentev (E.D.), *11730*

Winkels (H.-M.), see Contant (J.-M.), *7925*

Winkler (K.W.), attenuation, friction (sliding), pore pressure, seismic waves, Nur (A.), *10944*

Winkler (T.), see Erdmann-Jesnitzer (F.), *483*

winkler foundation, elasticity (nonhomogeneous), half space, stress concentration, Calladine (C.R.), Greenwood (J.A.), *257*
- beams (timoshenko), dynamic effects, elastic foundations, vehicles, Newton (S.G.), Clark (R.A.), *1460*
- elastic behavior, moving loads, plates (annular), plates (circular), El-Sirafy (I.H.), *3302*
- footings, soils, Gazetas (G.), *4463*
- elastic foundations, ocean bed, pipelines, soil mechanics, stress analysis, underwater structures, Hobbs (R.E.), *6551*
- elastic foundations, footings, smoke stacks, Barvashov (V.A.), Fedorovsky (V.G.), *7321*
- impact, layered media, punch problems, shear, viscoelasticity (dynamic), Aleksandrov (V.M.), Zelentsov (V.B.), *11159*

Winoto (S.H.), anemometers, flow measurement, laminar flow, vortex flow, Crane (R.I.), *3658*

Winter (D.A.), biological joints, biomechanics, gait, human body, *3058*

Winter (E.R.F.), see Nguyen (D.L.), *4823*

Winter (H.), contact stresses, friction (sliding), gear teeth, gears (worm), hydrodynamics, Wilkesmann (H.), *2557*

Winter (K.G.), compressible flow, contraction, turbulence, velocity profiles, wind tunnels, Boyd (C.), *8671*

Winther (B.A.), aerodynamic performance, airplanes, flight control, flutter, wind tunnels, Shirley (W.A.), (et al.), *4326*

Winther (R.), galerkin method, optimal control, parabolic equations, *168*
- algorithms, distributed parameters, initial value problems, numerical methods, optimal control, parabolic equations, *4207*
- see Arnold (D.N.), *10064*
- boundary value problems, finite element techniques, hyperbolic equations, initial value problems, stability (numerical), *11694*

Wippern (D.), see Kuhne (J.), *5844*

Wire (G.L.), deformation (plastic), fuel elements, grain boundaries, thin walled structures, Duncan (D.R.), (et al.), *6550*

wires, cyclic loading, relaxation, tests, torsion, Kuznetsov (B.I.), *494*
- cables, ropes, strength, Matanzo (F.) Jr., Metcalf (J.T.) Jr., *536*
- compressible flow, detection, separated flow, simulation, Degani (D.), Brosh (A.), (et al.), *1546*
- bars, eddy currents, flaw detection, surface flaws, Stumm (W.), *3508*
- energy transport, laser plasma interaction, lateral stability, transport phenomena, Ehler (A.W.), Begay (F.), (et al.), *3900*
- drawing, thermal effects, thermoelasticity, tubes, Asada (Y.), Mori (K.-I.), (et al.), *4004*
- aluminum alloys, drawing, work hardening, Varma (S.K.), *6409*
- anemometers, thermal measurements, wollaston wire, Petit (C.), Paranthoen (P.), (et al.), *10690*
- burning rate, combustion, solid propellants, Kubota (N.), Ichida (M.), (et al.), *11787*

wirewound vessels, dynamic analysis, shells (cylindrical), vibration (free), Greenberg (J.B.), Stavsky (Y.), *3374*
- pressure vessels, shells (anisotropic), shells (of revolution), stress analysis, tanks, Timonin (A.M.), *9464*
- filament winding, nonmetals, solid propellants, Lamaile (J.), Cabanel (D.), *9465*

Wirgin (A.), acoustic waves, reflection, wavy walls, *2951*

Wiriyachai (A.), bridges (railroad), bridges (truss), dynamic behavior, impact, structural response, Chu (K.-H.), (et al.), *9452*

Wirmark (G.), creep, edge dislocations, fracture, sliding, Nilsson (J.-O.), (et al.), *9393*

Wirsching (P.H.), fatigue, high cycle fatigue, linear theory, probabilistic design, Hsieh (S.), *446*

Wirtz (R.A.), convection (free), layered media, slots, Reddy (C.S.), *819*

Wisler (D.C.), see Smart (A.E.), *4687*

Wisniewski (A.), see Gajewski (P.), *6634*

Wiss (J.F.), dynamic response, shock, structural analysis, vibration, *10225*

Wissmann (J.W.), finite element methods (hybrid), finite element techniques, lagrange multiplier, variational methods, Specht (B.), *5032*

Witmer (E.A.), see Meredith (D.), *3293*

Witos (F.), half space, rayleigh waves, scattering, surface flaws, wave generation, *10229*

Witsch (K.J.), boundary value problems, geodesy, potential theory, uniqueness, *4965*

Witte (L.C.), see Iyican (L.), *1682*

Witten (A.J.), see Molyneux (J.E.), *10674*

Wittenberg (K.), see Beavers (G.S.), *8939*

Wittenberg (L.J.), energy conservation, energy storage, solar energy, solar ponds, Harris (M.J.), *6819*

Wittig (S.), see Breitkopf (G.), *1694*

Wittlin (G.), airplane structures, crash dynamics, dynamics, safety, *5369*

Wlodarczyk (E.), see Kasiak (M.), *6354*
- see Legowski (Z.), *6712*
- explosions, explosive loading, explosive solid interactions, impulsive propulsion, *9634*

Wobst (K.), see Aurich (D.), *10280*

Wodzicki (W.), dynamic properties, flexible bodies, structural response, vibration, *3349*

Wohle (W.), junctions, slabs, sound propagation, stochastic processes, transmission, vibration, Beckmann (T.), (et al.), *6894*

Wohrl (B.), see Wachter (J.), *5499*

Wojciech (S.), see Trombski (M.), *930*

Wojewodzki (W.), see Kwiecinski (M.), *7604*

Woi-Gajewska (B.), granular media, hoppers, unsteady flow, Zawidzki (J.), *12060*

Wolchuk (R.), bridges (box girder), design criteria, *1447*

Wolcin (J.J.), acoustics, noise, underwater acoustics, *3961*

Wolde-Tinsae (A.M.), arches, domes, imperfections, nonlinear analysis, Huddleston (J.V.), *9257*

Wolf (K.B.), see Steinberg (S.), *8113*
Wolf (L.), see Yeung (M.R.), *789*
Wolf (S.W.D.), see Goodyer (M.J.), *8670*
Wolf (T.L.), see Widnall (S.E.), *8648*
Wolfe (R.W.), elastic constants, knot size, laminates, wood, Moody (R.C.), *3493*
Wolfer (K.-H.), beams, elastic foundations, plates, soil structure interaction, *7612*
Wolff (M.), ducts (curved), experimental results, secondary flow, transition, Cognet (G.), *2651*
Wolford (J.C.), burmester configuration, computer aided design, four bar linkage, linkages, vector methods, *8481*
Wolfshtein (M.), see Ziv (A.), *4679*
Wolfson (R.L.T.), energy conservation, energy storage, solar collectors, Harvey (H.S.), *2832*
Wollkind (D.J.), models, nonlinear analysis, solidification, Notestine (R.D.), *2846*
Wolovich (W.A.), linear systems, multivariable systems, regulator problem, tracking, Ferreira (P.), *112*
- algorithms, design, matrix methods, multivariable systems, *11039*

Woltring (H.J.), biomechanics, estimation, gait, three dimensional formulation, *1168*
Won (T.K.), see Leduc (R.), *2836*
Wong (D.T.-M.), see Paidoussis (M.P.), *11841*
Wong (G.R.), see Wu (Y.P.), *1045*
Wong (J.C.), see Bagci (C.), *6117*
Wong (J.Y.), see Garber (M.), *531*
- see Garber (M.), *3561*

Wong (L.W.), see Yuen (W.W.), *771*
- see Yuen (W.W.), *1706*

Wong (P.M.), see Cheung (Y.K.), *5029*
Wong (R.), asymptotic methods, bessel functions, transforms, *10041*
Wong (T.-F.), experimental results, faults, micromechanics, rocks, *10262*
Wong (Y.C.), slabs, stiffness, Coull (A.), *2267*
- see Coull (A.), *3553*

Woo (C.W.), crack growth, crack retardation, ductile fracture, fracture criteria, j-integral, Kuruppu (M.D.), *2453*
- see Chow (C.L.), *3560*

Woo (D.M.), see Al-Makky (M.M.), *2397*
Woo (S.L.-Y.), exercise, experimental results, materials properties, strength, tendons, Gomez (M.A.), (et al.), *1032*
- experimental methods, stress strain relationships, tendons, tissues, viscoelastic materials, Gomez (M.A.), (et al.), *9046*

wood, bending, material testing, viscoelastic materials, Becker (H.F.), *1401*
- energy, energy (alternative sources), solar energy, wave energy, Veziroglu (T.N.) ed., *1965, book*
- beams, bonded joints, stress analysis, Marchand (G.E.), *2251*
- beams (sandwich), composite materials, fatigue, weibull statistics, Kyanka (G.H.), *3280*
- elastic constants, knot size, laminates, Wolfe (R.W.), Moody (R.C.), *3493*
- bolted joints, design, mechanical joints, Wilkinson (T.L.), Rowlands (R.E.), *5378*
- aerodynamic loads, drag, vegetation, wind loads, wind tunnels (environmental), Johnson (R.C.) Jr., Ramey (G.E.), (et al.), *9662*
- fire, models, pyrolysis, slabs, Holve (D.J.), Kanury (A.M.), *10717*

Wood (A.S.), enthalpy, phase changes, transforms, Ritchie (S.I.M.), (et al.), *3823*
Wood (B.E.), see Roux (J.A.), *6817*
Wood (D.J.), networks, numerical methods, piping systems, Rayes (A.G.), *8583*
Wood (D.S.), see Lloyd (G.J.), *8372*
Wood (L.A.), impact, moving loads, random loading, Byrne (K.P.), *8341*
Wood (M.H.), see Clement (C.F.), *7503*
Wood (M.L.), see Thomas (L.C.), *754*
Wood (R.C.), see Greene (C.R.), *4793*
Wood (R.D.), see Pica (A.), *9283*
Wood (R.H.), see Roberts (E.H.), *2343*
Wood (W.L.), damping, structural response, vibration (forced), *6316*
- discrete systems, dynamic analysis, newmark's method, numerical methods, structural analysis, Bossak (M.), (et al.), *11331*

Wood (W.W.), inertial waves, rotating cylinders, shells (fluid-filled), tanks, *1587*
wood structures, beams, shear strength, weibull statistics, Liu (J.Y.), *1433*
- beams (sandwich), Smith (I.), *2259*
- large displacement, nailed joints, shells (hyperbolic paraboloid), shells (sandwich), Moss (P.J.), Carr (A.J.), (et al.), *2281*
- beams, floors, joints, spliced joints, Soltis (L.A.), *3297*
- beams, bonded joints, laminates, stiffness, strength, Marx (C.M.), Moody (R.C.), *3528*
- beams, deflections, floors, stiffness, Mccutcheon (W.J.), Vanderbilt (M.D.), (et al.), *3554*
- composite structures, finite element techniques, plates (holed), Wilkinson (T.L.), Rowlands (R.E.), (et al.), *7214*
- beams (box), girders, torsion, Heimeshoff (B.), *7316*
- beams, stiffness matrix, Kiener (G.), *8228*

Woodcock (A.E.R.), see Stewart (I.), *2206*
Woodcock (J.P.), see Skidmore (R.), *7120*
Woodruff (D.W.), condensation, condensation (dropwise), gold, steam, surface effect, Westwater (J.W.), *10576*
Woods (J.L.), cylindrical bodies, heat transfer, laminar flow, rotating cylinders, tubes, Morris (W.D.), *4711*
Woods (L.C.), continuum mechanics, entropy, thermodynamics (nonequilibrium), *6040*
- rarefied gases, sound propagation, transport, transport phenomena, ultrasonics, Troughton (H.), *11438*

Woods (P.J.), see Fessler (H.), *7284*
Woods (W.A.), compressible flow, trains (railroad), tunnels, unsteady flow, velocity profiles, Pope (C.W.), *3629*
Woodsum (H.C.), acoustic waves, nonlinear waves, scattering, sound fields, viscous effects, Westervelt (P.J.), *2945*
Woodward (R.L.), see Yellup (J.M.), *4498*
Woodward (R.P.), fans, flow obstructions, noise (aerodynamic), Glaser (F.W.), *5782*
Woolley (B.L.), acoustic waves, axisymmetric flow, fluid-structure interaction, plates, vibration, *11650*
Woomer (E.), balancing, dynamic analysis, rotating shafts, Pilkey (W.), *11145*
Worcester (P.F.), caustics, ocean, sound propagation, *11897*
- propagation, random media, underwater acoustics, Williams (G.O.), (et al.), *11903*
- see Spiesberger (J.L.), *11905*

work hardening, anisotropic media, plane stress, yield criteria, Hodge (P.G.) Jr., *268*
- elastoplasticity, internal stresses, perturbation methods, Panzeca (T.), Polizzotto (C.), *269*
- cylindrical bodies, plastic behavior, rate sensitivity, torsion, Meguid (S.A.), *277*
- friction (sliding), metals, wear, x ray techniques, Sasada (T.), Norose (S.), (et al.), *1009*
- cylindrical bodies, plane strain, strain rate, Lee (Y.S.), Patel (M.R.), (et al.), *1200*
- cyclic loading, elastoplasticity, structural analysis, Williams (D.P.), Topper (T.H.), *1201*
- constitutive relations, crack propagation, viscoplasticity, Aboudi (J.), Achenbach (J.D.), *1377*
- continuum mechanics, endochronic theory, plasticity, Valanis (K.C.), *2231*
- indentation, nonhomogeneous media, slip line methods, Bhasin (Y.P.), Oxley (P.L.B.), (et al.), *2234*
- cyclic loading, elastoplasticity, shakedown structures, Megahed (M.M.), *2238*
- constitutive equations, yield criteria, Allen (D.H.), *2239*
- elastoviscoplasticity, laminates, stiffness, Aboudi (J.), *2250*
- endochronic theory, internal state variables, metals, Wu (H.C.), Yip (M.C.), *3265*
- plastic behavior, variational methods, yield condition, Casey (J.), Naghdi (P.M.), *3266*
- deformation (plastic), low temperature, steel, Gurev (A.V.), Alkhimenkov (T.B.), *4362*
- deformation (plastic), laminates, metallurgy, Yellup (J.M.), Woodward (R.L.), *4498*
- elastoplasticity, uniqueness, Brovko (G.L.), *5108*
- concrete, constitutive equations, cracks, Chen (W.F.), Suzuki (H.), *5117*
- experimental results, low temperature, steel, Novikov (N.V.), Gorodyskii (N.I.), *5118*
- cyclic loading, plasticity, stress strain relationships, Esin (A.), *5119*
- elastoplasticity, plates (circular), thermal loading, welded joints, Makhnenko (V.I.), Oleinik (V.A.), (et al.), *5796*
- metals, micromechanisms, yield criteria, Bastun (V.N.), *6183*
- aluminum alloys, drawing, wires, Verma (S.K.), *6409*
- constraints, design (optimum), nonlinear programming, Mazzarella (C.), Polizzotto (C.), *6513*
- deformation, elastoplasticity, framed structures, inelasticity, variable loading, Tin Loi (F.), *6528*
- anisotropy, plasticity, strain analysis, Besdo (D.), *7282*
- anisotropy, bauschinger effect, plasticity, stress strain relationships, Rees (D.W.A.), *7285*
- experimental results, plastic flow, polycrystalline materials, Mecking (H.), Kocks (U.F.), *7289*
- fatigue, residual stresses, surface effect, Trofimov (V.V.), Radeeva (E.N.), *7293*
- dynamic response, elastoviscoplasticity, laminates, nonlinear analysis, Aboudi (J.), Benveniste (Y.), *7407*
- conical bodies, forging, Stahlberg (U.), *7455*
- elastoviscoplasticity, fracture mechanics, j-integral, shells (cylindrical), yield condition, Carmignani (C.), Vitale (E.), *8151*
- existence theorems, plasticity, uniqueness, Suquet (P.-M.), *8205*
- materials possessing memory, yield criteria, Mroz (Z.), *8211*
- dynamic effects, elastoplasticity, shakedown structures, thermal effects, Konig (J.A.), Maier (G.), *8436*
- deformation (plastic), fracture, material testing, metallurgy, Aurich (D.), Wobst (K.), *10280*

working fluids, closed cycle, design, gas turbines, materials properties, thermodynamic properties, Lee (J.C.), Campbell (J.) Jr., (et al.), *11740*
Wormley (D.N.), see De Silva (C.W.), *2258*
Worndle (R.), composite materials, fibers, materials properties, plastics, Daschner (W.), *1203*

Worsey (A.J.), see Papamichael (N.), *8129*
Wortman (A.), impact, net, networks, projectiles, ropes, submerged bodies, *10681*
Wosk (J.), see Voloshin (A.), *4117*
• attenuation, bones, human body, shock waves, Voloshin (A.), *6025*
Wozniak (C.), continuum mechanics, discrete systems, functional analyis, topological techniques, *4123*
wrapping, numerical analysis, rolling, Kawaguchi (K.), *1343*
Wray (A.A.), see Yoshikawa (K.K.), *11411*
Wriggers (P.), see Klee (K.-D.), *5248*
Wright (B.R.), see Clauss (J.S.) Jr., *4805*
Wright (D.G.), baroclinic instability, oceanography, sloping bottom, stratification, *8023*
Wright (J.P.), fluid-structure interaction, shells (fluid-filled), shock waves, submerged bodies, Misovec (A.), (et al.), *11664*
Wright (P.K.), see Ramalingam (S.), *435*
• chip formation, machine design, metallography, temperature, tools, Mccormick (S.P.), (et al.), *8363*
Wright (R.J.), darcy flow, multiphase flow, porous media, Dawe (R.A.), *2997*
Wright (T.W.), critical region, reflection, shock waves (oblique), *4455*
wrinkling, bifurcation, buckling (plastic), plates (orthotropic), Triantafyllidis (N.), Needleman (A.), *350*
• finite strain, membranes, plane stress, Wu (C.H.), Canfield (T.R.), *4369*
• gravity, membranes, Mansfield (E.H.), *8245*
• forming, pipes, rolling, Kiuchi (M.), Shintani (K.), (et al.), *9374*
Wrobel (L.C.), boundary integral method, conduction (heat), integral methods, transient loading, Brebbia (C.A.), *2817*
Wroth (C.P.), see Randolph (M.F.), *11179*
Wrzecionlarz (P.A.), buckling (local), plates (rectangular), plates (sandwich), *7364*
Wu (C.H.), see Fenner (W.J.), *3304*
• finite strain, membranes, plane stress, wrinkling, Canfield (T.R.), *4369*
Wu (E.-R.), finite element techniques, interpolation, potential flow, *10067*
Wu (E.M.), see Christensen (R.M.), *3461*
Wu (F.), see Yih (C.-S.), *2671*
Wu (H.C.), endochronic theory, internal state variables, metals, work hardening, Yip (M.C.), *3265*
Wu (J.), boundary layer (atmospheric), drag coefficient, friction coefficient, friction velocity, ocean air interaction, reynolds stresses, roughness, turbulence (geophysical), *8980*
Wu (J.-R.), see Wei (R.-J.), *6996*
Wu (M.-Y.), eigenvalues, linear systems, matrix methods, time varying systems, *1991*
• analytical methods, dynamic analysis, time varying systems, *9161*
Wu (R.S.), edge dislocations, multiphase media, orthotropic materials, stress analysis, Chou (Y.T.), *8191*
Wu (S.M.), see Eman (K.), *437*
Wu (W.-T.), holography, underwater acoustics, waves, *5743*
Wu (W.-Z.), see Goldsmith (W.), *9370*
Wu (Y.-T.), lubrication (hydrodynamic), reynolds equation, roughness, seals, surfaces, thermoelasticity, Burton (R.A.), *12092*
Wu (Y.P.), biomechanics, gallstones, hydroelastic waves, organs, travelling waves, wave generation, wave interactions, Wong (G.R.), (et al.), *1045*
Wunderlich (B.), see Kosmowski (I.), *942*
Wunderlich (W.), kinematics, mathematical models, mechanisms (planes), *7145*
Wung (P.M.), axisymmetric flow, convection (free), pressure vessels, thermal loading, Tauchert (T.R.), *5576*
Wunsch (C.), circulation, heat transfer, oceanography, *7060*
Wurmthaler (C.), see Hippe (P.), *9181*
• see Hippe (P.), *10089*
Wurster (K.E.), see Rehder (J.J.), *849*
• aerodynamic heating, reentry, space vehicles, Eldred (C.H.), *6888*
Wurtz (J.), see Andersen (P.S.), *1858*
Wylie (E.B.), numerical methods, pipe flow, unsteady flow, water hammer, Streeter (V.L.), *11598*
Wyllie (D.C.), failure, rocks, slopes, *2386*
Wyngaard (J.C.), anemometers, boundary layer (atmospheric), turbulence (geophysical), velocimeters, velocity measurement, *7070*
Wynne (J.B.), see Townsin (R.L.), *7073*
Wysk (R.A.), see Davis (R.P.), *3220*

X

x ray techniques, friction (sliding), metals, wear, work hardening, Sasada (T.), Norose (S.), (et al.), *1009*
- brittle fracture, crack resistance, material testing, Georgiev (M.N.), Mezhova (N.Ya.), (et al.), *1415*
- attitude control, orbit correction, space vehicles, Rose (R.E.), Berkery (E.A.), *1794*
- musculoskeletal system, scoliosis, spine, Hindmarsh (J.), Larsson (J.), (et al.), *1964*
- experimental mechanics, location methods, three dimensional formulation, Patwardhan (A.G.), Soni (A.H.), (et al.), *1978*
- bearings (roller), crack propagation, cracking, failure, Maeda (K.), Tsushima (N.), (et al.), *2410*
- flexibility, fluoroscopy, inspection, nondestructive tests, Lee-Prampton (J.B.), *2502*
- missile structures, nuclear radiation, Cost (T.L.), *2977*
- cracks, flaw detection, nondestructive tests, pressure vessels, radiography, welded joints, Ruescher (E.H.), Graber (H.C.), *3507*
- copper alloys, residual stresses, stress relaxation, Amin (K.E.), Ganesh (S.), *4510*
- casting, flaw detection, radiography, welded joints, Closier (M.J.), *5318*
- diffraction, plates, residual stresses, Doi (O.), Ukai (T.), *5323*
- acoustic emission, crack growth, material testing, Kuksenko (V.S.), Orlov (L.G.), (et al.), *6438*
- monte carlo analysis, radiography, scattering, Smith (R.L.), *7554*
- composite materials, residual stresses, Tsai (S.-D.), Mahulikar (D.), (et al.), *9255*

Xanthis (L.S.), boundary integral methods, elliptic equations, singularities, stress intensity factor, Bernal (M.J.M.), (et al.), *6085*
- see Atkinson (C.), *6441*

Xi-Xian (J.), energy, forging, screw presses, tools, *4469*

Xiao (Y.-G.), crack growth, crack opening displacement, j-integral, Huang (G.-H.), *10286*

Y

Yablonskii (I.S.), aluminum alloys, brittle fracture, crack growth, fracture toughness, sheet metal, stress intensity factor, *9432*

Yablonskij (S.V.), algorithms, biomathematics, cybernetics, differential games, pattern recognition, *9152, book*

Yadav (J.S.), bearings (porous metal), bearings (thrust), lubrication (hydrostatic), pressure distribution, temperature, viscosity, Kapur (V.K.), *9030*

Yadav (R.), centrifugal compressors, design criteria, swirl flow, visualization, volute casings, Yahya (S.M.), *704*

Yadykin (I.B.), adaptive systems, lyapunov's functions, model reference systems, optimal control, stability theory, *3206*

Yaffe (R.), experimental methods, imperfections, shells (cylindrical), shells (stiffened), Singer (J.), (et al.), *3313*

Yagawa (G.), cracks, hardening, penalty function, Aizawa (T.), (et al.), *3459*

- cracks, elastic behavior, linear systems, nonlinear systems, penalty function, plates, Aizawa (T.), (et al.), *6457*

Yager (T.J.), friction, landing, runways, space shuttle, Horne (W.B.), *1332*

Yaghmai (I.), frames, frequency response, sensitivity, vibration (free), Frohrib (D.A.), *1281*

Yagoda (H.P.), asymptotic behavior, residual stresses, series, sheet metal, *54*

- elasticity (linear), orthotropic materials, sheet metal, winding, *236*

Yahya (S.M.), see Yadav (R.), *704*

Yaida (O.), see Horikawa (A.), *5132*

Yaji (S.), see Nakazawa (Y.), *1302*

Yajima (S.), aluminum alloys, high strength, high temperature, material testing, reinforced bodies, Okamura (K.), (et al.), *5125*

Yakhin (A.M.), see Sidorov (V.A.), *6403*

Yakhno (O.M.), see Vorontsov (Ye.G.), *605*

- see Vorontsov (E.G.), *4598*

Yakhno (V.N.), see Zak (Yu.A.), *1107*

Yakhot (A.), boundary layer, cauchy problem, compressible flow, computing techniques, plates, reynolds equation, Ben-Dor (G.), (et al.), *3657*

Yakimov (Yu.L.), bodies of revolution, cavities, motion, *3690*

- see Vilkhovchenko (S.D.), *8524*

Yakovchik (V.A.), see Panko (I.N.), *5299*

Yakovenko (M.G.), elastic bodies, half space, rayleigh waves, seismic waves, *5870*

Yakovlev (I.V.), see Khanov (A.M.), *6569*

- see Kornev (V.M.), *7363*

Yakovlev (O.S.), see Pavlov (V.V.), *217*

Yakovlev (V.I.), free boundary, induced drag, magneto fluid dynamics, propellers, theory, *6864*

- see Khonichev (V.I.), *9787*

Yakovlev (V.S.), see Tomashevskii (V.T.), *1257*

Yakovlev (V.V.), see Demchenko (R.I.), *4655*

Yakovlev (V.Ya.), drops, impact, pressure distribution, solid boundaries, *5484*

Yakovleva (A.P.), see Pshenichnyi (B.N.), *8166*

Yakupov (R.G.), impact, plates, shock waves, spherical waves, *5249*

- blast waves, deformation (plastic), impulsive loading, plastic flow, plates (circular), *10245*

Yamabe (T.), see Yoshinaka (R.), *2389*

Yamabuchi (T.), see Kagawa (Y.), *1798*

Yamada (E.), composite materials, conduction (heat), conductivity, particles, thermal contact resistance, Ota (T.), *2783*

Yamada (G.), see Irie (T.), *3361*

- see Irie (T.), *4422*
- see Irie (T.), *5212*
- see Irie (T.), *6290*

Yamada (K.), see Takeuti (Y.), *926*

- complex variables, plates (holed), thermal stresses, *4814*

Yamada (M.), see Nemat-Nasser (S.), *7408*

- see Nemat-Nasser (S.), *11169*

Yamada (S.), buckling (experimental), shells (shallow), shells (spherical), Uchiyama (K.), (et al.), *5171*

Yamada (S.E.), constitutive equations, elastoplasticity, porous media, rocks, Schatz (J.F.), (et al.), *7017*

Yamada (T.), see Hatanaka (K.), *1406*

- see Ishida (M.), *4608*

Yamada (Y.), see Takemiya (H.), *4036*

- see Mori (Y.), *5594*

Yamagami (K.), fluid mechanics, infiltration, porous media, Kurashige (M.), *5838*

Yamagata (T.), currents, cyclones, oceanography, *8027*

Yamagishi (T.), containment, currents, heating, helical flow, plasma, *10757*

Yamaguchi (A.), control, displacement control, piston driven flow, pumps, Ishikawa (T.), *2188*

- cavitation inception, orifices, reynolds number, vorticity, Suzuki (T.), *2586*
- cavitation inception, orifices, unsteady flow, vaporization, *2587*

Yamaguchi (H.), see Saito (H.), *1275*

Yamaguchi (K.), forming, plastic behavior, roughness, sheet metal, surfaces, Nishimura (S.), (et al.), *1345*

- see Kato (S.), *9018*
- see Koga (J.), *10561*
- see Kawakami (F.), *11931*

Yamaguchi (T.), see Reismann (H.), *8297*

- see Nishimatsu (Y.), *9367*

Yamaki (N.), see Tani (J.), *346*

Yamamoto (A.), aerodynamic performance, axial turbines, cooling, design, gas turbines, Takahara (K.), (et al.), *3741*

Yamamoto (K.), helical flow, inviscid fluid, modeling, turbulence, Hosokawa (I.), *8610*

- cylindrical bodies, hydrodynamic stability, vortex shedding, vortex streets, Watanabe (K.), (et al.), *10403*

Yamamoto (T.), attenuation, breakwater, floating bodies, mooring, wave loads, *526*

- dynamic response, nonlinear mechanics, rotating shafts, vibration (forced), Ishida (Y.), (et al.), *2341*
- elastic bodies, floating structures, mooring, wave interactions, Yoshida (A.), (et al.), *4100*
- dynamic analysis, nonlinear characteristics, rotating shafts, vibration (nonlinear), Ishida (Y.), (et al.), *5227*

Yamamoto (Y.), beams, galerkin method, vibration (nonlinear), Yasuda (K.), (et al.), *5201*

- finite amplitude, particulate flow, shock waves, unsteady state, Kobayashi (S.), (et al.), *5486*
- finite difference methods, shock waves, supersonic flow, three dimensional flow, Karashima (K.), *9635*

Yamasaki (H.), diffraction, flow measurement, operational methods, oscillators, Honda (S.), *6740*

Yamasaki (T.), see Kamiyama (S.), *11753*

Yamashita (K.), control, lyapunov's functions, optimization, power plants, Taniguchi (T.), *173*

Yamashita (S.), see Nakamura (I.), *9564*

Yamazaki (F.), see Ishihara (K.), *6379*

Yamazaki (K.), see Oda (J.), *3519*

Yampolskiy (L.S.), machinery, numerical control, turning, Trotsenko (V.V.), (et al.), *2191*

Yanabe (S.), rotating bodies, transient effects, vibration (forced), *4432*

- gyrodynamics, rotating shafts, vibration (forced), *6304*
- critical speed, damping, dynamic analysis, rotating shafts, vibration (forced), *11143*

Yanagi (T.), see Hong (I.), *2017*

Yanagida (T.), see Ozaka (Y.), *3533*

Yanase (S.), see Tatsumi (T.), *6679*

- spectra, turbulence, turbulence model, Tatsumi (T.), *9680*

Yand (Z.-M.), see Pan (S.S.), *8514*

Yandell (W.O.), see Taneerananon (P.), *7062*

Yanenko (N.N.), see Kovenya (V.M.), *2625*

- see Vorozhtsov (E.V.), *6715*

Yang (A.T.), see Hsia (L.M.), *4933*

Yang (C.-I.), acoustic waves, boreholes, elastic waves, Yu (S.-M.), *4452*

Yang (C.T.), see Song (C.C.S.), *7650*

Yang (C.Y.), dams, earthquakes, hydrodynamic pressure, Chiarito (V.), *7044*

Yang (H.T.), see Odeh (A.S.), *4026*

Yang (J.N.), composite materials, fatigue, life expectancy, programmed loading, stochastics, Jones (D.L.), *6197*

- earthquakes, spectra, structural response, Liu (S.C.), *7048*

Yang (K.D.), see Utkin (V.I.), *133*

Yang (R.-J.), see Yeung (W.-S.), *7697*

Yang (S.J.), electric power, motors, noise, noise abatement, *2937, book*

Yang (T.M.T.), entrance region, film flow, laminar flow, non newtonian flow, Yarbrough (D.W.), *8579*

Yang (T.Y.), see Shiau (L.-C.), *1894*

- see Gran (C.S.), *4039*
- see Bellagamba (L.), *6503*

Yang (W.-J.), see Mochizuki (S.), *761*

- see Wang (J.H.), *4019*
- see Han (J.-C.), *9883*

Yang (W.H.), see Watson (L.), *56*

- collapse, optimization, plates (circular), plates (simply supported), *1423*
- collapse, limit analysis, minimization, plates (circular), plates (weakened), *10154*

Yanitskii (P.A.), see Danielyan (Yu.S.), *11774*

Yanitskiy (V.Ye.), see Belotserkovskiy (G.M.), *11456*

Yanizeski (G.M.), see Bugliarello (G.), *12016*

Yankelevsky (D.Z.), penetration, slender bodies, soils, Adin (M.A.), *6361*

Yanko (A.K.), airplane structures, algorithms, failure, reliability analysis, *3529*

- compressional waves, damping, ducts (variable area), oscillatory flow, Korolev (P.V.), *4658*

Yankov (V.I.), see Pervadchuk (V.P.), *10442*

Yankov (Ya.D.), boundary conditions, rigid bodies, two phase flow, *11452*

Yankovskii (V.M.), see Evin (O.A.), *5656*

Yankovskii (Yu.V.), see Malygin (A.F.), *7964*

Yannopoulos (P.J.), see Tassios (T.P.), *3530*

Yano (H.), see Inoue (M.), *8665*
Yanovskaya (T.B.), see Its (E.N.), *8958*
Yanshin (A.M.), see Zabluda (S.M.), *4759*
• see Ivanov (S.G.), *11449*
Yanuki (T.), see Murakami (T.), *6169*
Yao (J.T.P.), see Shinozuka (M.) eds., *8447, book*
Yao (L.S.), cylindrical bodies, external flow, heat transfer (combined modes), laminar flow, separated flow, Chen (F.F.), *6777*
• convection (free), cylindrical bodies, heat transfer (combined modes), melting, Chen (F.F.), *8748*
Yao (S.-C.), convection (forced), critical heat flux, dispersed flow, drops, heat transfer, turbulent flow, Rane (A.), *3795*
• see Rane (A.G.), *7825*
• heat transfer, laminar flow, mist flow, pipe flow, spray flow, Rane (A.), *8697*
• see Rane (A.), *10651*
Yarbrough (D.W.), see Yang (T.M.T.), *8579*
Yarema (S.Ya.), crack growth, disks, stress intensity factor, Ivanitskaya (G.S.), *4475*
Yaremchuk (T.G.), see Redkovskaya (M.N.), *4283*
Yarin (A.L.), see Entov (V.M.), *636*
• see Entov (V.M.), *4630*
Yarin (L.P.), see Sukhov (G.S.), *5629*
• see Sukhov (G.S.), *9763*
• see Sukhov (G.S.), *9776*
• see Sukhov (G.S.), *9899*
Yarmitskii (A.G.), aerodynamic loads, cylindrical bodies, incompressible flow, inviscid fluid, lift, *10500*
yarn, fibers, flexible bodies, surveys, textiles, tires, Hearle (J.W.S.) eds., Thwaites (J.J.), (et al.), *1214, book*
• fibers, filamentary structures, paper, strength, Dent (R.W.), *2253*
• autocorrelation function, diffraction, fourier transform, lasers, statistical theory, Toba (E.), *2256*
• compression, filamentary structures, materials properties, textiles, Leaf (G.A.V.), Oxenham (W.), *5131*
• adhesives, textiles, twisting, Lord (P.R.), Parson (J.R.), (et al.), *7312*
• damping, dynamic effects, textiles, twisting, Lord (P.R.), Stuckey (W.C.), *7313*
• ballooning, spinning bodies, textiles, Lisini (G.G.), Nerli (G.), (et al.), *7314*
Yaroshevskii (V.A.), dynamic analysis, nonlinear analysis, vibration (self excited), *3090*
Yaskevich (G.F.), see Smirnov (V.A.), *992*
Yasnikov (G.P.), diffusion, fluidized beds, mass transfer, mathematical models, Gaiperin (L.G.), (et al.), *8777*
Yasuda (K.), see Yamamoto (Y.), *5201*
Yates (D.F.), design (minimum weight), trusses, Templeman (A.B.), (et al.), *10345*
Yatomi (C.), crack growth, griffith cracks, infinite medium, *462*
• crack opening displacement, crack propagation, energy-release rate, wedges, *2448*
Yatsyk (S.I.), crystallography, propagation velocity, ultrasonics, Krasavin (V.V.), *500*
Yaushev (K.K.), bifurcation, computing techniques, decay, discontinuities, ducts, *3724*
Yavin (Y.), optimal control, pursuit, stochastic processes, Jordaan (A.M.), *11075*
• see Pachter (M.), *11087*
yawing, flow measurement, meters, pressure measurement, water tunnels, Takamatsu (Y.), Takahara (H.), (et al.), *1641*
• high speed flow, hulls, planing surfaces, Casling (E.M.), *3034*
• asymptotic behavior, boundary layer, cylindrical bodies, existence theorems, gortler series, uniqueness, Schwierz (K.-P.), *5426*
• aerodynamic loads, incompressible flow, slender bodies, Reding (J.P.), Ericsson (L.E.), *5495*
• balancing, high speed, machinery, pitching, rotating shafts, Freudenstein (F.), Macey (J.P.), (et al.), *6563*
• pitot tube, sensitivity, Millward (A.), *7075*
• biodynamics, human body, perception thresholds, vibration, Irwin (A.W.), *7123*
• heaving, pitching, rolling motion, ship motion, virtual mass, Troesch (A.W.), *10878*
• airplanes, computer aided design, damping, gust loads, power spectral density, Noback (R.), Blaauboer (C.), *11843*
Ye (D.-Z.), see Zeng (Q.-C.), *9936*
Yearwood (T.L.), anemometers, aorta, blood flow, hot film, Chandran (K.B.), *6023*
• see Chandran (K.B.), *11485*
Yekutiel (O.), sampled data systems, synthesis, time delay systems, zero-order-hold, *6135*
Yellup (J.M.), deformation (plastic), laminates, metallurgy, work hardening, Woodward (R.L.), *4498*
Yen (C.-L.), see Geers (T.L.), *11660*
Yen (J.G.), dynamic stability, helicopters, rotating bodies, Mclarty (T.T.), *4439*
Yen (K.), algorithms, linearization, quaternion equations, time varying systems, Cook (G.), *4212*
Yen (S.-W.), buckling, shells (cylindrical), shells (stiffened), torsion, *6263*
Yeo (B.P.), algorithms, optimal control, quasilinearization, singular control, *189*
Yeo (M.F.), see Cheung (Y.K.), *7202*
• see Hirst (M.J.S.), *8237*
Yermakov (S.A.), bottom irregularities, damping, internal waves, *1889*
• bottom irregularities, internal waves, roughness, stratification, surface waves, tsunami, Pelinovskiy (Ye.N.), *8982*
Yeroshenko (V.M.), channel flow, fluid injection, heat transfer, nusselt number, porous walls, suction, Zaichik (L.I.), (et al.), *10572*
Yetter (J.A.), aerodynamic performance, noncircular pipes, nozzles, ventilation, Leavitt (L.D.), *3680*
Yeung (K.S.), see Tang (S.C.), *7208*
Yeung (M.R.), computer programming, heat transfer (combined modes), nuclear reactors, slug flow, tube bundles, Wolf (L.), *789*
Yeung (R.W.), flow obstructions, interaction, shallow water, ship dynamics, slender bodies, Tan (W.T.), *9007*
• cylindrical bodies, damping, floating bodies, virtual mass, *11654*
Yeung (W.-S.), ducts (curved), particle fluid flow, perturbation methods, trajectories, *4621*
• boundary layer (turbulent), integral methods, pressure gradient, two dimensional flow, Yang (R.-J.), *7697*
Yevjevich (V.), see Chaudhry (M.H.) eds., *3596, book*
Yevstratov (V.F.), composite materials, elastomers, materials properties, Lykin (A.S.), (et al.), *3278*
Yewell (R.B.), see Bejan (A.), *3758*
yield condition, acoustic emission, rocks, triaxial tests, Gowd (T.N.), *433*
• laminar flow, non newtonian flow, pipe flow, Froishteter (G.B.), Vinogradov (G.V.), *619*
• composite materials, layered media, Sawicki (A.), *1212*
• crack initiation, ductile fracture, Saka (M.), Shoji (T.), (et al.), *1380*
• cold working, forming, plastic behavior, upset forging, Pohlandt (K.), *2393*
• cold working, constitutive equations, forming, polymers, survey, Shaw (M.T.), *2396*
• plastic behavior, variational methods, work hardening, Casey (J.), Naghdi (P.M.), *3266*
• crack propagation, elastoplasticity, Dean (R.H.), Hutchinson (J.W.), *3464*
• boundary value problems, plastic behavior, plates (annular), Sanguineti (G.), *4354*
• grain size, microstructures, stress intensity factor, thresholds, Mutoh (Y.), Radhakrishnan (V.M.), *5288*
• crack opening displacement, fracture, multiple cracks, Smith (E.), *5305*
• inclusions, iron, stress strain relationships, triaxial loading, Igaki (H.), Ikeda (K.), (et al.), *5325*
• steel, strength, stress strain relationships, surfaces, Sasaki (H.), Sato (Y.), *5327*
• capillary flow, viscometry, viscous flow, Golovanchikov (A.G.), Tyabin (N.V.), *6589*
• steel, thermal effects, Kovalchuk (B.I.), Lebedev (A.A.), (et al.), *7287*
• fracture, notch tests, polymers, torsion, Truss (R.W.), Duckett (R.A.), (et al.), *7584*
• elastoviscoplasticity, fracture mechanics, j-integral, shells (cylindrical), work hardening, Carmignani (C.), Vitale (E.), *8151*
• beams, deflections, elastoplasticity, frames, plasticity, Bandyszewski (W.), Sawczuk (A.), *8438*
• crack initiation, cracks, Smith (E.), *9383*
yield criteria, constitutive equations, existence theorems, plasticity, Kamenyarzh (Ye.A.), *267*
• anisotropic media, plane stress, work hardening, Hodge (P.G.) Jr., *268*
• elastoplasticity, finite element techniques, numerical methods, Tracey (D.M.), Freese (C.E.), *278*
• failure, plastic behavior, sand, Desai (C.S.), *419*
• plastic behavior, soils, Van Eekelen (H.A.M.), *1315*
• crack growth, crack opening displacement, elastoplasticity, stress intensity factor, De Koning (A.U.), *1378*
• deformation (plastic), material testing, polymers, G'Sell (C.), Jonas (J.J.), *2235*
• constitutive equations, work hardening, Allen (D.H.), *2239*
• metals, plasticity, porous media, Gadala (M.S.), Mullins (M.L.), (et al.), *2243*
• plates (anisotropic), sheet metal, stress strain relationships, Ishi (M.F.), *2275*
• plates (bimetallic), plates (circular), plates (sandwich), Turvey (G.J.), *2279*
• functional analyis, plasticity, stress invariants, vector methods, Stokes (V.K.), *4927*
• elastoplasticity, experimental results, rupture, Mozharovskii (N.S.), Bobyr (N.I.), (et al.), *5110*
• anisotropy, bauschinger effect, experimental results, Shevchenko (Yu.N.), Kulakov (S.V.), (et al.), *5115*
• elasticity (nonlocal), elastoplasticity, Eringen (A.C.), *6179*
• metals, micromechanisms, work hardening, Bastun (V.N.), *6183*
• limit analysis, linear programming, plasticity, Cannarozzi (A.A.), *6501*
• constitutive equations, continuum theory, granular media, Mullenger (G.), Davis (R.O.), *7291*
• dislocations, relaxing media, rods, stress relaxation, Merzhievskii (L.A.), Shamonin (S.A.), *8200*
• anisotropy, plates (perforated), Markov (K.Z.), *8202*
• materials possessing memory, work hardening, Hroz (Z.), *8211*
• deep drawing, drawing, plastic flow, von mises flow rule, Zivanovic (S.), *8362*
• steel, strain, stresses, tension, Bascoul (A.), Maso (J.C.), *8431*

Y

- crack opening displacement, dynamic response, finite element techniques, stress intensity factor, Betser (A.A.), Kobayashi (A.S.), (et al.), *10302*

Yih (C.-S.), buoyant flow, plumes, prandtl number, Wu (F.), *2671*
- inviscid fluid, similarity methods, stratified flow, vorticity, *7655*
- axisymmetric flow, differential equations (partial), existence theorems, stratified flow, *10407*

Yilmazer (U.), see Valanis (K.C.), *6456*
Yin (S.-K.), see Hohenemser (K.H.), *6239*
Yin (W.-L.), finite strain, membranes, theory, *5157*
Ying (L.-A.), cauchy problem, existence theorems, hyperbolic equations, inhomogeneities, uniqueness, Wang (C.-H.), *1089*
Ying (S.P.), coherent structure, noise, noise abatement, power plants, Dennison (E.E.), *3978*
Yinting (L.), see Dexiang (G.), *3007*
Yip (M.C.), see Wu (H.C.), *3265*
Yoda (K.), see Irie (T.), *7387*
Yoda (M.), fracture criteria, j-integral, mixed mode fracture, unloading, *3458*
Yoder (P.J.), constitutive equations, plasticity, strain analysis, Iwan (W.D.), *8204*
Yogurtcu (Y.K.), testing equipment, ultrasonics, velocity measurement, Lambson (E.F.), (et al.), *5240*
Yokobori (T.), crack growth, creep, fatigue, fracture mechanics, high temperature, stress intensity factor, Sakata (H.), *3494*
- crack growth, creep, fatigue, fracture mechanics, high temperature, stress intensity factor, Sakata (H.), (et al.), *3495*

Yokoi (M.), experimental methods, friction (sliding), roughness, sound generation, Nakai (M.), *11945*
- experimental methods, friction (sliding), sound generation, Nakai (M.), *11946*

Yokokawa (S.), see Ohmori (M.), *9378*
Yokoo (Y.), see Kato (S.), *3552*
Yokota (T.), boreholes, earth, heat transfer, measurements, Kinoshita (H.), (et al.), *966*
Yokota (Y.), see Masuoka (T.), *8940*
Yokoyama (T.), finite element techniques, plastic waves, rods, Tsuzuki (M.), *4446*
- aquifers, energy conservation, energy storage, Umemiya (H.), (et al.), *10603*

Yokoyama (Y.), see Okabe (S.), *1473*
Yolkin (N.N.), boundary value problems, existence theorems, gravity waves (finite depth), rotational flow, *11615*
Yong (R.N.), see Tabba (M.M.), *7441*
Yoo (C.H.), dynamic analysis, frequencies, girders (curved), Fehrenbach (J.P.), *3295*
Yoo (H.J.), see Han (C.D.), *8493*
Yoo (J.Y.), see Beavers (G.S.), *7642*
Yortsos (Y.C.), see Gavalas (G.R.), *1087*
Yoshida (A.), see Yamamoto (T.), *4100*
- chemical kinetics, combustion, flames (turbulent), reaction rates, Gunther (R.), *6837*
- see Katsumata (M.), *9910*

Yoshida (F.), creep, cyclic loading, hardening, strain, stress ratio, stresses, Ohta (I.), (et al.), *5329*
Yoshida (H.), absorption, cavities, ducts, porous media, silencers, sound propagation, *2934*
- monte carlo analysis, pipe flow, simulation, turbulent flow, two phase flow, Masuda (H.), (et al.), *8893*

Yoshida (K.), see Kyozuka (Y.), *11644*
Yoshida (O.), see Ono (R.), *1923*
Yoshida (S.), anisotropic media, soils, stress strain relationships, *3400*
Yoshikawa (K.K.), afterbodies, compressible flow, supersonic flow, turbulent flow, Wray (A.A.), *11411*
Yoshimoto (I.), see Muruyama (K.), *3582*
Yoshimura (T.), adaptive systems, discrete systems, linear systems, stochastic control, stochastic systems, Kiyota (M.), (et al.), *3204*
- see Watanabe (K.), *11084*

Yoshinaka (R.), rocks, strength, Yamabe (T.), *2389*
Yoshino (T.), axisymmetric loading, cylindrical bodies, elasticity (three dimensional), Utsugi (S.), *4333*
Yoshizaki (M.), convection (free), heat, rayleigh number, shear flow, temperature profile, *1515*
Yoshizawa (A.), closure, reynolds stresses, statistical theory, turbulence, *4644*
Yossifon (S.), adhesion, force, grinding, mechanisms, Rubenstein (C.), *438*
Young (A.M.), see Henriquez (T.A.), *4804*
Young (C.), see Wilby (P.G.), *4673*
Young (D.M.), see Hageman (L.A.), *4177, book*
Young (J.W.), airplanes, dynamic stability, mathematical models, trajectories, Schy (A.A.), (et al.), *1161*
Young (K.J.), see Dymond (J.H.), *1658*
Young (M.F.), see Goldschmidt (V.W.), *2690*
- energy storage, storage, stratified flow, tanks, thermal effects, thermosyphons, Baughn (J.W.), *4714*
- solar collectors, solar energy, thermosyphons, Bergquam (J.B.), *5956*

Young (S.J.), absorption, cylindrical bodies, emissivity, radiant interchange, radiation properties, *7861*
Youngren (G.K.), combustion chambers, reservoirs, simulation, *8943*
Younis (M.E.), blades, cascades, finite volume method, numerical methods, time domain techniques, Camarero (R.), *9588*
Yount (D.E.), bubble dynamics, cavitation, permeability, stabilization, *943*
Yousaf (M.), characteristic methods, explosions, implosion, shock waves, *8637*
Yousef (W.W.), convection, entrance region, interferometry, nusselt number, secondary flow, Tarasuk (J.D.), *1668*
Yousri Gerges (S.N.), acoustics, reverberation, sound generation, *901*
Yu (J.C.), see Joshi (M.C.), *4806*
Yu (J.S.), convection, diffusion, dilute solutions, laminar flow, *1557*
Yu (N.J.), see Seebass (A.R.), *2617*
Yu (S.-M.), see Yang (C.-I.), *4452*
Yu (T.X.), see Johnson (W.), *434*
Yu (W.), adaptive systems, design, feedback, networks, pierce loop, queue theory, Majithia (J.C.), *11093*
Yu (Z.-M.), accelerometers, calibration, dynamic testing, frequency response, Li (W.-L.), (et al.), *1269*
Yu Hon-Cheung, constraints, linkages, mechanisms (spatial), *9480*
- kinematics, linkages, mechanisms, synthesis, Baker (J.E.), *10380*

Yuan (J.S.-C.), control, space vehicles, stabilization, *8848*
Yucel (A.), absorption, convection, convection (free), heat addition, radiant interchange, thermal plumes, Bayazitoglu (Y.), *9727*
Yuceoglu (U.), adhesives, bending, composite materials, joints, shear stress, stress analysis, Updike (D.P.), *9488*
Yudin (V.I.), dynamic analysis, manipulators, robotics, vibration (forced), *3357*
Yuen (H.C.), see Saffman (P.G.), *671*
- see Lake (B.M.), *3020*

Yuen (W.W.), numerical methods, thermal diffusion, transient effects, Wong (L.W.), *771*
- absorption, radiant interchange, reflection, scattering, Wong (L.W.), *1706*
- absorption, gases, radiant interchange, radiation, transmission, *10604*

Yuen Ming Fai, see Fok Wing Chau, *9288*
Yule (A.J.), combustion, flames, interaction, jets, schlieren methods, transition, Chigier (N.A.), (et al.), *841*
Yun (C.-B.), dynamic effects, kalman filters, nonlinear systems, Shinozuka (M.), *513*
Yunga (S.L.), deformation, earth, earth's crust, earthquake effects, *4032*
Yunis (M.), see Agrawal (R.K.), *10722*
Yurachkovskiy (Yu.P.), algorithms, estimation, pattern recognition, Groshkov (A.N.), *169*
Yurchak (B.S.), see Skhirtladze (G.I.), *7061*
Yurevich (F.B.), see Konyukh (L.A.), *5586*
Yushkevic (A.A.), markov processes, mathematical models, probability theory, stochastic processes, Fainberg (E.A.), *5053*
Yushkov (B.S.), see Bartolomei (A.A.), *3408*
Yusov (V.N.), see Myachenkov (V.I.), *316*
Yusupov (R.M.), see Gorodetskiy (V.I.), *4316*

Z

Zabashta (Yu.F.), see Golik (A.Z.), *2978*
Zabela (K.A.), bonded joints, strength, Znachkov (Yu.K.), *10384*
Zablotskii (N.D.), see Grudskaya (E.G.), *9971*
Zabluda (S.M.), geomagnetic field, libration theory, magnetic field, orbit mechanics, Yanshin (A.M.), *4759*
Zabolotnyi (F.T.), axisymmetric flow, inviscid fluid, mixed flow turbines, vortex flow, *2758*
Zadorozhnyi (V.F.), minimax techniques, model reduction, synthesis, Nurminskii (E.A.), (et al.), *107*
Zaev (V.A.), see Nikitenko (A.F.), *6431*
Zagainov (V.A.), see Kapustin (V.N.), *4833*
Zagzebski (K.P.), see Chen (J.C.), *6314*
Zaheeruddin (K.), bearings (porous metal), bearings (thrust), inertia, lubrication (hydrostatic), magneto fluid dynamics, *1025*
Zahoor (A.), see Leis (B.N.), *468*
- crack growth, ductile fracture, j-integral, path integrals, steel, Abou-Sayed (I.S.), *1375*
- circumferential cracks, ductile fracture, j-integral, pipes, stability theory, Kanninen (M.F.), *5303*
- bending, cracks, fracture criteria, j-integral, pipelines, plasticity, Kanninen (M.F.), *8400*
- see Wilkowski (G.M.), *10301*

Zaichik (L.I.), see Eroshenko (V.M.), *6658*
- see Yeroshenko (V.M.), *10572*
- see Eroshenko (V.M.), *10669*

Zaitsev (A.A.), lifting bodies, separation, trailing edge, unsteady flow, vorticity, Tyurev (V.V.), *2913*
- airfoils, flaps, incompressible flow, potential flow, vortex sheets, Komarov (A.M.), *3728*

Zaitsev (N.L.), see Bakshi (O.A.), *482*
Zajaczkowski (J.), beams, friction, stability theory, vibration (parametric), *6279*
- approximation methods, differential equations (ordinary), vibration (parametric), *6283*

Zak (M.), elastic bodies, hydroelasticity, rotating shafts, surface profiles, *1174*
Zak (M.A.), panels (flat), plates, solar collectors, vibration (nonlinear), *8300*
Zak (S.H.), see Olbrot (A.W.), *10080*
Zak (V.L.), algorithms, differential games, pursuit, *4318*
Zak (Yu.A.), algorithms, computer programming, stochastics, Yakhno (V.N.), *1107*
- see Belikov (S.A.), *3184*

Zakarin (E.A.), combustion, convection (free), navier stokes equation, Kashkarov (V.P.), (et al.), *9779*
Zakharin (A.M.), markov processes, mathematical models, stochastic systems, *3196*
Zakharin (F.M.), dynamic analysis, gyrodynamics, gyroinertial systems, measurements (dynamic), Kharitonov (M.A.), *8101*
Zakharov (N.S.), burgers equation, group theory, korteweg de vries equation, nonlinear analysis, Korobeinikov (V.P.), *10021*
Zakharov (S.M.), see Bushe (N.A.), *1020*
Zakharov (V.M.), atmosphere, lasers, lidar, meteorology (physical), moisture, raman scattering, scattering, Kalachinskii (S.F.), (et al.), *5959*
Zakkay (V.), see Miller (G.), *6815*
Zakiyaziminskii (L.A.), see Efimov (B.G.), *11403*
Zakrzhevskii (A.E.), see Ganiev (R.F.), *192*
- control, dynamic analysis, elastic bodies, programmed motion, *6055*
- dynamic analysis, gyrodynamics, rotating bodies, *7150*

Zalka (K.), beams (cantilever), beams (thin section), buckling (torsional), lateral stability, *3332*
- beam columns, beams (cantilever), buckling, shear loading, *3333*

Zaman (K.B.M.Q.), experimental results, jets, shear flow, suppression, turbulence, Hussain (A.K.M.F.), *1582*
- see Hussain (A.K.M.F.), *5461*

Zamani (N.G.), elasticity, finite element techniques, least squares, *1129*
Zamecnik (F.J.), buckling (local), cold working, cold-formed steel, collapse, failure, multistory frames, steel, *5349*
Zames (G.), discrete systems, entropy, linear systems, linear theory, time invariant systems, *7231*
Zamir (I.), see Sheinman (I.), *4374*
Zamir (M.), channel flow, channels (divided), flow obstructions, poiseuille flow, wedges, Camiletti (S.E.), *9575*
Zamskii (B.N.), conservation laws, mixtures, thermal diffusion, transport properties, Rabinovich (G.D.), *4134*
Zamyatnin (M.M.), see Solntsev (Yu.P.), *6368*
Zander (M.), see Thomas (W.), *1659*
Zandt (G.), see Hawley (B.W.), *3392*
Zannetti (L.), compressible flow, inviscid fluid, numerical methods, unsteady flow, Colasurdo (G.), *1524*
Zapparov (F.I.), see Garifullin (F.A.), *8724*
Zapryanov (Z.), drops, oscillations, vortices, Chervenivanova (E.E.), *4018*
- ducts (curved), laminar flow, porous surfaces, secondary flow, unsteady flow, Matakiev (V.), *4618*

Zarchan (P.), design, guidance systems, missiles, simulation, *1162*
Zarek (J.H.B.), beams, bending, eigenvalues, modal analysis, vibration (free), Gibbs (B.M.), *3352*
Zaremba (A.T.), control, cranes, pendulums, Sokolov (B.N.), *174*
Zaretsky (E.V.), see Coy (J.J.), *4899*
Zariffeh (E.K.), convection (free), cylindrical bodies, laminar flow, plane flow, Daguenet (M.), *4708*
Zaripov (R.G.), statistical mechanics, thermodynamic processes, thermodynamics (statistical), *3768*
Zarka (J.), cylindrical bodies, elastoplasticity, half space, rolling, Frelat (J.), *7295*
Zarko (V.E.), combustion (unsteady), models, powders, Kiskin (A.B.), *10706*
- see Grigorev (V.G.), *10713*

Zarrabi (K.), see Kitching (R.), *1241*
- see Kitching (R.), *6221*

Zarrop (M.B.), discrete systems, frequency domain techniques, identification, information theory, *2126*
Zarubin (A.G.), bodies (liquid filled), boussinesq fluid, cavities, convection (free), moving media, perturbation methods, Ngo Zui Kan, *7838*
Zaryankin (A.E.), annular flow, geometrical properties, steam turbines, *3980*
- channel flow, entrance region, turbulence model, turbulent flow, Likherzak (E.E.), (et al.), *10440*

Zarzer (E.), see Kowalik (M.), *7804*
Zaslavsky (A.), beams, shear stress, *296*
- buckling, dynamic stability, hinged bodies, moving loads, portal frames, *3541*

Zasionko (I.S.), decomposition, reaction kinetics, vibration (thermally excited), Mukoseev (Yu.K.), *829*
- nonequilibrium effects, shock waves, two component flow, Mozzhukhin (E.V.), (et al.), *1734*

Zaslotskaya (L.A.), see Gopkalo (A.P.), *6947*
Zastolskaya (Z.K.), see Demina (N.I.), *3584*
Zastrow (U.), see Panagiotopoulos (P.D.), *254*
- airy function, anisotropic media, disks, elasticity (three dimensional), plates (anisotropic), *2226*
- plates (anisotropic), plates (circular), stress analysis, *2276*
- see Rieder (G.), *7378*

Zatsarinnyi (V.V.), see Makhutov (N.A.), *491*
Zavadskii (V.K.), algorithms, control, filters, guidance theory, terminal control, *2111*
Zavarin (A.N.), computing techniques, error, measurements, monitoring, *2484*
Zavarykin (L.G.), see Andreev (L.V.), *8267*
Zavgorodnii (P.F.), concentration, convection (free), models, solidification, Kolesnik (V.I.), (et al.), *2847*
- see Povkh (I.L.), *3819*
- see Zhuk (V.I.), *4705*

Zavgorodnii (V.I.), see Dulney (G.N.), *2812*
Zavoichinskii (B.I.), boundary value problems, elastic constants, elasticity (linear), *6157*
Zavolzhenskii (M.V.), crossflow, cylindrical bodies, oscillating bodies, Terskov (A.Kh.), *4684*
Zavyalova (N.S.), aluminum alloys, flaw detection, ingots, material testing, titanium, ultrasonics, Grishina (V.M.), (et al.), *501*
Zawidzki (J.), see Woi-Gajewska (B.), *12060*
Zaychik (L.I.), fluid injection, heat transfer, mass transfer, pipe flow, suction, *815*
Zaytsev (G.G.), optimal control, servomechanisms, time optimal systems, Steklov (V.K.), *4302*
Zaytsev (V.P.), see Droban (N.V.), *899*
Zboril (F.), analog computation, conduction (unsteady), differential equations (partial), *2046*
Zborowski (A.), models, propellers (marine), ships, wakes, Nginh (N.M.), *1921*
Zdravkovich (M.M.), cylindrical bodies, strakes, suppression, vortex shedding, *868*
Zebelyan (Z.Kh.), see Bolotin (V.V.), *6241*
Zedan (M.), see Schneider (G.E.), *3118*
Zedan (M.F.), see Dalton (C.), *9941*
Zee (G.T.Y.), see Grace (R.A.), *7769*
Zeid (I.), contact problems, finite element techniques, friction (rolling), rolling contact, Padovan (J.), *7210*
- see Padovan (J.), *8149*

Zeigarnik (Yu.A.), boiling, channel flow, convection (forced), cooling, critical heat flux, heat exchangers, Privalov (N.P.), (et al.), *7834*
Zein (S.A.A.), channel flow, cylindrical bodies, drag coefficient, floating bodies, free boundary, froude number, *5398*
Zeinetdinova (R.Z.), coatings, damping, experimental mechanics, tubes, vibration, Naumkina (N.I.), (et al.), *5194*
Zeitunyan (R.Kh.), alfven number, equilibrium, magneto fluid dynamics, rotating fluids, theory, *10743*
Zeldovich (Y.), combustion, flame propagation, time dependence, *10699*
Zeldovich (Ya.B.), see Aldushin (A.P.), *3980*
- flame propagation, flames (laminar), hydrodynamic stability, thermal instability, *11782*

Zelengur (A.A.), see Alekseyev (N.M.), *8689*
Zelenko (A.A.), circulation, hydrodynamic stability, oceanography, perturbation methods, *4877*

Zelentsov (V.B.), bending, boundary value problems, contact problems, plates, *7351*
- see Aleksandrov (V.M.), *11159*

Zelentsov (V.V.), compressible flow, fluid injection, nozzles, supersonic flow, Nesterov (A.A.), (et al.), *11400*
Zelenyuk (E.E.), see Krivenyuk (V.V.), *8885*
Zelman (M.B.), see Volodin (A.G.), *1538*
Zemlyanskii (B.A.), cylindrical bodies, heat transfer, hypersonic flow, leading edge, shock waves, swept wings, Shmanenkova (G.A.), *6767*
- blunt bodies, heat transfer, hypersonic flow, vorticity, Lunev (V.V.), (et al.), *10425*

Zeng (Q.-C.), atmospheric circulation, coriolis forces, rotating fluids, Ye (D.-Z.), *3936*
Zenkov (V.V.), linear systems, mathematical models, process control, range model, *2110*
zero g phenomena, dynamic properties, human body, mass determination, measurements (dynamic), Sarychev (V.A.), Sazonov (V.V.), (et al.), *1064*
- combustion, space shuttle, Cockran (T.H.), *3876, book*
- aerosols, orbits, Edwards (H.W.), *4016*
- containers (partially filled), space vehicles, spacelab, visualization, Vreeburg (J.P.B.), Van Den Assem (D.), *5477*
- bones, demineralization, gravity, strain measurement, Hinsenkamp (M.), Burny (F.), (et al.), *6002*
- drops, oscillations, rotational flow, Radyakin (N.K.), *11596*

Zeronian (S.H.), flammability, moisture, textiles, Ellison (M.S.), (et al.), *2867*
Zevin (A.A.), algorithms, optimal control, vibration (forced), vibration isolation, vibrators, vibrotransporter, *4311*
Zeytounian (R.), compressible flow, navier stokes equation, reynolds number (high), unsteady flow, *585*
Zeytounian (R.K.), see Guiraud (J.P.), *5938*
Zezin (Yu.P.), materials properties, polymers, viscoelastic materials, Malinin (N.I.), *262*
Zhabin (V.I.), algorithms, automation, design (optimum), mathematical programming, Korneichuk (V.I.), (et al.), *159*
Zhabko (N.I.), see Troshchenko (V.T.), *4512*
Zhak (V.M.), hydrostatics, ocean waves, oceanography, tsunamis generation, Kulikov (E.A.), *1892*
Zhakin (A.I.), convection, electro fluid dynamics, inhomogeneities, nonlinear characteristics, stability theory, *5674*
Zhang (D.-C.), distributed parameters, stability theory, time delay systems, time lag, *9168*
Zhang (W.-Y.), see He (G.-Q.), *9264*
Zharinov (A.V.), electron beams, modeling, pinch effect, relativity, vlasov equation, Chikhachev (A.S.), *9802*
Zharkov (A.A.), see Filippovskii (N.F.), *5849*
Zharkov (V.N.), see Akopyan (S.Ts.), *5877*
- see Gavrilov (S.V.), *8006*

Zharkova (G.M.), aerodynamics, flow measurement, liquid crystal, optical techniques, thermal measurements, *725*
Zhdan (S.A.), dynamic loads, explosions, walls, *7434*
Zhdanov (A.I.), identification, least squares, linear systems, Katsyuba (O.A.), *3181*
Zhdanov (K.R.), calorimeters, conduction (heat), conductivity, thermal measurements, Matizen (E.V.), (et al.), *2784*
Zhdanov (V.V.), see Bespalov (A.M.), *9712*
Zheleznov (L.P.), see Kabanov (V.V.), *11112*
Zheleznyakov (G.V.), discharges, hydrology, rivers, streams, Danilevich (B.B.), *4045*
Zheng (Y.-S.), boundary value problems, elliptic equations, singular perturbations, *10934*
Zheng (Y.W.), see Luo (S.J.), *6627*
Zheng (Z.-C.), see Hwang (K.-C.), *6253*
Zhermolenko (V.N.), dynamic analysis, nonlinear analysis, perturbation methods, *2317*
Zhestkov (G.B.), compressible flow, compressional waves, entrance region, pipe flow, Mareev (V.A.), *11601*
Zhevlakov (G.N.), see Vorobeva (L.S.), *6803*
Zhigalko (Yu.P.), dynamic analysis, plates (stiffened), shells (stiffened), Dmitrieva (L.M.), *8311*
Zhigulev (V.N.), airfoils, drag, optimization, subsonic flow, transonic flow, *5493*
Zhileikin (Ya.M.), see Bakhvalov (N.S.), *5734*
- see Bakhvalov (N.S.), *11980*
- see Bakhvalov (N.S.), *12007*

Zhilkin (V.A.), holography, interferometry, strain measurement, *3485*
Zhitenev (V.V.), crack growth, deformation (plastic), impact, runge kutta method, stiffness, testing equipment, Markochev (V.M.), *2496*
Zhitkyavichene (V.P.), cyclic loading, deformation, high temperature, low cycle fatigue, Medeksha (G.G.), *3269*
Zhiugzhda, see Zhukauskas (A.), *2786, book*
Zhivotyagin (A.F.), concentration, diffusion, drops, peclet number, wakes, *9539*
Zhmakin (A.I.), compressible flow, numerical methods, shock waves, Fursenko (A.A.), *11425*
Zhmulin (E.M.), acoustics, jet engines, noise, sound generation, supersonic flow, Munin (A.G.), (et al.), *910*
Zhong-Heng (G.), elasticity (nonlinear), variational methods, virtual work methods, *236*
- deformation (finite), elastoplasticity, strain analysis, *6181*
- bending (elastic), thin walled structures, torsion, *6208*
- elasticity (nonlinear), energy methods, variational methods, *7267*

Zhu (P.), aerodynamic loads, bodies of revolution, subsonic flow, vortex shedding, wings, Shou (W.), (et al.), *6717*
Zhu (Y.L.), aerodynamics, boundary value problems, compressible flow, numerical methods, Chen (B.M.), *11398*
Zhuikov (V.V.), see Lokai (V.I.), *2822*
Zhuk (A.P.), see Guz (A.N.), *6329*
Zhuk (V.I.), see Ryzhov (O.S.), *2634*
- heat transfer, insulating materials (thermal), solidification, Zavgorodnii (P.F.), (et al.), *4705*
- boundary layer, moving surfaces, recirculation, supersonic flow, Ryzhov (O.S.), *5431*
- boundary layer, moving surfaces, shock waves, Ryzhov (O.S.), *7707*

Zhukauskas (A.), crossflow, cylindrical bodies, heat exchangers (crossflow), heat transfer Zhiugzhda, *2786, book*
Zhukhovitskii (E.M.), see Gershuni (G.Z.), *5554*
- see Gershuni (G.Z.), *6783*
- see Gershuni (G.Z.), *8942*

Zhukov (A.V.), see Vaal (A.A.), *5242*
Zhukov (E.N.), see Zhvalov (V.P.), *2943*
Zhukov (S.A.), boiling, conduction (heat), rewetting, thermal waves, Barelko (V.V.), (et al.), *4704*
- film boiling, nucleate boiling, pool boiling, thermal instability, transition boiling, Barelko (V.V.), (et al.), *6772*

Zhukov (V.M.), see Petukhov (B.S.), *1673*
- see Petukhov (B.S.), *6976*

Zhukovskii (A.P.), see Kayuk (Ya.F.), *11116*
Zhukovskiy (A.V.), adiabatic processes, centrifugation, helium, liquid vapor mixture, two phase flow, *4014*
Zhumabaev (M.Zh.), see Karimbaev (T.D.), *1254*
Zhuravlenko (V.Ya.), see Kremnev (O.A.), *5609*
Zhuravskii (G.I.), see Ganzha (V.L.), *5817*
- see Ganzha (V.L.), *12050*

Zhvalov (V.P.), noise, turbojet engines, Zhukov (E.N.), (et al.), *2943*
Zibold (A.F.), see Kapusta (A.B.), *10756*
Ziebs (J.), biaxial loading, fracture mechanics, fracture toughness, microstructures, steel, Aurich (D.), (et al.), *11317*
Ziegler (F.), see Irschik (H.), *7347*
Zienkiewicz (O.C.), constitutive relations, foundations, numerical analysis, soils, *6374*
- cyclic loading, drainage, soils, Chang (C.T.), (et al.), *6387*
- see Williams (R.T.), *6707*

Ziganshin (R.R.), see Galeev (Z.M.), *6866*
- discharges, electrical properties, plasma, theory, turbulence (transport), Ismagilov (R.Kh.), (et al.), *11831*

Ziglina (I.N.), circumnavigation, damage, probability theory, solar system, tides, *8838*
Zikidis (M.K.), computing techniques, periodic orbits, restricted three body problem, *8841*
Zilauts (A.F.), see Kreger (A.F.), *3248*
Zilbershteyn (A.M.), classification, detection, estimation, noise (random), signal detection, Natkovich (Yu.S.), *2103*
- Zimcik (D.G.), dynamic stability, imperfections, impulsive loading, shells (cylindrical), transient loading, Tennyson (R.C.), *7361*

Zimmerman (C.A.), design, rockets, solid propellants, space vehicle structures, *1769*
Zimmerman (J.T.F.), bottom irregularities, coriolis forces, oceanography, tides, vorticity, *10858*
Zimmerman (R.H.), composite materials, conduction (heat), filamentary structures, layered media, *10594*
Zimont (V.L.), channel flow, combustion, hydrogen, shock waves, supersonic flow, Lavin (V.M.), (et al.), *2865*
Zinchenko (A.Z.), axisymmetric flow, drops, spherical bodies, stokes flow, viscous flow, *1509*
Zinchenko (V.I.), boundary layer, fluid injection, heat transfer, shells (spherical), supersonic flow, Trofimchuk (E.G.), *10682*
Zinkovskii (A.P.), see Matveev (V.V.), *5214*
Zinnatullin (N.Kh.), see Nafikov (I.M.), *4826*
Zinober (A.S.I.), see Huntley (E.), *7385*
Ziskin (M.C.), see Meier (G.D.), *1037*
Ziv (A.), ejectors, mixing, pumps, supersonic flow, Wolfshtein (M.), *4679*
Ziv (M.), elasticity (nonlinear), large displacement, waves, *2362*
Zivanovic (S.), deep drawing, drawing, plastic flow, von mises flow rule, yield criteria, *8362*
Zletin (A.N.), axisymmetric loading, cylindrical bodies, elasticity (linear), *8247*
Zlatoustov (V.A.), dynamic analysis, pendulums, vibration (forced), Sazonov (V.V.), (et al.), *4404*

Ziobin (V.V.), see Balanin (B.A.), *5812*
Ziochevskii (A.B.), see Bondarovich (L.A.), *1409*
Ziodeev (V.P.), see Kogan (E.A.), *11333*
Zmitrowicz (A.), blades, finite element methods, friction (sliding), turbines, vibration (forced), vibration (free), *7397*
• friction (sliding), friction (solid solid), roughness, surface profiles, surfaces, *10884*
Znachkov (Yu.K.), see Zabela (K.A.), *10384*
Znachkovskii (O.Ya.), brittle fracture, elliptical cracks, thermal loading, Rakovskii (V.A.), (et al.), *7491*
Znamenskii (V.V.), ablation, aerodynamic heating, film thickness, heat transfer, Lunev (V.V.), *5607*
Zocco (J.G.), see Greenstein (T.), *6623*
Zolezzi (T.), constraints, optimal control, regulator problem, *11070*
Zollinger (M.), computing techniques, finite element techniques, plates (parallel), stress analysis, *8154*
Zolotko (A.N.), metals, particle fluid flow, suspensions, Matsko (A.M.), (et al.), *9745*
• boron, ignition sensitivity, particles, suspensions, Polishchuk (D.I.), (et al.), *10698*
Zolotov (N.L.), convection (free), plates (vertical), similarity methods, *2796*
Zolotova (N.V.), see Gonor (A.L.), *12023*
Zornig (J.G.), dispersion, scattering, underwater acoustics, *5764*
Zscherpe (G.), conduction (heat), lasers, phase changes, radiant interchange, radiation properties, *10607*
Zscherpel (W.), see Lenk (D.), *933*
Zuber (I.), numerical methods, turbulence, turbulent flow, *9615*
Zubov (L.M.), compression, elasticity (three dimensional), stability theory, *3320*
Zubov (V.I.), damping, optimal control, rotating bodies, time optimal systems, *4271*
Zubova (A.F.), differential equations (ordinary), oscillations, stability, *28*
Zuckerwar (A.J.), radiation, resonance, sound, tubes, Meredith (R.W.), *11975*
Zuev (A.I.), see Avrorin (E.N.), *5685*
Zugna (S.), see Gabrielli (I.), *5760*
Zukas (J.A.), dynamic properties, impact, materials properties, strain rate, Nicholas (T.), (et al.), *9350*
Zurek (W.H.), statistical mechanics, thermodynamic properties, thermodynamics (nonequilibrium), Schieve (W.C.), *6748*
Zurer (A.B.), see Dik (I.G.), *9837*
Zverkov (B.V.), bends, creep, plane strain, pressurized pipes, Danyushevskii (A.I.), *10153*
Zvirin (Y.), see Kalva (S.P.), *2991*
• closed conduit flow, convection (free), nuclear reactors, thermal instability, Jeuck (P.R.) III, (et al.), *6811*
Zweben (C.), aerospace, composite materials, hybrid construction, structural analysis, *10131*
Zyablova (Zh.I.), disks, heat addition, radiant interchange, solar energy, Komissarchik (M.G.), (et al.), *9726*
Zyabrev (N.B.), concentration, gases, impurities, porous media, Kudryashov (N.A.), (et al.), *823*
Zyvoloski (G.A.), finite difference methods, geothermal reservoirs, two phase flow, O'Sullivan (M.J.), *8932*

AMR SUBJECT HEADINGS

FOUNDATIONS AND BASIC METHODS IN MECHANICS

- Continuum mechanics
- Finite element methods
- Finite difference methods
- Other methods in computational mechanics
- Modeling
- Experimental system analysis

DYNAMICS AND VIBRATION

- Kinematics & dynamics
- Vibrations of solids (basic)
- Vibrations (structural elements)
- Vibrations (structures)
- Wave motions in solids
- Impact on solids
- Wave motion in incompressible fluids
- Wave motion in compressible fluids
- Solid-fluid interaction
- Astronautics (celestial & orbital mechanics)
- Explosions & ballistics
- Acoustics

AUTOMATIC CONTROL

- Systems theory & design
- Optimal control systems
- Systems & control (applications)
- Robotics

MECHANICS OF SOLIDS

- Elasticity
- Viscoelasticity
- Plasticity & viscoplasticity
- Composite material mechanics
- Cables, ropes, beams, etc.
- Plates, shells, & membranes
- Structural stability (buckling, postbuckling)
- Electromagneto solid mechanics
- Soil mechanics (basic)
- Soil mechanics (applied)
- Rock mechanics
- Material processing
- Fracture processes
- Fracture mechanics
- Experimental stress analysis
- Material test techniques
- Structures (basic)
- Structures (ground)
- Structures (ocean & coastal)
- Structures (mobile)
- Structures (containment)
- Friction & wear
- Machine elements
- Machine design
- Fastening & joining

MECHANICS OF FLUIDS

- Rheology
- Hydraulics
- Incompressible flow
- Compressible flow
- Rarefied flow
- Multiphase flows
- Wall layers (including boundary layers)
- Internal flow (pipe, channel, Couette)
- Internal flow (inlets, nozzles, diffusers, & cascades)
- Free shear layers (mixing layers, jets, wakes, cavities, & plumes)
- Flow stability
- Turbulence
- Electromagneto fluid & plasma dynamics
- Naval mechanics
- Aerodynamics
- Machinery fluid dynamics
- Lubrication
- Flow measurements & visualization

THERMAL SCIENCES

- Thermodynamics
- Heat transfer (one phase convection)
- Heat transfer (two phase convection)
- Heat transfer (conduction)
- Heat transfer (radiation & combined modes)
- Heat transfer (devices & systems)
- Thermomechanics of solids
- Mass transfer with & without heat transfer
- Combustion
- Prime movers & propulsion devices (systems & applications)

EARTH SCIENCES

- Micromeritics
- Porous media
- Geomechanics
- Earthquake mechanics
- Hydrology, oceanography, & meteorology

ENERGY SYSTEMS AND ENVIRONMENT

- Fossil fuels
- Nuclear systems
- Geothermal systems
- Solar systems
- Wind energy systems
- Ocean energy systems
- Energy distribution & storage systems
- Environmental fluid mechanics
- Mechanics of hazardous waste containment & disposal

BIOSCIENCES

- Biomechanics
- Human factors engineering
- Rehabilitation engineering
- Sports mechanics

PUBLICATIONS SCANNED FOR AMR

AMR covers in its field technical journals, reports, books, symposia and annuals. The list of publications includes all serials received regularly.

Titles are listed alphabetically in the form in which they appear on the journal. All articles and prepositions have been included except for those which begin a title. The list does not contain any cross-references. The origin of the publication is listed following the title of the publication unless the title indicates the city and/or country of publication. Where the city does not appear as a part of the title, then the city is shown, followed by the name of the country if the city is not well-known.

A

Abhandlungen der Braunschweigischen Wissenschaftlichen Gesellschaft. *Braunschweig, Germany*
Academie Royale de Belgique, Bulletin de la Classe des Sciences, 5^{e} Serie. *Brussels*
Academie Serbe des Sciences et des Arts, Bulletin, Classe des Sciences Techniques. *Belgrade*
Acoustics Letters. *London*
Acta Academiae Aboensis, Ser. B, Mathematica et Physica. *Aabo, Finland*
Acta Astronautica. *Oxford, United Kingdom*
Acta Geophysica Sinica. *Peking*
Acta Mathematica. *Budapest*
Acta Mathematica Sinica. *Peking*
Acta Mechanica. *Vienna*
Acta Mechanica Solida Sinica. *Peking*
Acta Metallurgica. *Oxford, United Kingdom*
Acta Physica. *Budapest*
Acta Polymerica. *Berlin*
Acta Polytechnica Scandinavica, Applied Physics Series, Ph. *Stockholm*
Acta Polytechnica Scandinavica, Civil Engineering and Building Construction Series, Ci. *Stockholm*
Acta Polytechnica Scandinavica, Mathematics and Computing Machinery Series, Ma. *Stockholm*
Acta Polytechnica Scandinavica, Mechanical Engineering Series, Me. *Stockholm*
Acta Technica. *Budapest*
Acta Technica CSAV. *Prague*
Acustica. *Stuttgart*
Advances in Applied Mechanics. *New York*
Advances in Biological and Medical Physics. *New York*
Advances in Biomedical Engineering and Medical Physics. *New York*
Advances in Cryogenic Engineering. *Pittsburgh*
Advances in Heat Transfer. *New York*
Advances in Hydroscience. *New York*
Advances in Mechanics. *Warsaw*
Advances in Physics. *London*
Advances in Plasma Physics. *New York*
Advances in the Astronautical Sciences. *San Diego, Calif.*
Aeronautical Journal. *London*
Aeronautical Quarterly. *London*
Aeronautical Research Committee, SCIR, ARC Technical Note. *Bangalore, India*
Aeronautical Research Laboratories, Australia, Aerodynamics Note, ARL/A. *Melbourne*
Aeronautical Research Laboratories, Australia, Aerodynamics Report, ARL/A. *Melbourne*
Aeronautical Research Laboratories, Australia, Instruments Note, ARL/I. *Melbourne*
Aeronautical Research Laboratories, Australia, Materials Report, ARL-MAT-Report. *Melbourne*
Aeronautical Research Laboratories, Australia, Mechanical Engineering Report, ARL-Mech-Eng-Report. *Melbourne*
Aeronautical Research Laboratories, Australia, Metallurgy Note, ARL/Met. *Melbourne*
Aeronautical Research Laboratories, Australia, Metallurgy Report, ARL/MET. *Melbourne*
Aeronautical Research Laboratories, Australia, Structures and Materials Note, ARL/S.M. Note. *Melbourne*
Aeronautical Research Laboratories, Australia, Structures and Materials Report, ARL/S.M. *Melbourne*
Aeronautique et l'Astronautique. *Paris*
AIAA Journal. *New York*
AIChE Journal. *New York*
AIChE Symposium Series. *New York*
Aircraft Engineering. *London*
Akademiya Nauk Azerbaidzhanskoi SSR, Doklady. *Baku*
Allgemeine Bau-Zeitung. *Vienna*
American Ceramic Society Bulletin. *Columbus, Ohio*
American Journal of Physics. *New York*
American Scientist. *New Haven, Conn.*
Anais da Academia Brasileira de Ciencias. *Rio de Janeiro*
Analele Stiintifice ale Universitatri "Al. I. Cuza" din Iasi, Serie Noua, Sectiunea Matematica. *Romania*
Analyse Numerique et la Theorie de l'Approximation. *Cluj, Romania*
Angewandte Chemie, International Edition in English. *Weinheim, Germany*
Annalen der Physik. *Leipzig*
Annales Academiae Scientiarum Fennicae, Series A, VI, Physica. *Helsinki*
Annales de Chimie, Quinzieme Serie. *Paris*
Annales de Geophysique. *Paris*
Annales de l'Institut Oceanographique. *Paris*
Annales de l'Institut Technique du Batiment et des Travaux Publics. *Paris*
Annales de Physique, Quinzieme Serie. *Paris*
Annales des Travaux Publics de Belgique. *Brussels*
Annali di Matematica Pura ed Applicata, Serie Quarta. *Bologna*
Annals of Biomedical Engineering. *Oxford, United Kingdom*
Annals of Mathematics. *Princeton, N.J.*
Annual Review of Astronomy and Astrophysics. *Palo Alto, Calif.*
Annual Review of Fluid Mechanics. *Palo Alto, Calif.*
Anzeiger der Osterreichischen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse. *Vienna*
Aplikace Matematiky. *Prague*
Applicable Analysis. *New York*
Applied Acoustics. *Barking, United Kingdom*
Applied Energy. *Barking, Essex, United Kingdom*
Applied Mathematical Modelling. *Guildford, United Kingdom*
Applied Mathematics and Computation. *New York*
Applied Mathematics and Mechanics (English Edition). *Wuhan, China*
Applied Mathematics & Optimization. *New York*
Applied Ocean Research. *Southampton, United Kingdom*
Applied Physics A, Solids and Surfaces. *Berlin*
Applied Physics B, Photophysics and Laser Chemistry. *Berlin*
Applied Physics Letters. *New York*
Applied Scientific Research. *The Hague*
Applied Solar Energy. *(Translation of* Geliotekhnika *by Allerton Press Inc., New York.)*
Applied Statistics. *London*
Arabian Journal for Science and Engineering. *Chichester, United Kingdom*
Archiv der Mathematik. *Karlsruhe, Germany*

Archiv fur das Eisenhuttenwesen. *Dusseldorf*
Archive for Rational Mechanics and Analysis. *Berlin*
Archives of Acoustics. *Warsaw*
Archives of Biochemistry and Biophysics. *New York*
Archives of Mechanics. *Warsaw*
Archiwum Automatyki i Telemechaniki. *Warsaw*
Archiwum Budowy Maszyn. *Warsaw*
Archiwum Elektrotechniki. *Warsaw*
Archiwum Gornictwa. *Warsaw*
Archiwum Hydrotechniki. *Warsaw*
Archiwum Inzynierii Ladowej. *Warsaw*
Archiwum Termodynamiki. *Warsaw*
ASHRAE Journal. *New York*
ASLE Transactions. *Park Ridge, Ill.*
ASTM Special Technical Publication, STP. *Philadelphia*
ASTM Standardization News. *Philadelphia*
Astronautics & Aeronautics. *New York*
Astronomical Journal. *New Haven, Conn.*
Astronomy and Astrophysics. *New York*
Astrophysics. *(Translation of* Astrofizika *by Consultants Bureau, New York.)*
Astrophysics and Space Science. *Dordrecht*
ATA. *Turin*
Atmospheric and Oceanic Physics. *(Translation of* Izvestiya, Academy of Sciences, USSR, Atmospheric and Oceanic Physics *by Scripta Technica Inc., Washington, D.C.)*
Atmospheric Environment. *Oxford, United Kingdom*
Atti del Seminario Matematics e Fisico dell'Universita di Modena.
Atti dell' Istituto di Scienza delle Costruzioni dell' Universita di Pisa.
Atti dell' Istituto Veneto di Scienze, Lettere ed Arti. *Venice*
Atti della Accademia Nazionale dei Lincei, Rendiconti delle Adunanze Solenni. *Rome*
Atti della Accademia Nazionale dei Lincei, Serie Ottava, Rendiconti, Classe di Scienze Fisiche, matematiche e naturali. *Rome*
ATZ, Automobiltechnische Zeitschrift. *Stuttgart*
Australian Journal of Physics. *Melbourne*
Australian Mathematical Society Gazette. *Clayton, Vict., Australia*
Automatic Control and Computer Sciences. *(Translation of* Avtomatika i Vychislitel'naya Tekhnika *by Allerton Press Inc., New York.)*
Automatica. *Oxford, United Kingdom*
Automation and Remote Control. *(Translation of* Avtomatika i Telemekhanika *by Consultants Bureau, New York.)*
Automatisme. *Paris*
Automatizace. *Prague*
Automotive Engineer. *London*
Aviation, Space and Environmental Medicine. *Washington, D.C.*
Avtomatika. *Kiev*
Avtomatika i Telemekhanika. *Moscow*

B

Ball Bearing Journal. *Luton, Bedfordshire, United Kingdom*
Banyaszati es Kohaszati Lapok BANYASZAT. *Budapest*
Banyaszati es Kohaszati Lapok KOHASZAT. *Budapest*
Banyaszati es Kohaszati Lapok, KOOLAJ ES FOLDGAZ. *Budapest*
Bauingenieur. *Berlin*
Bautechnik. *Berlin*
Bayerische Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse, Abhandlungen, Neue Folge. *Munich*
Bell Laboratories Record. *Murray Hill, N.J.*
Bell System Technical Journal. *New York*
Beton- und Stahlbetonbau. *Berlin*
Biological Cybernetics. *Berlin*
Biomedical Engineering. *(Translation of* Meditsinskaya Tekhnika *by Consultants Bureau, New York.)*
Biomedical Sciences Instrumentation (Proceedings of the National Biomedical Sciences Instrumentation Symposium). *New York*
Biometrics. *Atlanta, Ga.*
Biophysical Journal. *Baltimore*
Biophysics. *(Translation of* Biofizika *by Pergamon Press, Oxford, United Kingdom.)*
Biopolymers. *New York*
Biorheology. *Oxford, United Kingdom*
Biotechnology and Bioengineering. *New York*
Blech, Rohre, Profile. *Bamberg, Germany*
Bollettino della Unione Matematica Italiana, Serie IV. *Bologna*
Boundary-Layer Meteorology. *Dordrecht, Holland*
Brennstoff-Warme-Kraft. *Dusseldorf*
British Journal of Non-Destructive Testing. *Southend-on-Sea, United Kingdom*
Brown Boveri Review. *Baden, Switzerland*
Building Science Series. *Washington, D.C.*
Buletinul Institutului Politehnic din Iasi, Sectia IV, Mecanica Tehnica. *Romania*
Buletinul Institutului Politehnic "Gheorghe Gheorghiu-Dej" Bucuresti, Seria Chimie—Metalurgie. *Bucharest*
Buletinul Institutului Politehnic "Gheorghe Gheorghiu-Dej" Bucuresti, Seria Electrotehnica. *Bucharest*
Buletinul Institutului Politehnic "Gheorghe Gheorghiu-Dej" Bucuresti, Seria Mecanica. *Bucharest*
Buletinul Stiintific si Tehnic al Institutului Politehnic "Traian Vuia" Timisoara, Seria Chimie. *Romania*
Buletinul Stiintific si Tehnic al Institutului Politehnic "Traian Vuia" Timisoara, Seria Constructii. *Romania*
Buletinul Stiintific si Tehnic al Institutului Politehnic "Traian Vuia" Timisoara, Seria Electrotehnica. *Romania*
Buletinul Stiintific si Tehnic al Institutului Politehnic "Traian Vuia" Timisoara, Seria Matematica—Fizica. *Romania*
Buletinul Stiintific si Tehnic al Institutului Politehnic "Traian Vuia" Timisoara, Seria Mecanica. *Romania*
Buletinul Universitatii din Brasov, Seria A, Mecanica Aplicata, Constructii de Masini. *Romania*
Buletinul Universitatii din Galati, Fascicula II, Matematica, Fizica, Mecanica Teoretica. *Romania*
Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences Techniques. *Warsaw*
Bulletin de la Direction des Etudes et Recherches, Serie A, Nucleaire, Hydraulique, Thermique. *Grenoble*
Bulletin de la Societe Mathematique de France. *Paris*
Bulletin de la Societe Royale des Sciences de Liege.
Bulletin de l'Association Technique Maritime et Aeronautique. *Paris*
Bulletin of Mathematical Biology. *Oxford, United Kingdom*
Bulletin of Mechanical Engineering Laboratory. *Tokyo*
Bulletin of Prosthetics Research. *Washington, D.C.*
Bulletin of Research Laboratory of Precision Machinery and Electronics. *Yokohama, Japan*
Bulletin of the Academy of Sciences of the Georgian SSR. *Tbilisi*
Bulletin of the American Meteorological Society. *Boston*
Bulletin of the Australian Mathematical Society. *St. Luica*
Bulletin of the Calcutta Mathematical Society.
Bulletin of the Earthquake Research Institute, University of Tokyo.
Bulletin of the Faculty of Engineering, Assiut University. *Egypt*
Bulletin of the Faculty of Engineering, Yokohama National University.
Bulletin of the Indian Society of Earthquake Technology. *Roorkee U.P., India*
Bulletin of the Institution of Engineers (India). *Calcutta*
Bulletin of the International Association for Shell and Spatial Structures. *Madrid*
Bulletin of the JSME. *Tokyo*
Bulletin of the Laboratory of Public Works. *Athens, Greece*
Bulletin of the Operations Research Society of America. *Berkeley, Calif.*
Bulletin of the Seismological Society of America. *Berkeley, Calif.*
Bulletin of University of Osaka Prefecture, Series A, Engineering and Natural Sciences. *Osaka, Japan*
Bulletin Scientifique, Section A, Sciences Naturelles, Techniques et Medicales. *Zagreb*
Bulletin Technique Vevey. *Switzerland*
Bygningsstatiske Meddelelser. *Copenhagen*

C

Canadian Aeronautics and Space Journal. *Ottawa*
Canadian Journal of Chemical Engineering. *Ottawa*
Canadian Journal of Remote Sensing. *Ottawa*
CBI Research. *Stockholm*
CEA, Chemical Engineering in Australia. *St. Leonards, New South Wales*
Celestial Mechanics. *Dordrecht*
Cement and Concrete Research. *Oxford, United Kingdom*
Centraal Laboratorium T.N.O. Rapport. *Delft*
Centre d'Etudes, de Recherches et d'Essais Scientifiques du Genie Civil, Memoires, C.E.R.E.S., Nouvelle Serie. *Liege*
Ceramic Engineering and Science Proceedings. *Columbus, Ohio*
CETIM Informations. *Senlis, France*
Chemical Engineering Journal. *Lausanne, Switzerland*
Chemical Engineering Progress. *New York*
Chemical Engineering Science. *Oxford, United Kingdom*
Chemical Reviews. *Easton, Pa.*
Chemical Society Reviews. *London*
Chemie Ingenieur Technik. *Weinheim, Germany*

CIRP Annals, Manufacturing Technology. *Bern, Switzerland*
Civil Engineer in South Africa. *Johannesburg*
Civil Engineering. *New York*
Civil Engineering in Japan. *Tokyo*
CME, Chartered Mechanical Engineer. *Bury St. Edmunds, Suffolk, United Kingdom*
CMP Cieplne Maszyny Przeplywowe. *Lodz, Poland*
Coastal Engineering. *Amsterdam*
Cold Regions Science and Technology. *Amsterdam*
Combustion and Flame. *New York*
Combustion, Explosion, and Shock Waves. *(Translation of* Fizika Goreniya i Vzryva *by Consultants Bureau, New York.)*
Combustion Science and Technology. *London*
Communications of the ACM. *New York*
Communications on Pure and Applied Mathematics. *New York*
Composites. *Guildford, United Kingdom*
Composites Technology Review. *Philadelphia*
Comptes Rendus des Seances de l'Academie des Sciences, Serie II: Mecanique, Physique, Chimie, Sciences de la Terre, Sciences de l'Univers. *Paris*
Computer-Aided Design. *Guildford, United Kingdom*
Computer Methods in Applied Mechanics and Engineering. *Amsterdam*
Computers and Biomedical Research. *New York*
Computers & Chemical Engineering. *Oxford, United Kingdom*
Computers & Fluids. *Oxford, United Kingdom*
Computers & Graphics. *Oxford, United Kingdom*
Computers & Mathematics with Applications. *Oxford, United Kingdom*
Computers and People. *Newtonville, Mass.*
Computers & Structures. *Oxford, United Kingdom*
Computers in Biology and Medicine. *Oxford, United Kingdom*
Computing. *Vienna*
Concrete. *London*
Concrete International: Design & Construction. *Detroit*
Consiglio Nazionale delle Richerche Quaderni de "La Ricerca Scientifica". *Rome*
Construction Metallique. *Paris*
Control and Computers. *Anaheim, Calif.*
Control & Instrumentation. *London*
Corrosion Science. *Oxford, United Kingdom*
Cosmic Research. *(Translation of* Kosmicheskie Issledovaniya *by Consultants Bureau, New York.)*
Costruzioni Metalliche. *Milan*
Cranfield Institute of Technology, Cranfield Report Aero. *United Kingdom*
Cranfield Institute of Technology, Cranfield Report E & C. *United Kingdom*
Cranfield Institute of Technology, Cranfield Report M & P. *United Kingdom*
Cranfield Institute of Technology, Cranfield Report MAT. *United Kingdom*
CSIR Research Review. *Pretoria*
Current Papers, Department of Aeronautical Engineering, Kyoto University.
Cybernetics. *(Translation of* Kibernetika *by Consultants Bureau, New York.)*
Czechoslovak Journal of Physics, B. *Prague*
Czechoslovak Mathematical Journal. *Prague*

D

Datamation. *New York*
Defence Science Journal. *New Delhi*
Delft Progress Report.
Demonstratio Mathematica. *Warsaw*
Department of Defence, Australia, Weapons Research Establishment, Report. *Salisbury*
DET, Die Eisenbahntechnik. *Berlin*
Deutsche Forschungs- und Versuchsanstalt fur Luft- und Raumfahrt, Mitteilung, DFVLR-Mitt. *Cologne*
Deutsche Forschungs- und Versuchsanstalt fur Luft- und Raumfahrt, Forschungsbericht, DFVLR-FB. *Cologne*
Deutsche Luft- und Raumfahrt, Forschungsbericht, DLR-FB. *Munich*
Deutsche Luft- und Raumfahrt, Mitteilungen. *Munich*
Developments in Geotechnical Engineering. *Amsterdam*
Developments in Mechanics. *New York*
Developments in Theoretical and Applied Mechanics. *Blacksburg, Va.*
DFVLR Nachrichten. *Linder Hohe, Germany*
Differential Equations. *(Translation of* Differentsial'nye Uravneniya *by Consultants Bureau, New York.)*
Digital Processes. *Saphorin, Switzerland*
Doklady Akademii Nauk BSSR. *Minsk*
Doklady Akademiya Nauk Armyanskoi SSR. *Erevan*
Dopovidi, Akademii Nauk Ukrainskoi RSR, Seriya A, Fiziko Matematichni ta Tekhnichni Nauki. *Kiev*
Dynamics of Atmospheres and Oceans. *Amsterdam*

E

Earthquake Engineering & Structural Dynamics. *London*
Elektronische Rechenanlagen mit Computer Praxis. *Munich*
Endeavour, New Series. *Oxford, United Kingdom*
Energia Elettrica. *Milan*
Energia es Atomtechnika. *Budapest*
Energomashinostroenie. *Leningrad*
Energy and Buildings. *Lausanne, Switzerland*
Energy Conversion and Management. *Oxford, United Kingdom*
Energy Developments in Japan. *Chicago*
Engineering Cybernetics. *(Translation of* Tekhnicheskaya Kibernetika *by Scripta Publishing Company, Washington, D.C.)*
Engineering Digest. *Toronto*
Engineering Education. *Washington, D.C.*
Engineering Fracture Mechanics. *Oxford, United Kingdom*
Engineering Geology. *Amsterdam*
Engineering in Medicine. *Bury St. Edmunds, Suffolk, United Kingdom*
Engineering Issues, Journal of Professional Activities, Proceedings of the American Society of Civil Engineers, PP. *New York*
Engineering Journal. *Montreal*
Engineering Journal. *Chicago*
Engineering Optimization. *New York*
Engineering Structures. *Guildford, United Kingdom*
Engineering Thermophysics in China. *Chicago*
Entropie. *Paris*
Escher Wyss News. *Zurich*
Experimental Mechanics. *Westport, Conn.*
Experimental Techniques. *Westport, Conn.*

F

F & M, Feinwerktechnik & Messtechnik. *Munich*
Fatigue of Engineering Materials and Structures. *Oxford, United Kingdom*
Feingeratetechnik. *Berlin*
FFA Flygtekniska Forsoksanstalten, Meddelande. *Stockholm*
Fizika Tverdogo Tela. *Leningrad*
Fluid Dynamics. *(Translation of* Izvestiya Akademii Nauk SSSR—Mekhanika Zhidkosti i Gaza *by Consultants Bureau, New York.)*
Fluid Mechanics—Soviet Research. *Washington, D.C.*
Fluidics Quarterly. *Stanford, Calif.*
FOA Reports. *Stockholm*
Forschung im Ingenieurwesen. *Dusseldorf*
Fuel. *Guildford, United Kingdom*
Fuzzy Sets and Systems. *Amsterdam*

G

Gazovaya Promyshlennost'. *Moscow*
Geophysical and Astrophysical Fluid Dynamics. *New York*
Geophysical Magazine. *Tokyo*
Geophysical Surveys. *Dordrecht*
Geophysical Transactions. *Budapest*
Geophysics. *Tulsa*
Geophysics: The Leading Edge of Exploration. *Tulsa, Okla.*
Geotechnical Testing Journal. *Philadelphia, Pa.*
Geotechnique. *London*
GEP. *Budapest*
Gepgyartastechnologia. *Budapest*
Gidromekhanika. *Kiev*
Giornale del Genio Civile. *Rome*
Glas. *Belgrade*
Godishnik na Sofiskiya Universitet, Fakultet po Matematika i Mekhania. *Sofia*
Godishnik na Sofiskiya Universitet, Fizicheski Fakultet. *Sofia*

H

Health Physics. *Oxford, United Kingdom*
Heat Transfer Engineering. *Washington, D.C.*

Heat Transfer—Japanese Research. *Washington, D.C.*
Heat Transfer—Soviet Research. *Washington, D.C.*
Heating/Piping/Air Conditioning. *Cleveland*
Helvetica Physica Acta. *Basel*
Helsinki University of Technology, Research Papers.
Heron. *Delft*
High Temperature. *(Translation of* Teplofizika Vysokikh Temperatur *by Consultants Bureau, New York.)*
Holz als Roh- und Werkstoff. *Berlin*
Houille Blanche. *Grenoble*
Hovering Craft & Hydrofoil. *London*
Human Factors. *Baltimore*
Hydrotechnical Construction. *(Translation of* Gidrotekhnicheskoe Stroitel'stvo *by ASCE, New York.)*

I

IABSE Periodica. *Zurich*
IBM Journal of Research and Development. *Armonk, New York*
IE Industrial Engineering. *New York*
IEE Proceedings-A. *London*
IEE Proceedings-B, Electric Power Applications. *London*
IEE Proceedings-C, Generation, Transmission and Distribution. *London*
IEE Proceedings-D, Control Theory and Applications. *London*
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IEEE Transactions on Information Theory. *New York*
IEEE Transactions on Instrumentation and Measurement. *New York*
IEEE Transactions on Pattern Analysis and Machine Intelligence. *New York*
IEEE Transactions on Power Apparatus and Systems. *New York*
IMA Journal of Applied Mathematics. *New York*
IMA Journal of Numerical Analysis. *New York*
Indagationes Mathematicae. *Amsterdam*
Indian Geotechnical Journal, *New Delhi*
Indian Institute of Science, Department of Aeronautical Engineering, Report AE. *Bangalore*
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Indian Journal of Physics and Proceedings of the Indian Association for the Cultivation of Science. *Calcutta*
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Indiana University Mathematics Journal. *Bloomington, Indiana*
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Industrial Robot. *Kempston, Bedford, United Kingdom*
Ingegnere. *Bergamo, Italy*
Ingenieur-Archiv. *Berlin*
Institut fur Bauwissenschaftliche Forschung. *Zurich*
Institut fur Hydraulik und Gewasserkunde, Technische Universitat Munchen, Mitteilungen. *Munich*
Institute for Aerospace Studies, University of Toronto, UTIAS Report.
Institute for Aerospace Studies, University of Toronto, UTIAS Review.
Institute of Petroleum, IP. *London*
Institute of Space and Aeronautical Science, University of Tokyo, Report.
Institution of Civil Engineers, Proceedings, Part 1, Design and Construction. *London*
Institution of Civil Engineers, Proceedings, Part 2, Research and Theory. *London*
Institution of Engineers and Shipbuilders in Scotland, Transactions. *Glasgow*
Institutionen for Byggnadsstatik, Kungl. Tekniska Hogskolan, Stockholm, Meddelande.
Institutionen for Hallfasthetslara, Kungliga Tekniska Hogskolan, Publication. *Stockholm*
Instrumentation Technology. *Pittsburgh*
Instruments and Control Systems. *Pittsburgh*
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Integral Equations and Operator Theory. *Basel*
Interavia. *Geneva*
International Centre for Mechanical Sciences, Courses and Lectures. *Vienna*
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International Journal for Numerical Methods in Fluids. *New York*
International Journal for Numerical Methods in Engineering. *Chichester, United Kingdom*
International Journal of Adhesion and Adhesives. *Guildford, United Kingdom*
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International Journal of Heat and Mass Transfer. *Oxford, United Kingdom*
International Journal of Hydrogen Energy. *Oxford, United Kingdom*
International Journal of Infrared and Millimeter Waves. *New York*
International Journal of Machine Tool Design & Research. *Oxford, United Kingdom*
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International Journal of Mathematics and Mathematical Sciences. *Greenville, No. Car.*
International Journal of Mechanical Engineering Education. *London*
International Journal of Mechanical Sciences. *Oxford, United Kingdom*
International Journal of Multiphase Flow. *Oxford, United Kingdom*
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International Journal of Structures. *Roorkee, India*
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International Journal of Thermophysics. *New York*
International Journal of Vehicle Design. *Jersey, C.I., United Kingdom*
International Shipbuilding Progress. *Rotterdam*
Israel Annual Conference on Aviation and Astronautics. *Tel Aviv*
Israel Journal of Technology. *Jerusalem*
Istanbul Teknik Universitesi Bulteni.
Istituto Lombardo, Accademia di Scienze e Lettere, Rendiconti, Scienze Matematiche, Fisiche, Chimiche e Geologiche, A. *Milan*
Izvestiya Akademii Nauk Armyanskoi SSR, Mekhanika. *Erevan*
Izvestiya Akademiya Nauk Azerbaidzhanskoi SSR, Seriya Fiziko-Tekhnicheskikh i Matematicheskikh Nauk. *Baku*
Izvestiya Akademii Nauk Estonskoi SSR, Fizika, Matematika. *Tallin*
Izvestiya Akademii Nauk Kazakhskoi SSR, Seriya Fiziko-Matematicheskaya. *Alma-Ata*
Izvestiya Akademii Nauk Latviiskoi SSR, Seriya Fizicheskikh i Tekhnicheskikh Nauk. *Riga*
Izvestiya Akademii Nauk SSSR, Mekhanika Tverdogo Tela. *Leningrad*
Izvestiya Akademii Nauk SSSR, Metally. *Moscow*
Izvestiya Akademii Nauk SSSR, Tekhnicheskaya Kibernetika. *Moscow*
Izvestiya Akademii Nauk UzSSR, Seriya Tekhnicheskikh Nauk. *Taskent, UzSSR*
Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR, Seriya Tekhnicheskikh Nauk. *Novosibirsk*

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Japan Shipbuilding & Marine Engineering. *Tokyo*
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Jernkontorets Annaler. *Stockholm*
JETP Letters. *(Translation of* Pis'ma v Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki *by American Institute of Physics, New York.)*
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Johns Hopkins APL Technical Digest. *Laurel, Maryland*
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Journal of Applied Physics. *New York*
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Journal of Biomechanical Engineering, Transactions of the ASME. *New York*
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Journal of the Institution of Engineers (India), Civil Engineering Division, CI. *Calcutta*

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Journal of the Institution of Engineers (India), Mechanical Engineering Division, ME. *Calcutta*
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Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers, IR. *New York*
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Journal of the Japan Society of Civil Engineers. *Tokyo*
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Journal of the London Mathematical Society, Second Series.
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Journal of the Meteorological Society of Japan, Ser. II. *Tokyo*
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Journal of the Optical Society of America. *New York*
Journal of the Physical Society of Japan. *Tokyo*
Journal of the Power Division, Proceedings of the American Society of Civil Engineers, PO. *New York*
Journal of the Research Institute of Science and Technology, Nihon University. *Tokyo*
Journal of the Society of Materials Science, Japan. *Kyoto*
Journal of the South African Institute of Mining & Metallurgy. *Johannesburg*
Journal of the Structural Division, Proceedings of the American Society of Civil Engineers, ST. *New York*
Journal of the Surveying and Mapping Division, Proceedings of the American Society of Civil Engineers, SU. *New York*
Journal of the Textile Institute. *Manchester, United Kingdom*
Journal of the Urban Planning and Development Division, Proceedings of the American Society of Civil Engineers, UP. *New York*
Journal of the Water Resources Planning and Management Division, Proceedings of the American Society of Civil Engineers, WR. *New York*
Journal of the Waterway, Port, Coastal and Ocean Division, Proceedings of the American Society of Civil Engineers, WW. *New York*
Journal of Thermal Stresses. *Washington, D.C.*
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Journal of Water Pollution Control Federation. *Washington, D.C.*
Journal of Wind Engineering and Industrial Aerodynamics. *Amsterdam*
JPT, Journal of Petroleum Technology. *New York*

K

Kexue Tongbao. *Peking*
Ki, Klima + Kalte Ingenieur. *Karlsruhe, Germany*
Kibernetika i Vychislitel'naya Tekhnika. *Kiev*
Kongelige Danske Videnskabernes Selskab, Matematiskfysiske Meddelelser. *Copenhagen*
Konstruktiver Ingenieurbau Berichte. *Essen*

L

Laboratorio Nacional de Engenharia Civil, Lisbon, Memoria.
Large Scale Systems. *Amsterdam*
Latviiskii Matematicheskii Ezhegodnik. *Riga, Latvia*
Lecture Notes in Physics. *Berlin*
LGM Mededelingen, Laboratorium voor Grondmechanica. *Delft*
Lietuvos TSR Mokslu Akademijos Darbai, Serija B. *Vilnyus, Lithuanian SSR*
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Matematiche. *Catania, Italy*
Matematichki Vesnik, Nova Seriya. *Belgrade*
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Materials Research Bulletin. *Oxford, United Kingdom*
Materials Science and Engineering. *Lausanne*
Mathematicae Notae. *Rosario, Argentina*
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Meddelelse Skipsteknisk Forskningsinstitutt. *Trondheim*
Medical & Biological Engineering & Computing. *Stevenage, Herts, United Kingdom*
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Memoirs of the Faculty of Engineering, Kobe University. *Japan*
Memoirs of the Faculty of Engineering, Kyoto University. *Japan*
Memoirs of the Faculty of Engineering, Kyushu University. *Fukuoka, Japan*
Memoirs of the Faculty of Engineering, Nagoya University, *Japan*
Memoirs of the Faculty of Engineering, Tamagawa University. *Tokyo*
Memorial de l'Artillerie Francaise. *Paris*
Meres es Automatika. *Budapest*
Metallofizika. *Kiev*
Metallurgia. *Redhill, United Kingdom*
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Metallurgist and Materials Technologist. *London*
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Mitteilungen uber Forschung und Konstruktion im Stahlbau. *Dottingen, Switzerland*
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Moscow University Mechanics Bulletin. *(Translation of* Vestnik Moskovskogo Universiteta. Mekhanika *by Allerton Press Inc., New York.)*
MSR, Messen, Steuern, Regeln. *Berlin*
MTZ, Motortechnische Zeitschrift. *Stuttgart*
Muszaki Tudomany. *Budapest*

N

NASA Contractor Report. *Washington, D.C.*
NASA Technical Note. *Washington, D.C.*
NASA Technical Report. *Washington, D.C.*
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National Aerospace Laboratory, Tokyo, Technical Report.
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Naturwissenschaften. *Berlin*
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Naval Ship Research and Development Center, Technical Translations. *Washington, D.C.*
NBS Building Science Series. *Washington, D.C.*
NBS Handbook. *Washington, D.C.*
NBS Monograph. *Washington, D.C.*
NBS Report. *Washington, D.C.*
NBS Special Publication. *Washington, D.C.*
NBS Technical Note. *Washington, D.C.*
NDT International. *Guildford, United Kingdom*
Netherlands Ship Model Basin, Publications. *Wageningen*
New Scientist. *London*
Noise Control Engineering. *Bedford, Mass.*
Nonlinear Analysis. *Oxford, United Kingdom*
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Nordisk Betong. *Stockholm*
North East Coast Institution of Engineers & Shipbuilders, Transactions. *Newcastle-upon-Tyne, United Kingdom*
Norwegian Maritime Research. *Oslo*
Norwegian Ship Model Experiment Tank, Publications. *Trondheim*
Noutati in Mecanica Aplicata si in Constructia de Masini, A. *Brasov*
NSDB Technology Journal. *Manila*
NT, New Techniques. *Zurich*
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Nuclear Engineering International. *London*
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Pramana. *Bangalore*
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VDI-Berichte. *Dusseldorf*
VDI-Forschungsheft. *Duseldorf*
VDI-Z. *Dusseldorf*
Vehicle System Dynamics. *Amsterdam*
Vertica. *Oxford, United Kingdom*
Vestnik, Akademii Nauk Kazakhskoi SSR. *Alma-Ata*
Vestnik Leningradskogo Universiteta, Matematika, Mekhanika, Astronomiya. *Leningrad*

Vestnik Moskovskogo Universiteta, Seriya I, Matematika, Mekhanika. *Moscow*
Vizugyi Kozlemenyek. *Budapest*
Voith Research and Construction. *Heidenheim, W. Ger.*
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Voprosy Dinamiki i Prochnosti. *Riga*
Voprosy Teorii Kristallizatsii. *Riga*
Vyzkumny Ustav Energeticky, Bulletin. *Praha*

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Warme- und Stoffubertragung. *Berlin*
Wasserwirtschaft. *Stuttgart*
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Wave Motion. *Amsterdam*
Wear. *Lausunne, Switzerland*
Welding Journal. *New York*
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Werkstattstechnik, WT, Zeitschrift fur Industrielle Fertigung. *Berlin*
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World Textile Abstracts. *Manchester, United Kingdom*

Z

Zagadnienia Eksploatacji Maszyn. *Krakow*
Zeitschrift fur Angewandte Mathematik und Mechanik. *Berlin*
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Zprava VZLU, ARTI Reports. *Prague*
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Chung, Jin S—USA
Chung, T J—USA
Cicala, Placido—Italy
Cimbleris, Borisas—Brazil
Ciobanu, Gh Gr—Romania
Citavy, Jan—Czechoslovakia
Clift, R—UK
Clough, Roger B—USA
Colonell, Joseph M—USA
Comninou, Maria—USA
Conry, T F—USA
Conway, Joseph C—USA
Cook, Peter A—UK
Corradi, Leone—Italy
Covert, Eugene E—USA
Cowper, G R—Canada
Craik, Alex D D—UK
Crandall, Stephen H—USA
Craven, Arthur H—UK
Cretu, Ion Gh—Romania
Criminale, W O, Jr—USA
Crosbie, A L—USA
Cross, James J—Australia
Crowe, Clayton T—USA
Crowninshield, Roy D.—USA
Cummings, Alan—USA
Currie, I G—Canada
Cusano, Cristino—USA
Cutchins, Malcolm A—USA
Cywinski, Zbigniew—Poland
Czoboly, Erno—Hungary

D

D'Arcy, Donald F—Canada
Dabrowski, O—Poland
Dabrowski, Ryszard—Poland
Damian, R M—Romania
Dange, Yashodhrmon K—India
Daniels, P G—UK
Das, Arabindo—FRG
Das, K P—India
Dasgupta, Gautam—USA
Datta, Subhendu K—USA
Davies, Glyn A O—UK
Davis, J L—USA
Davis, L Berkley, Jr—USA
Davis, Michael R—Australia
Davydov, Isay—USA
Dawe, Donald J—UK
De Fouquet, Jacques—France
Debnath, Lokenath—USA
Deissler, Robert G—USA
Del Piero, Gianpietro—Italy
Delale, Feridun—USA
Dembicki, Eugeniusz—Poland
Dempsey, John P—USA
De Neeve, Pieter F—Canada
De Oliveira, Joao G—USA
De Pater, Anton D—Netherlands
De Pater, Cornelis—Netherlands
Deresiewicz, Herbert—USA
Desai, Shivaraj S.—India
Deutsch, Ioan I—Romania
DeSanto, J A—USA
De Socio, Luciano M—Italy
De Vahl Davis, Graham—Australia
DeWolf, John—USA
Dhaliwal, Ranjit S—Canada
Diaconita, Vasile—Romania
Diaconu, Mihail V—Romania
Dickerson, J R—USA
Dietrich, Lech—Poland
Dikmen, Murat—Turkey
Dimitriu, Dan V—Romania
Djukic, Djordje S—Yugoslavia
Dodd, Bradley P—UK
Dodge, Franklin T.—USA
Doligalski, Thomas L.—USA
Done, George T S—UK
Dong, Stanley B—USA
Doraiswamy, Laxmangudi K—India
Dorey, Graham—UK
Dorinson, A—USA
Dorosz, Stanislaw—Poland
Doshi, Mahendra R—USA
Dougalis, Vassilios—Greece
Dougall, Richard S—USA
Dougill, John W.—UK
Dowell, Millard F—USA
Dragon, Andrzej—France
Drew, Donald A—USA
Drouin, G—Canada
Druban, David—UK
Drucker, D C—USA
Dubey, R—Canada
Dugan, John P—USA
Dukkipati, Rao Venkateswara —Canada
Dulikravich, George S.—USA
Dumitrescu, Lucian Z—Romania
Dunavant, David A.—USA
Dunder, Vera F—USA
Durbin, Paul A.—USA
Durelli, A J—USA
Durvasula, S—India
Duszek, Maria K—Poland
Dutton, J C—USA
Dyrbye, Claes—Denmark
Dziedzic, Jerzy S—Poland

E

Eades, James B—USA
Earmme, Youn Young —Republic of Korea
Eason, George—UK
Eatock-Taylor, Rodney—UK
Eggers, Klaus W H—FRG
Eisenklam, Paul—UK
Ejike, Uwadiegwu B C O—Nigeria
El-Hawary, Mohamed E.—Canada
Elcrat, Alan R.—USA
Elishakoff, Isaac—Israel
Ellis, J.—UK
ElMaraghy, Hoda—Canada
Ene, Horia E.—Romania
Engelbrecht, Juri—USSR
Engelmann, Folker—Netherlands
Ensminger, Dale—USA
Epstein, Marcelo—Canada
Erdi, Balint—Hungary
Erickson, John C. Jr.—USA
Ertepinar, Aybar—USA
Etsion, Izhak—Israel
Eversman, Walter—USA
Everstine, Gordon C.—USA
Ezzat, Hazem A—USA

F

Fabrikant, Valery I.—Canada
Fabrizio, Mauro—Italy
Faeth, Gerard M.—USA
Faggiani, Sergio—Italy
Fasano, Antonio—Italy
Fatic, Vuk M.—USA
Feijoo, Raul A.—Brazil
Fejer, Andrew A.—USA
Feldman, D S—USA
Felske, James—USA
Fenton, Robert G.—Canada
Fenves, S J—USA
Fernandez Long, Hilario—Argentina
Ferreri, Juan C.—Argentina
Ferziger, Joel H.—USA
Fiala, Vladimir—Czechoslovakia
Filemon, Elisabeth—Hungary
Finlayson, Bruce A.—USA
Fishman, L.—USA
Fiszdon, Wladyslaw—FRG
Flack, Ronald D—USA
Fleming, David P—USA
Fletcher, Leroy S.—USA
Foral, Ralph, F.—USA
Forbes, T G—UK
Forristall, George, Z.—USA
Fox, Robert W.—USA
Franchi, Alberto—Italy
Frediani, Aldo—Italy
Freidman, Edward—USA
Freire, J L—Brazil
Freudenstein, Ferdinand—USA
Friend, George—Australia
Fu, Kuan-Chen—USA
Fu, L. S.—USA
Fuhs, Allen, E.—USA
Fukuda, Hiroshi—Japan
Fukuoka, Hidekazu—Japan
Fulop, Z—Hungary
Funaioli, Ettore—Italy

G

Gai, S L—Australia
Gamer, U—Austria
Gamski, Kazimierz—Belgium
Gandhidasan, P—Trinidad
Gane, N—Australia
Ganowicz, Ryszard—Poland
Gaonkar, Gopal, H.—India
Gardner, Richard, A.—USA
Garg, Vijay K.—USA
Garrad, A D—UK
Gaspar, Zsolt—Hungary
Gaunaurd, G C—USA
Gaur, Yogeshwar, N.—India
Gawronski, Wlodzimierz—Poland
Gdoutos, Emmanuel—Greece
Geerling, Joseph, J. P. —Netherlands
Genetti, William, E.—USA
Gerrard, John, H.—UK
Gerstle, Frank P.—USA
Ghaswala, Soli K—India
Ghering, Walter, L.—USA
Ghetti, Augusto—Italy
Ghinassi, Giuseppe—Italy
Ghiocel, Dan, V.—Romania
Ghosh, Bhabani C—India
Ghosh, Mihir, K.—USA
Gill, Mohammad A.—Nigeria
Gill, Samuel, S.—UK
Gillia, Peter, P.—USA
Ginsburg, S—USA

Gioda, Giancarlo—Italy
Gioncu, Victor—Romania
Giovannozzi, Renato, G.—Italy
Giri, Jagannath—USA
Giuliani, Francisco—Argentina
Gladwell, Graham, M. L.—Canada
Glenn, Lewis A.—USA
Gobl, Richard—Hungary
Gokhman, Alexander—USA
Golecki, Josef, J.—Israel
Gollahalli, Subramanyam R.—USA
Gopal, Raj—USA
Gopalsamy, K—Australia
Gorez, Raymond, R. D. J.—Belgium
Goto, Norihiro—Japan
Gotoh, Kanefusa—Japan
Gotoh, Manabu—Japan
Gottifredi, Juan Carlos—Argentina
Govindaraju, S P—India
Goyal, Brij K.—India
Graff, Karl, F.—USA
Graff, S.—USA
Gratch, Serge—USA
Green, Theodore—USA
Greenberg, Michael, D.—USA
Greenwood, Donald, T.—USA
Gregory, Malcolm S.—Australia
Gregory, R. Douglas—UK
Greitzer, E M—USA
Griffith, Peter—USA
Griffith, Wayland, C.—USA
Griffiths, David—UK
Grigoriu, M—USA
Grivas, Dimitri A—USA
Groff, Edward G.—USA
Grootenboer, H. J.—Netherlands
Gross, Dieter—FRG
Grysa, Krzysztof, W.—Poland
Guderley, Karl, G.—USA
Guenther, Ronald, B.—USA
Gupta, A. K.—India
Gupta, Ashwani K.—USA
Gupta, Bharatbhushan—India
Gupta, Gopal, D.—USA
Gupta, Madan, M.—Canada
Gupta, Murli M—USA
Gupta, Ramesh, C.—Singapore
Gupta, S. S.—India
Gurel, Okan—USA
Gurpinr, Aybars—Belgium
Guzelsu, Nejat—USA
Gyulai, Francisco, F.—Romania

H

Habib, Izzedin S—USA
Habip, L M—FRG
Haddow, J B—Canada
Haftka, Raphael—USA
Hagedorn, Karl E—FRG
Hagedorn, Peter—FRG
Hahn, Hans G—FRG
Haji-Sheikh, Abdolhosseim—USA
Halford, Gary R—USA
Hammel, Juergen W—FRG
Hammitt, Frederick G—USA
Hammond, G P—UK
Hancock, G J—UK
Handscomb, David C—UK
Hanjalic, Kemal—Yugoslavia
Hansen, Erik B—Denmark
Hanus, Gary J—USA
Hanuska, Alexander —Czechoslovakia
Harleman, D R F—USA
Harrington, R S—USA
Harris, S Dyer—USA
Harrison, H Ronald—UK
Hartley, Craig S—USA
Hartranft, Ronald J—USA
Harvill, L R—USA
Hassager, Ole—Denmark
Hassid, Samuel—Israel
Hasslacher, George J, III—USA
Hauger, Werner—FRG
Haupt, Peter—FRG
Haut, R C—USA
Hawks, Roger J—USA
Hawkyard, J B—UK
Hay, Nessim I—UK
Hayashi, Kozaburo—Japan
Haydl, Helmut M—Canada
Haynes, Donald F—USA
Hebeker, F-K—FRG
Heinisch, Roger P—USA
Helm, Laszlo—Hungary
Hemp, W S—UK
Hendricks, Scott L—USA
Hennecke, Dietmar K—FRG
Henshall, John L—UK
Herbeck, Margot—FRG
Herman, Harry—USA
Hermance, C E—Canada
Herrmann, Klaus P—FRG
Hess, John L—USA
Hess, Ronald A—USA
Hewit, James R—UK
Hickox, Charles E Jr—USA
Hikita, Tsutomu—Japan
Hilton, Peter D—USA
Himmelblau, David M—USA
Hirsch, Charles—Belgium
Hochmuth, R M—USA
Hocking, L M—UK
Hodge, James K—USA
Hodge, Philip G Jr—USA
Hodgson, John P—UK
Hoffman, Allen H—USA
Holzer, Siefried M—USA
Homma, H—Japan
Hoogstraten, Hendrik W —Netherlands
Hori, Yukio—Japan
Horie, Yasuyuki—USA
Horowitz, Jeffrey S—USA
Horrigmoe, Geir—Norway
Hoskin, B C—Australia
Hoskins, Ronald F—UK
Houghton, J Richard—USA
Housner, George W—USA
Hovanessian, Shahen A—USA
Howarth, R B—USA
Howe, Denis—UK
Howe, Michael S—UK
Howell, John R—USA
Hrudey, T M—Canada
Hrycak, Peter—USA
Hsieh, B J—USA
Huang, Thomas T—USA
Hubbard, Mont—USA
Hubbard, Robert P—USA
Huebschman, Eugene C—USA
Hui, D—USA
Huiskes, R—Netherlands
Hult, Jan A H—Sweden
Hunt, E C—USA
Hunt, Julian C R—UK
Hunt, Kenneth H—Australia
Hurwitz, F I—USA
Huseyin, Koncay—Canada
Huston, Ronald L—USA
Hutchings, Ian M—UK
Huul, Niels H—USA
Hyca, Milan—Czechoslovakia
Hyer, Michael W—USA
Hyman, William A—USA

I

Ibrahim, Raouf A—USA
Iesan, Dorin—Romania
Ignaczak, Jozef—Poland
Ilyas, M—UK
Imber, Murray—USA
Inayatullah, G—India
Ingham, Derek B—UK
Inoue, Tatsuo—Japan
Ioakimidis, N I—Greece
Irvine, H M—Australia
Ivakhnenko, Aleksey G—USSR
Iyengar, K T S—India
Iyengar, N G R—India

J

Jaburek, Friedrich—Austria
Jackson, Andrew—USA
Jacquot, Pierre—Switzerland
Jagoda, Jechiek I—USA
Jain, Subhash C—USA
Jakubowski, Gerald S—USA
Jaluria, Y—USA
Janna, William S—USA
Jaros, Petr—Czechoslovakia
Jaumotte, Andre L—Belgium
Javornicky, Jan—Czechoslovakia
Jawson, Maurice A—UK
Jeffers, Robert G—USA
Jeffrey, Alan—UK
Jepps, George—Australia
Jira, Josef—Czechoslovakia
Jirousek, Jaroslav—Switzerland
Johannesen, Niels Holm—UK
Johnson, Alastair F—UK
Johnson, Glen E—USA
Johnson, Ray C—USA
Jones, Norman—UK
Joshi, P B—USA
Junkins, John L—USA

K

Kabelka, Josef—Czechoslovakia
Kacprzynski, Jerzy J—Canada
Kaczkowski, Zbigniew—Poland
Kadalbajoo, M K—India
Kaercher, Hans J—FRG
Kalani, Mohan—India
Kaliszky, Sandor—Hungary
Kalkof, H -G—FRG
Kamel, Hussein A—USA
Kamiya, Norio—Japan
Kapp, Joseph A—USA
Kapur, A D—Nigeria
Kar, R C—India
Kasperkiewicz, Janusz—Poland
Kassoy, David R—UK
Kawaguti, Mitutosi—Japan
Kawahara, Mutsuto—Japan
Keey, Roger B—New Zealand
Keith, Theo G—USA
Kelly, Robert E—USA
Kendall, James M, Jr—USA
Kenkare, Arvind S—UK
Kennedy, Francis E, Jr—USA
Kerle, H—FRG
Kern, G—Austria
Kesava Rao, B—India
Khan, Akhtar S—USA
Kiang, R L—USA
Kikuchi, Fumio—Japan
Kingston, J G—UK
Kirmser, Philip G—USA
Kisbocskoi, Laszlo—Hungary
Kishor, Bishan—India
Kitagawa, Hiroshi—Japan
Kitching, Ronald—UK
Klepp, Horst J—FRG
Klopocki, Jan—Poland
Knabe, W—Nigeria
Knets, Ivars V—USSR
Kobayashi, Albert S—USA
Kobayashi, Shiro—USA
Kollmann, Franz Gustav—FRG
Kolonits, F—Hungary
Komanduri, R—USA
Konig, Jan Andrzej—Poland
Konish, H J—USA
Koopman, Nelson—USA
Kopriva, Vladimir—Czechoslovakia
Kordulla, Wilhelm—FRG
Kordyban, Eugene S—USA
Korving, C—Netherlands
Kotorynski, Walter P—Canada
Kotsovinos, Nikos—Greece
Kounadis, Anthony N—Greece
Kovacs, Laszlo—Hungary
Kraft, Edward M.—USA
Krajcinovic, Dusan—USA
Kratochvil, Milan—Czechoslovakia
Krejci, Ludek—Czechoslovakia
Krenk, Steen—Denmark
Krisch, Alfred—FRG
Krishna Murty, A V—India
Krishna, Dharmavaram Venkatachar—India
Krishnamurthy, A R—India
Krishnamurthy, L—USA
Krishnasamy, Settiana G—Canada
Kristek, Vladimir F —Czechoslovakia
Kriz, R D—USA
Ku, Albert Bee—USA
Kubik, Jozef—Poland
Kucera, Jan—USA
Kuehn, Thomas H—USA
Kuhn, Guenther—FRG
Kuiken, G D C—Netherlands
Kuipers, M—Netherlands
Kulacki, F A—USA
Kulkarni, Anil K.—USA
Kulshrestha, Prem K—USA
Kunz, D L—USA
Kunz, Richard, K—USA
Kupper, Tassilo—FRG
Kux, Jurgen H—FRG
Kuzman, Dennis C—USA
Kwiecinski, Marek—Poland

L

Laermann, Karl-Hans—FRG
Lakkad, Subhash C—India
Lakshmana Gowda, B H—India
Lakshmana Rao, N S—India
Lakshmana Rao, S K—India
Lakshminarayana, K—India
Lal, Krishna—India
Lamb, J Parker—USA
Lambourne, N C—UK
Lance, R H—USA
Landahl, M—Sweden
Landweber, Louis—USA
Lang, Sidney B—Israel
Lange, Horst R—FRG
Langford, Aubrey F W—Australia
Larock, Bruce E—USA
Lauer, James L—USA
Laufer, John—USA
Laura, P A—Argentina
Laushey, Louis M—USA
Lawson, Thomas V—UK
Lazzarino, Lucio—Italy
Leduc, Bernard—Belgium
Lee, A J C—UK
Lee, C W—USA
Lee, Lawrence H N—USA
Lee, Yu-Tai—USA
Lefkowitz, Samuel G—USA
Legros, J C—Belgium
Letelier M. F.—Chile
Leung, Andrew Y T—UK
Leutheusser, Hans J—Chile
Levi, Enzo—Mexico
Levin, A E—USA
Levinson, David A—USA
Levinson, Mark—USA
Levy, A J—USA
Levy, Samuel—USA
Lew, John S—USA
Lewin, P A—Denmark
Lewis, Edward V—USA
Leyer, Jean C—France
Leyko, Jerzy Z—Poland
Li, V. C.—USA
Libai, Avinoam—Israel
Librescu, L—Israel
Lichtarowicz—UK
Lienhard, John H—USA
Lilley, David G—USA
Lin, C. W.—USA
Lin, Husan-Chi—USA
Lin, Tung H—USA
Lin, Wen H.—USA
Lincoln, John W—USA
Lind, N C—Canada
Lindholm, Ulric S—USA
Lipkin, Joel—USA
Liron, Nadav—Israel
Lisini, G Gualberto—Italy
Little, Robert W—USA
Litvin, Faydor—USA
Lloyd, K H—Australia
Logan, Trent R—USA
Lonngren, K—USA
Loscutoff, Walter V—USA
Lou, Jack Y K—USA
Love, William J—USA
Lu, S Y—USA
Lu, W-y—USA
Luca, Octavian V—Romania
Lucjanek, Wieslaw W—Poland
Ludema, Kenneth, C—USA
Lugner, Peter M—Austria
Luke, Yudell L—USA
Lumley, John L—USA
Lush, Peter A—UK
Lutze, F H, Jr—USA
Luz, Eberhard—FRG
Lyczkowski, R W—USA
Lyons, Thomas J—Australia

M

Mabey, D. G.—UK
Macvean, Donald, B.—UK
Madejski, Jan—Poland
Madhav, Madhira, R.—India
Madhusudana, Chakravarti V.—Australia
Maggiore, A—Italy
Mahalingam, Selvadurai—Sri Lanka
Mahrenholtz, Oskar, H. G.—FRG
Maier, Giulio—Italy
Maiti, Surjya, K.—UK
Majewski, W.—Poland
Majors, Harry, Jr.—USA
Majumdar, Alok, K.—USA
Majumdar, Bankim C.—India
Makelainen, Pentti—Finland
Mall, S—USA
Mallinson, Gordon D.—New Zealand
Malvern, Lawrence, E.—USA
Mames, Jakub—Poland
Mandl, P.—Canada
Mang, Herbert—Austria
Manolis, George D.—USA
Manson, Numa—France
Mansour, William M.—Brazil
Margolis, Donald, L.—USA
Markenscoff, Xanthippi—USA
Marketos, E. G.—Greece
Markland, Eric—UK
Markstein, George, H.—USA
Markus, Stefan—Czechoslovakia
Marriott, Douglas, L.—USA
Marsicano, Fenix, R.—Argentina
Martin, Charles S.—USA
Martin, Charles, J.—USA
Martin, Gregory D.—USA
Martins Ferreira, Sergio, M.—Brazil
Marvin, Joseph, G.—USA
Mashelkar, Raghunath, A.—India
Masliyah, Jacob, H.—Canada
Masri, S.—USA
Massel, Stanislaw R.—Norway
Masson, Henri A—Belgium
Masur, Ernest, F.—USA
Mathur, Mukundnarain N.—India
Matsumoto, Eiichi—Japan
Maugin, Gerard, A.—France
McCalley, Robert, B., Jr.—USA
McClure, Carl, K.—USA
McGowan, Jon—USA
McLean, John L.—USA
Medwadowski, Stefan J.—USA
Meijers, P.—Netherlands
Mendes de Sousa, Antonio, C.—Canada
Mengi, Yalcin—Saudi Arabia
Merchant, Howard, C.—USA
Merckx, Kenneth, R.—USA
Merilo, Mati—USA
Merker, Gunther P.—FRG
Merte, Herman—USA
Messerle, Hugo, K.—Australia
Meyer, Max—UK
Meyerhof, G. G.—Canada
Meyers, A—FRG
Middleman, Stanley—USA
Mikkola, Martti, J.—Finland
Miles, J. P.—UK
Miller, A K—USA
Miller, Gerald E.—USA
Miller, Richard, K.—USA
Miloh, Touvia—Israel
Minster, Jiri—Czechoslovakia
Misra, Jagadis Chandra—India
Mital, V.—India
Miyake, Yutaka—Japan
Mizutani, Yukio—Japan
Mlejnek, Hans Peter—FRG
Mohanty, Aswini Kumar—India
Montgomery, Stephen, R.—UK
Mordfin, Leonard—USA
Morduchow, Morris—USA
Morecki, Adam—Poland
Morgan, Kenneth—UK
Morgan, William, B.—USA
Moroianu, Adrian,A.—Romania
Morris, Phillip, J.—USA
Moses, Fred—USA
Mote, C. D. Jr.—USA
Moulden, Trevor—USA
Mroz, Zenon—Poland
Mukherjee, B.—Canada
Mukherjee, Dinabandhu—India
Muki, Rokura—USA
Mulholland, George, P.—USA
Mullan, Philip J—USA
Mullen, Robert L—USA
Muller, Peter, C.—FRG
Munteanu, Ioan, I.—Romania
Murakami, Sumio—Japan
Murotsu, Yoshisada—Japan
Murrow, Harold, N.—USA
Murthy, M. G. K.—India
Murthy, P. N.—India
Murzewski, Janusz W.—Poland
Muszynska, Agnieszka—USA
Myasnikova, Ljuba, P.—USSR
Myers, Michael, K.—USA

N

Na, Tsung, Y.—USA
Nachman, Arje—USA
Naerlovic-Veljkovic, Natalija—Yugoslavia
Nagaraj, H S—USA
Nagaraj, V. T.—India
Nagaraja, Yelagalavadi, R.—India
Nair, Prasad, K.—USA
Nakagawa, Noritoshi—Japan
Nakamizo, Takayoshi—Japan
Nalluri, C.—UK
Namba, Masanobu—Japan
Naprstek, Jiri—Czechoslovakia
Narasimhan, Mysore N. L.—USA
Narasimhan, Sampathiengar—India
Nariboli, Gundo, A.—USA
Nash, William, A.—USA
Natarajan, R.—USA
Nathan, Noel D.—Canada
Nau, B. S.—UK
Navon, I M—USA
Nayar, Brij, M.—India
Neale, Kenneth, W.—Canada
Nelson, Ivan—USA
Nestler, Donald, E.—USA
Nethercot, D. A.—UK
Neubert, Vernon H.—USA
Neuhaeuser, Hansjoerg—Austria
Neve, Raymond, S.—UK
Newman, John, B.—USA
Nica, Alexandru, C.—Romania
Nicholas, Theodore—USA
Nicholson, David, W.—USA
Nickell, Robert, E.—USA
Nicolaou, Michael, C.—Brazil
Nield, Donald, A.—New Zealand
Niemann, Hans-Juergen—FRG
Nikbin, Kamran—UK
Niordson, Frithiof, I.—Denmark
Noor, Ahmed, K.—USA
Norrie, Douglas, H.—Canada
Norwood, Frederick, R.—USA
Nova, Roberto—Italy
Novak, Pavel—UK
Nowak, Andrzej, S.—USA
Nowinski, Jerzy, L.—USA

O

O'Neill, Michael E—UK
Ochoa, Ozden O.—USA
Ockendon, H—UK
Ockendon, John R—UK
Oden, J Tinsley—USA
Ogura, Keiji—Japan
Oh, S I—USA
Ohji, Kiyotsugu—Japan
Ohlson, Nils-Gunnar—Sweden
Ohno, Nobutada—Japan
Ojha, S K—India
Oldham, K—UK
Olesiak, Zbigniew—Poland
Olhoff, Niels—Denmark
Oliver, A R—Australia
Oliveto, Giuseppe—Italy
Olszowski, Bogdan—Poland
Oravecz, Kalman I—USA
Orlando, Alcir F—Brazil
Orthwein, William C—USA
Osburn, James O—USA
Osman, M O M—Canada
Owen, J M—UK

P

Pagano, Nicholas J—USA
Page, Robert H—USA
Pai, B R—India
Pai, S I—USA
Pai, T G—India
Paintal, Amreek S—USA
Paipetis, Stephen A—Greece
Pal, Pannalal—India
Palczewski, Andrzey—Canada
Paldas, M—India
Palusamy, Sam S—USA
Pamadi, Bandu N—USA
Pan, H H—USA
Pan, K C—USA
Panagiotopoulos, Panos—Greece
Panayotounakos, D E—Greece

Pande, G C—Greece
Papailiou, Kyriacos D—Greece
Papastavridis, John G.—USA
Parameswaran, Manjeri A—India
Parhizgar, S—USA
Paria, G—India
Parihar, Kailash Singh—India
Parker, R—UK
Parkins, David, W.—UK
Parks, Patrick C—UK
Parks, V J—USA
Paslay, Paul R—USA
Passman, S L—USA
Patel, Vithal A—USA
Pattabiraman, J—India
Patterson, C—UK
Paul, Burton—USA
Paul, John P—UK
Payne, Fred R—USA
Payne, Lawrence E—USA
Pazis, Dimitrios N—Greece
Pearson, John—USA
Pearson, P H O—Australia
Pecinka, Ladislaw—Czechoslovakia
Peck, Robert E—USA
Pecseli, H L—Denmark
Pedersen Preben T—Denmark
Pedersen, Pauli—Denmark
Pei, D C T—Canada
Pengelley, C Desmond—USA
Peregrine, D H—UK
Perju, Dan—Romania
Perl, Modrechai—Israel
Perlea, Vlad—Romania
Perreira, N. Duke—USA
Persson, Ake—Sweden
Peryca, Stefan—Poland
Peters, David A—USA
Petrie, C J S—UK
Phan-Thien, Nhan—Australia
Phillips, Aris—USA
Phillips, Winfred M—USA
Pian, Theodore H H—USA
Piechor, K—Poland
Pih, Hui—USA
Pindera J T—Canada
Pinto, John G—USA
Pisoni, Claudio—Italy
Plank, R J—UK
Platten, J K—Belgium
Platzer, Max F—USA
Plaut, Raymond H—USA
Pletcher, Richard H—USA
Plumb, Ovid A—USA
Pohle, Frederick V—USA
Pokorny, Bohumil—Czechoslovakia
Polizzotto, Castrenze—Italy
Pollar, Andrew—Canada
Pop, Ioan—Romania
Pope, Malcolm H—USA
Popelar, Carl H—USA
Popescu, Michail—Romania
Popescu, Mihai E—Romania
Popiel, C O—Poland
Popovici, Adrian M—Romania
Popoviciu, Mircea O—Romania
Popplewell, Neil—Canada
Porteiro, Jose L F—USA
Porter, Robert W—USA
Porumb, Dorin—Romania
Potter, Merle C—USA
Powe, Ralph E—USA
Powell, Robert L—USA
Powell, T Conley—USA
Prabhakaran, R—USA
Prabhu, Aradhya—India
Prabhu, Bantwal S—India
Prakash, J—FRG
Prasad, Birendra—USA
Prassianakis, John N—Greece
Prathap, G—India
Prevost, Jean-Herve—USA
Prud'homme, Roger—France
Prussing, John E—USA
Przirembel, C E G—USA
Pullman, W A—Australia
Puri, Pratap—USA
Purohit, Niranjan K—India
Purohit, Sharad C—India
Purushotham, C M—India
Putnam, Abbott A—USA

Q

Quinn, D W—USA
Qureshi, Z H—USA

R

Rafiroiu, Mihai—Romania
Raftopoulos, Demetrios D—USA
Raghavacharyuly, E—India
Raghavan, M R—India
Raghavan, Ramjee—USA
Raj, Rishi—USA
Rajappa, N R—India
Rajar, Rudi—Yugoslavia
Rajvanski, S C—India
Rakowski, Gustaw—Poland
Ramamurti, V—India
Ramaprian, Belakavadi R—USA
Ramesh, O K—India
Ramkissoon, Harold—Trinidad
Ramm, Heinrich J—USA
Ramu, S Anatha—India
Rand, Richard—USA
Raniecki, Bogdan—Poland
Ranu, Harcharan S—USA
Rao Palepu V—India
Rao, C R A—Australia
Rao, D K—India
Rao, K Sankara—India
Rao, N S—Switzerland
Rascon, Octavio—Mexico
Raskovic, Danilo P—Yugoslavia
Rathy, R K—India
Raudkivi, Arved J—New Zealand
Ravindran, Renuka—India
Rawtani, Sunder—India
Ray, Ajit Kumar—Canada
Reader, Wayne T—USA
Red, W E—USA
Reddy, Chinthagunta S—USA
Reed, F Everett—USA
Reggini, H—Argentina
Reid, S R—UK
Reifsnider, Kenneth—USA
Reitz, Edward S—USA
Rice, Warren—USA
Richards, T H—UK
Ridha, Raouf A—USA
Rinehart, John S—USA
Ripperger, E A—USA
Ritter, Alfred—USA
Ritter, Reinhold—FRG
Roberts, John W—UK
Robertson, J M—USA
Rocke, Richard D—USA
Roco, M C—USA
Roderick, Norman F—USA
Rodi, Wolfgang—FRG
Roesner, K G—FRG
Rogers, Colin—Canada
Rohani, Behzad—USA
Rosel, Rudolf—Switzerland
Rosenhouse, G.—Israel
Ross, Arthur L—USA
Rossmanith, Hans-Peter—Austria
Rossow, Mark—USA
Rostamian, Rouben—USA
Rouleau, Wilfred T—USA
Rozewicz, Joseph—UK
Rozhdestvensky, K V—USSR
Rubin, C—USA
Rubio, J E—UK
Rudinger, George—USA
Ruiz, Carlos—UK
Rund, Hanno—USA
Rushton, K R—UK
Ruth, Douglas W—Canada
Ruzicka, Milos—Czechoslovakia
Ryali, Subbarao B—USA
Ryan, Eugene P—UK
Ryan, Michael E—USA
Ryba, Dusan—Netherlands

S

Sacheti, Nirmal Chand—Australia
Sackman, Jerome L—USA
Sadd, Martin H—USA
Sadler, Stanley Gene—USA
Safarik, Pavel—Czechoslovakia
Saha, Subiata—USA
Sahin, I.—USA
Saibel, Edward—USA
Saito, K—USA
Saito, Masakatsu—Japan
Salehi, Sohrab V.—UK
Samra, Rajbir S—USA
Samria, Narendra K—India
Sananes, F—France
Sanchez Sarmiento, Gustavo—Argentina
Sankar, Thiagas S—Canada
Santarelli, Francesco—Italy
Sarkadi-Szabo, Stephen—USA
Sarma, Maddipati S—India
Sarma, V V S—India
Sarpkaya, Turgut—USA
Sarsten, Arthur—Norway
Sasiadek, Jerzy—Canada
Sastry, U A—Algeria
Satas, Donatas—USA
Sathyamoorthy, M—USA
Sato, Yasuo—Japan
Sauer, Harry J, Jr—USA
Savage, Stuart B—Canada
Savic, Peter—Canada
Savii, George G—Romania
Savitz, Rubin S—USA
Savkoor, Arvin R—Netherlands
Savulescu, Stefan N—Romania
Sawczuk, Antoni—France
Sawicki, Andrzej—UK
Scanlon, Jane C—USA
Scarlat, Adrian S—Israel
Scattergood, Ronald O—USA
Schiehlen, Werner O—FRG
Schiffner, Klaus J—FRG
Schijve, Jacobus—Netherlands
Schindel, Leon H—USA
Schluender, Ernst-Ulrich—FRG
Schmid-Schoenbein, Geert—USA
Schmidt, Bernd—FRG
Schmidt, Dieter W—FRG
Schmidt, Reiner—Austria
Schmidt, Robert—USA
Schmidt, Werner, F—FRG
Schmitt-v Schubert, Barbara—FRG
Schmitt, Heiko—FRG
Schnell, Walter—FRG
Schnurmann, R—UK
Schrader, Karl-Heinrich—FRG
Schreyer, H L—USA
Schwanecke, Helmut—FRG
Schweitzer, Gerhard—Switzerland
Schwieger, Horst—FRG
Sciammarella, Cesar A—USA
Scipio, L Albert—USA
Sears, William R—USA
Seginer, Arnan—USA
Seide, Paul—USA
Seidelmann, Kenneth—USA
Seinfeld, John H—USA
Sendeckyj, George P—USA
Sesonske, Alexander—USA
Seto, William W—USA
Seymour, Brian R—Canada
Sforza, Pasquale M—USA
Shaalan, Mohammad R —Saudi Arabia
Shahinpoor, Mohsen—USA
Shang, J S—USA
Sharma, Anil K—Trinidad
Sharma, C B—UK
Sharma, Ram K—India
Sharma, Shankar P—India
Sharp, Arnold G—USA
Sharpe, William N, Jr—USA
Shaw, Richard—USA
Shaw, William J D—Canada
Shepherd, J J—Australia
Sheppard, Leslie M—Australia
Shi-igai, Hiroyoshi—Japan
Shilkrut, Dov—Israel
Shin, Y S—USA
Shindo, Akio—Japan
Shrivastava, S K—India
Shrivastava, Suresh C—Canada
Shukla, Arun—USA
Shukla, Jang Bahaour—India
Shukla, Kedar N—India
Shuto, Nobuo—Japan
Siekmann, J—FRG
Sierakowski, Robert, L.—USA
Silberman, Edward—USA
Silvester, Richard—Australia
Simmons, John, M.—Australia
Simon, Burkhard—FRG
Simon, Harold, A.—USA
Simonis, John, C.—USA
Simpson, R L—USA
Singer, Joseph M.—USA
Singh, Punyatma—India
Singh, Shiva N.—USA
Sinha, Prawal—India
Sinha, Subhash, C.—USA
Sircar, Ranesh—India
Sivaramakrishnan, M. M.—USA
Skovgaard, Ove—Denmark

Skowronski, Janislaw M.—Australia
Slavchev, Slavcho, G.—Bulgaria
Sleeman, Brian David—UK
Small, Richard, D.—USA
Smelser, Ronald, E.—USA
Smilg, Benjamin—USA
Smith, A. M. O.—USA
Smith, Erling, A.—USA
Smith, Jack, C.—USA
Smith, Lester, W.—USA
Smith, Richard, N.—USA
Smith, Wayne, F.—USA
Sneck, Henry, J.—USA
Sobey, Rodney, J.—Australia
Sobieszczanski, Jaroslaw—USA
Sobotka, Zdenek—Czechoslovakia
Soderberg, Olof—Sweden
Soechting, John, F.—USA
Soler, Alan, I.—USA
Soliman, Hassan, M.—Canada
Somers, Arnold, E., Jr.—USA
Sonntag, Gerhard—FRG
Soo, Shao L.—USA
Soom, Andres—USA
Sorensen, E., Paul—USA
Sorenson, Spencer, C.—USA
Soundalgekar, V. M.—Bahrain
Sowunmi, Olusegun Adedayo —Nigeria
Sozzi, Gary, L.—USA
Spanos, Pol D.—USA
Sperski, Marek—Poland
Speziale, Charles—USA
Spillers, William, R.—USA
Springer, George, S.—USA
Spurk, Joseph, H.—FRG
Squire, William—USA
Sreenivasan, Katepalli, R.—USA
Srinivasan, Muthukrishnan G. —USA
Srinivasan, V—USA
Srinivasan, Venkatachary—India
Srivastav, Ram, P.—USA
Srivastava, Hari, M.—Canada
Srivastava, Kailash Nath—India
Srivastava, L M—Liberia
St. Amand, Pierre—USA
Stalker, Raymond J.—Australia
Stallmeyer, James, E.—USA
Stanley, Peter—UK
Stanton, Edward, L.—USA
Starosolszky, Odon—Hungary
Staub, Fred, W.—USA
Stecco, Sergio, S.—Italy
Stephan, Karl—FRG
Stepniewski, Wieslaw, Z.—USA
Steven, Grant, P.—Australia
Stevenson, Michael, G.—Australia
Stewart, Stephen E.—USA
Stewartson, Keith—UK
Stiassnie, M—Israel
Stojek, Zbyszko—Poland
Stokes, Vijay, K.—USA
Storakers, Bertil, M.—Sweden
Strehlow, Roger, A.—USA
Strifors, Hans—Sweden
Stroeven, Piet—Netherlands
Stupnicki, Jacek—Poland
Sture, Stein—USA
Sturm, Friedwin—Austria
Subramanian, N.—India
Subramanian, Nallepilli R.—India
Sugiyama, Y—Japan
Suhubi, Erdogan S—Turkey
Sumer, B. Mutlu—Turkey
Sun, C. T.—USA
Sundararajan, Chelliah—USA
Sung, Shung, H.—USA
Sutherland, George, H.—USA
Sutherland, Herbert J.—USA
Sved, George—Australia
Svendsen, I. A.—Denmark
Svensson, Noel, L.—Australia
Swaminathan, V—India
Swarup, Shanti—India
Swisher, George, M.—USA
Sykes, D M—UK
Symm, George, T.—UK
Symonds, Paul, S.—USA
Szabo, Akos—Hungary
Szaniawski, A.—Poland
Szeri, Andras, Z.—USA
Szilard, Rudolph—FRG
Szymczak, Czeslaw—Poland

T

Tadjbakhsh, I. G.—USA
Takayama, Kazuyoshi—Japan
Talreja, R—Denmark
Tamas, Mircea, A.—Romania
Tanaka, E—Japan
Tanaka, Ichiro—Japan
Tanaka, Keisuke—USA
Tanaka, Kikuaki—Japan
Tanaka, Masataka—Japan
Tani, J—Japan
Tarn, Tzyh J.—USA
Tavoularis, Stavros—Canada
Taya, Minoru—USA
Taylor, R F—USA
Teodorescu, Petre, P.—Romania
Tesarno, Alexander —Czechoslovakia
Teschneer, Winfried—FRG
Tewari, N. K.—India
Thangam, Siva—USA
Theocaris, Pericles, S.—Greece
Thompson, Joe—USA
Thomson, Robert, G.—USA
Thornton, Earl, A.—USA
Thresher, Robert, W.—USA
Thrun, Sigmund—USA
Thurlow, Gordon, G.—UK
Tielking, John, T.—USA
Ting, Kwun-Lon—USA
Tirupat, Varadan, K.—India
Tomita, Yoshihiro—Japan
Tonder, Kristian—Norway
Tondl, Ales—Czechoslovakia
Tooth, Alwyn S—UK
Topper, Timothy H—Canada
Topping, Alanson D—USA
Townsend, Miles A—USA
Tracey, Dennis M—USA
Trehan, S K—India
Triantafyllou, M—USA
Troch, Inge—Austria
Troger, Hans—Austria
Trompette, Philippe—France
True, Hans C—Denmark
Tsahalis, Demosthenes T—USA
Tsangaris, S—Greece
Tsao, Mike C—USA
Tsubaki, Tatsuya—Japan
Tsuji, Hiroshi—Japan
Tung, Chi Chao—USA
Tupholme, Geoffrey E—UK
Turek, Frantisek—Czechoslovakia
Turhan, Dogan—Saudi Arabia
Turns, S R—USA
Tuzson, John—USA
Tvergaard, Viggo—Denmark
Tyagi, V P—India
Tyllered, Gunnar O—Sweden
Tzafestas, Spyridon G—Greece

U

Uchida, Shigeo—Japan
Ueng, Charles E S—USA
Uhrig, R—FRG
Ulbrich, H—FRG
Ulmanu, Vlad O—Romania
Ungar, Eric E—USA
Upadhyay—USA

V

Vajravelu, Kuppalapalle—USA
Valavala, Subba Rao—India
Valenta, J—Czechoslovakia
Van Aken, Ray W—USA
Van der Werff, Terry J—USA
Van Harten, K—Netherlands
Van Overmeire, Marc—Belgium
Vance, John M—USA
VanArsdale, William E.—USA
Varschavsky, Ari—Chile
Varshney, Raj K—India
Veluswami, M A—India
Venter, R D—Canada
Verma, H K—India
Verma, P D—India
Verma, P D S—India
Viggiani, Carlo—Italy
Vijay, Mohan—Canada
Villaggio, Piero—Italy
Vinogrado, Aleksandra M—Canada
Vinogradov, Oleg G—Canada
Viorel, Vlad V—Romania
Viskanta, Raymond—USA
Vito, Raymond P—USA
Vohr, John H—USA
Von Lavante, E—USA
Von Turkovich, B F—USA
Vongisessomjai, Suphat—Thailand
Vrouwenvelder, T C—Netherlands

W

Wager, J. G.—Australia
Wagner, Hans—FRG
Walker, Gregory, J.—Australia
Wan, Conrad, C.—USA
Wang L R L—USA
Wang, James, T. S.—USA
Warburton, Geoffrey, B.—UK
Warder, Richard, C. W., Jr.—USA
Warren, William, E.—USA
Warrick, A W—USA
Warsi, Zahir U. A.—USA
Waszczyszyn, Zenon, W.—Poland
Wattendorf, Frank—USA
Waymire, Gary, R.—USA
Webb, James, H.—UK
Weber, Hans, I.—Brazil
Weber, Helmut, E.—USA
Webster, George, A.—UK
Weiland, Claus—FRG
Weingarten, Lawrence, I—USA
Weiss, Vladimir—Czechoslovakia
Welty, James, R.—USA
Wempner, Gerald, A.—USA
Weng, George, J.—USA
Wessels, Andriaan C. E. —Netherlands
Westkaemper, John, C.—USA
Whaley, Wayne—USA
White, Jon, M.—Saudi Arabia
Wicher, J—Poland
Wichterle, Kamil—Czechoslovakia
Wieckowski, Josef—Poland
Wijker, J. J.—Netherlands
Wilcock, Donald, F.—USA
Wilkinson, David—Australia
Willam, Kaspar, J.—USA
Williams, Forman, A.—USA
Williams, Harry, E.—USA
Williams, James, C., III—USA
Willmott, A. J.—UK
Wilson, Charles, E.—USA
Winer, Ward O—USA
Winsor, F J, Jr—USA
Winsor, Frederick J—USA
Winterberg, Friedwardt M—USA
Wissmann, D J W —FRG
Wittbrodt, Edmu —Poland
Wizmur, Mieczyslaw—Poland
Woernle, H T—FRG
Woo, Lin S—USA
Wood, A D—Ireland
Worley, Will J—USA
Worthington, Peter J—UK
Wozniak, Czeslaw—Poland
Wright, Steven J—USA
Wu, Chien H—USA
Wu, Erh-Rong—USA
Wu, Shi Tsan—USA
Wuest, Walter—FRG
Wunderlich, Walter—FRG
Wylie, E B—USA

X

Xirouchakis, Paul C—USA

Y

Yabe, Hiroshi—Japan
Yamada, Yoshiaki—Japan
Yamane, Eitaro—Brazil
Yang, J W—USA
Yankelevsky, David Z—Israel
Yasuhara, Michiru—Japan
Yen, David H Y—USA
Yoo, Chai H.—USA
Yoo, J Y—Republic of Korea
Yorgiadis, Alexander—USA
York, Thomas M—USA
Yoshizawa, Akira—Japan
Youm, Youngil—USA
Young, Alec D—UK
Yu, C P—USA

Yu, Y S—USA
Yu, Yi-Yuan—USA
Yuen, Walter W—USA
Yukawa, Sumio—USA

Z

Zakin, J L—USA
Zarka, Joseph—France
Zarling, J P—USA
Zaslawsky, Maurice—USA
Zastrow, U—FRG
Zemanek, Jan—Czechoslovakia
Ziegler, Franz—Austria
Zielnica, Jerzy—Poland
Zienkiewicz, Henry K—UK
Zimmie, T F—USA
Zyczkowski, Michal—Poland

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Russian Letter Cap.	Ital.	Mathematical Reviews; Zentralblatt für Mathematik	Bulletin Signalétique	Applied Mechanics Reviews	Science Abstracts	U.S. Library of Congress	Amer. Slavic & E. European Review	Journal of Symbolic Logic
А	*а*	a	a	a	a	a	a	a
Б	*б*	b	b	b	b	b	b	b
В	*в*	v	v	v	v	v	v	v
Г	*г*	g	g	g	g	g	g	g
Д	*д*	d	d	d	d	d	d	d
Е	*е*	e	e	e	e	e	e	é
Ё	*ё*	e	ë	e	ë	ë	ë	ë
Ж	*ж*	ž	zh	zh	zh	z͡h	ž	ž
З	*з*	z	z	z	z	z	z	z
И	*и*	i	i	i	i	i	i	i
Й	*й*	ĭ	j	i	ĭ	ĭ	j	j
К	*к*	k	k	k	k	k	k	k
Л	*л*	l	l	l	l	l	l	l
М	*м*	m	m	m	m	m	m	m
Н	*н*	n	n	n	n	n	n	n
О	*о*	o	o	o	o	o	o	o
П	*п*	p	p	p	p	p	p	p
Р	*р*	r	r	r	r	r	r	r
С	*с*	s	s	s	s	s	s	s
Т	*т*	t	t	t	t	t	t	t
У	*у*	u	u	u	u	u	u	u
Ф	*ф*	f	f	f	f	f	f	f
Х	*х*	h	kh	kh	kh	k͡h	kh	h
Ц	*ц*	c	c	ts	ts	t͡s	c	c
Ч	*ч*	č	ch	ch	ch	c͡h	č	č
Ш	*ш*	š	sh	sh	sh	s͡h	š	š
Щ	*щ*	šč	shch	shch	shch	s͡hch	šč	šč
Ъ	*ъ*	″			‘	″	‘	
Ы	*ы*	y	y	y	ȳ	y	y	y
Ь	*ь*	′	’		’	’	’	’
Э	*э*	è	e	e	é	é	è	e
Ю	*ю*	ju	ju	yu	yu	i͡u	ju	ú
Я	*я*	ja	ja	ya	ya	i͡a	ja	á

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GREEK			ENGLISH		PSEUDO ENGLISH		RUSSIAN		MUTE	
Г	gamma	g	A	a	B	v	Ж	zh	Ь	
Д	delta	d	Б	b	З	z	И	i	Ъ	
К	kappa	k	E	e	H	n	Ц	ts	Й	
Л	lambda	l	O	o	C	s	Ч	ch		
П	pi	p	M	m	У	oo	Ш	sh		
Р	rho	r	T	t			Щ	shch		
Ф	phi	f					Э	e	Ы	y
Х	chi	kh					Ю	yu	Я	ya

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NOTES

NOTES

NOTES

TABLE OF CONTENTS

GUIDE TO AKWAS v

LIST OF INDEX TERMS ix

AKWAS (AUTHOR AND KEY WORDS IN ALPHA SEQUENCE) 1

LIST OF SUBJECT MAIN HEADINGS 592

LIST OF JOURNALS SCANNED 593

LIST OF AMR REVIEWERS 603

TRANSLITERATION CHART 610

GUIDE TO MONTHLY ENTRIES

JANUARY	1-1048	JULY	6034-7128
FEBRUARY	1049-1964	AUGUST	7129-8083
MARCH	1965-3073	SEPTEMBER	8084-9072
APRIL	3074-4120	OCTOBER	9073-9992
MAY	4121-4923	NOVEMBER	9993-10907
JUNE	4924-6033	DECEMBER	10908-12103

APPLIED MECHANICS REVIEWS, VOL. 35, 1982
ANNUAL INDEX

Sharma (R.K.), ks formulation, oblateness, orbit mechanics, perturbation methods, regularization, two body problem, *6877*
Sharma (R.N.), conical flow, experimental results, wall jets, *1575*
Sharma (S.), buckling, composite structures, laminates, plates, Iyengar (N.G.R.), (et al.), *287*
- composite materials, laminates, plates (anisotropic), Iyengar (N.G.R.), (et al.), *7342*

Sharma (S.D.), see Gai (S.L.), *3725*
Sharma (V.D.), compressible flow, dissociation, nonequilibrium flow, *2619*
- mathematical models, nonequilibrium flow, shock waves, shock waves (attached), *5419*
- compressible flow, discontinuities, dissociation, gases, *6710*
- compressible flow, discontinuities, nonequilibrium effects, thermodynamics, Singh (R.S.), *7780*
- characteristic methods, discontinuities, dissociation, gases, Sharma (J.), (et al.), *9636*
- see Menon (V.V.), *10759*

Sharon (A.), explosions, film boiling, fuel-coolant interactions, shock tubes, Bankoff (S.G.), *10719*
Sharpe (W.N.) Jr., see Bagaria (W.J.), *2479*
Shashaty (A.J.), bending, cables, design, resistance, *4552*
- cables, ocean bed, torsion, underwater structures, *9256*

Shashkov (A.G.), mathematical models, thermocouples, thermophysical properties, *8680*
Shatalov (I.K.), axial compressors, blades, pressure distribution, strain gages, surge, velocity measurement, *8657*
Shatalov (S.D.), see Khodzhaev (K.Sh.), *4990*
Shatokhin (S.N.), bearings (gas lubricated), discharges, loads, lubricants (gas), lubrication (hydrostatic), Kodnyanko (V.A.), *9969*
Shaub (H.), internal combustion engines, lubricants (liquid), temperature, viscometry, Murphy (C.K.), *3757*
Shavaliev (M.Sh.), diffusion, mixtures, navier stokes equation, poiseuille flow, *10672*
Shaw (J.), blades, dynamic response, rotors, vibration, Albion (N.), *2337*
Shaw (L.M.), aerodynamic interference, axial fans, noise (aerodynamic), turbofan engines, wakes, Glaser (F.W.), *7894*
Shaw (M.C.), cutting, extrusion, forming, materials properties, plastic flow, *3429*
Shaw (M.T.), cold working, constitutive equations, forming, polymers, survey, yield condition, *2396*
Shaw (P.T.), see Csanady (G.T.), *8033*
Shaw (R.), see Abu-Ghannam (B.J.), *2633*
Shaw (R.H.), see Anand (S.C.), *80*
Shaw (S.J.), see Kinloch (A.J.), *542*
Shay (W.A.), finite difference methods, internal flow, navier stokes equation, two dimensional flow, vorticity, *4586*
Shchelkachev (M.V.), dispersion relation, electro fluid dynamics, perturbations, taylor instability, theory, *3890*
Shchennikov (V.V.), see Byrkin (A.P.), *8568*
Shchepetov (S.V.), see Kovrizhnykh (L.M.), *11838*
Shcherbak (S.B.), see Melikhov (O.I.), *5539*
- see Makhviladze (G.M.), *7888*

Shcherbakov (E.V.), algorithms, parallel computations, programming, *3180*
Shcherbakov (V.F.), see Pochuev (V.P.), *8808*
Shcherban (N.I.), see Fridman (V.M.), *3480*
Shcherbina (D.M.), heat transfer (combined modes), radiant interchange, radiometer, thermal measurements, *4713*
Shcherbina (Yu.V.), see Kazakevich (V.V.), *3205*
Shchukin (V.K.), cavities, compressible flow, convection, supersonic flow, Gortyshov (Yu.F.), (et al.), *11401*
- boundary layer (turbulent), channel flow, swirl flow, turbulence (structure), velocity profiles, Khalatov (A.A.), (et al.), *11547*

Shea (R.), materials properties, shock waves (normal), solid mechanics, Mescall (J.F.), *1311*
shear, higher order theories, plates (orthotropic), plates laminated, plates orthotropic, stress strain relationships, Ulyashina (A.N.), *319*
- bending, plates (nonlinear), plates (rectangular), postbuckling behavior, Walczak (W.), Jakubowski (S.), *332*
- plane strain, plastic flow, plasticity, shear bands, steel, Anand (L.), Spitzig (W.A.), *1196*
- beams (sandwich), design (optimum), large displacement, plates (nonlinear), Gierlinski (J.), Mroz (Z.), *1223*
- bending, plastic behavior, plates (circular), Nakamura (Y.), Tatenami (T.), (et al.), *1229*
- concrete, stiffness, Fardis (M.N.), Buyukozturk (O.), *1441*
- beams (flexural), bending (elastic), elasticity (linear), shear centre, Gyarmathy (K.), *2221*
- plates (nonhomogeneous), plates (thick), torsion, Mukhopadhyay (A.), Mukhopadhyay (J.), *2266*
- bending, girders, prestressed concrete, torsion, Taylor (G.), Warwaruk (J.), *2523*
- acoustic emission, crack propagation, fracture, pressure vessels, Finkel (V.M.), Muravin (G.B.), (et al.), *3506*
- bending, panels (flat), reinforced concrete, torsion, ultimate strength, Majid (K.I.), Celik (T.), *3534*
- galerkin method, plates (circular), rotary inertia, vibration (nonlinear), Chia (C.Y.), Sathyamoorthy (M.), *4423*
- acoustic waves, dynamic stresses, flexural waves, plates, reflection, wave equations, Dubbeldayy (P.S.), Rudgers (A.J.), *5209*
- dynamic analysis, plasticity, snow, tracked vehicles, vehicles, Brown (R.L.), *5366*
- boundary layer, calibration, friction (skin), preston tubes, Nitsche (W.), *5507*
- floating bodies, fluid-structure interaction, plates, vibration (forced), Suvorov (A.M.), Cherkesov (L.V.), *6297*
- copper, elastic constants, lattices, polycrystalline materials, strain, Gairola (B.K.D.), Kroner (E.), *6468*
- bolted joints, bolts, experimental results, torsion, Bahia (C.S.), Martin (L.H.), *6566*
- laminates, layered media, shells (sandwich), thermal stresses, thermoelasticity, Khoroshun (L.P.), Babich (D.V.), *6953*
- creep, finite element techniques, nonlinear analysis, stiffness matrix, Nguyen Dang Hung, *7218*
- galerkin method, plates (circular), plates (orthotropic), rotary inertia, vibration (nonlinear), Sathyamoorthy (M.), *7393*
- crack propagation, cracks, holes, Fuchssteiner (W.), Olsen (O.W.), *7520*
- adhesion, composite materials, strength, Rybin (A.A.), *7569*
- buoyancy, cavities, prediction, turbulent flow, Ideriah (F.J.K.), *7738*
- dynamic analysis, plates, rotary inertia, vibration (nonlinear), Sathyamoorthy (M.), *8308*
- concrete, plates, punch problems, reinforced bodies, Godycki-Cwirko (T.), Kosinska (A.), *8379*
- modal analysis, rotary inertia, shells (spherical), vibration (forced), Shenderov (E.L.), *9337*
- constitutive relations, soils, Nakai (T.), Matsuoka (H.), *9354*
- beams, bending, elastoplasticity, reinforced concrete, Nakazawa (T.), Ohta (T.), *9444*
- buildings, foundations, joints, piles, rock mechanics, Dight (P.M.), Chiu (H.K.), *9485*
- cylindrical bodies, roughness, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *9594*
- emulsions, fluid mechanics, permeability, porous media, surface profiles, surfactants, Kalpakci (B.), Klaus (E.E.), (et al.), *9887*
- beams, dynamic properties, rotary inertia, vibration (free), Doyle (J.F.), *10199*
- elastic foundations, plates (isotropic), vibration (free), Volos (N.P.), Dovganich (M.I.), *10203*
- beams (cantilever), bending, blades, rotary inertia, vibration (free), Subrahmanyam (K.B.), Kulkarni (S.V.), (et al.), *10208*
- beams, reinforced concrete, shear stress, Batchelor (B. De V.), Kwun (M.), *10359*
- beams (curved), dynamic analysis, rotary inertia, vibration (free), Suzuki (K.), Takahashi (S.), *11148*
- impact, layered media, punch problems, viscoelasticity (dynamic), winkler foundation, Aleksandrov (V.M.), Zelentsov (V.B.), *11159*

shear flow, boundary layer, mesolayer, turbulence, turbulence model, Long (R.R.), Chen (T.-C.), *645*
- orr sommerfeld equation, turbulence (homogeneous), Kambe (R.), Doi (M.), (et al.), *648*
- flow measurement, turbulence, turbulent flow, velocity profiles, Harris (S.D.), Williamson (J.W.), (et al.), *660*
- polymers, viscometry, Kulicke (W.-M.), Porter (R.S.), *1488*
- convection (free), heat, rayleigh number, temperature profile, Yoshizaki (M.), *1515*
- experimental results, jets, suppression, turbulence, Zaman (K.B.M.Q.), Hussain (A.K.M.F.), *1582*
- channels, gravity waves (internal), stratified flow, wave interactions, Grimshaw (R.), *1601*
- cylindrical bodies, external flow, heat transfer, hot wire, reattachment, separated flow, Ota (T.), Kon (N.), (et al.), *1665*
- brownian motion, diffusion, particle dynamics, Foister (R.T.), Van De Ven (T.G.M.), *1731*
- currents, oceanography, Smart (J.H.), *1891*
- constitutive equations, materials possessing memory, non newtonian flow, viscoelastic fluids, Menezes (E.V.), *2575*
- biomechanics, rheology, viscometry, Whorlow (R.W.), *2578, book*
- flow obstructions, inviscid fluid, two dimensional flow, vorticity, Shankar (P.N.), Sinha (U.N.), *2609*
- airfoils, interaction, perturbations, Hashem (A.A.F.), Peacock (R.E.), *2610*
- mixing layers, stratified flow, Popov (V.A.), Chashechkin (Yu.D.), *2667*
- boundary layer, hydrodynamic stability, orr sommerfeld equation, roughness, stability theory, Lewkowicz (A.K.), *2681*
- decay, hydrodynamic stability, perturbations, Brown (S.N.), Stewartson (K.), *2682*
- curved surfaces, turbulence (structure), Townsend (A.A.), *2699*
- aerodynamic excitation, eddies, jets, noise (aerodynamic), turbulence, Vlasov (E.V.), Ginevskii (A.S.), *2942*
- annuli, drops, Chan (P.C.-H.), Leal (L.G.), *2986*
- bearings (thrust), lubrication (hydrostatic), turbulent flow, Harada (M.), Aoki (H.), (et al.), *3043*
- non newtonian flow, plates (parallel), pressure gradient, second order fluids, Rajagopal (K.R.), Huilgol (R.R.), *3590*

- conical flow, diffusers, inlet flow, inlet flow (sheared), velocity profiles, Nakamura (I.), Ishikawa (K.), (et al.), *3679*
- hydrodynamic stability, membranes, vortex flow, Couder (Y.), *3702*
- dispersed flow, suspensions, walls, Brunn (P.), *4008*
- geophysics, granular media, rock mechanics, Passman (S.L.), Nunziato (J.W.), (et al.), *4132*
- rayleigh problem, unsteady flow, viscoelastic fluids, Johri (A.K.), Singhal (R.K.), *4568*
- computing techniques, coordinate systems, mathematical methods, navier stokes equation, Hirschel (E.H.), Korculla (W.), *4596, book*
- hydrodynamic stability, orr sommerfeld equation, stability theory, Salwen (H.), Grosch (C.E.), *4639*
- rotational flow, solitary waves, stratified flow, Gibbon (J.D.), James (I.N.), (et al.), *4653*
- hydrodynamic stability, ocean air interaction, surface waves, wind-wave interaction, Kawai (S.), *4857*
- blood flow, capillary flow, microcirculation, platelet concentration, Beck (M.R.) Jr., Eckstein (E.C.), *4919*
- cylindrical bodies, pressure distribution, transition flow, vortex shedding, Rooney (D.M.), Peltzer (R.D.), *5453*
- swirl flow, turbulence, turbulence model, Naot (D.), *5466*
- constitutive equations, polymers, viscoelastic fluids, Leonov (A.I.), Prokunin (A.N.), *6571*
- entrainment, rotating cylinders, viscoelastic fluids, viscoplasticity, Shulman (Z.P.), Baikov (V.I.), *6572*
- brownian motion, colloids, polar fluids, suspensions, Takamura (K.), Van De Ven (T.G.M.), (et al.), *6583*
- constitutive equations, couette flow, viscometry, Goddard (J.D.), *6593*
- flow irregularities, roughness, turbulent flow, Schofield (W.H.), *6641*
- closure, turbulence model, turbulent flow, Gallagher (B.), Magaard (L.), (et al.), *6685*
- ducts, sound propagation, Mani (R.), *6910*
- axisymmetric flow, bubble dynamics, Miksis (M.J.), *6987*
- deformation, drops, interface phenomena, Flumerfelt (R.W.), *6990*
- boundary layer (atmospheric), clouds, diffusion, turbulence (geophysical), wind, Skhirtladze (G.I.), Yurchak (B.S.), *7061*
- boundary layer, finite difference methods, navier stokes equation, parabolic equations, Spradley (L.W.), Stalnaker (J.F.), (et al.), *7684*
- boundary layer (atmospheric), turbulence (geophysical), wind-wave interaction, Chao (S.P.), *8034*
- drops, polymers, Chin (H.B.), Han (C.D.), *8492*
- free boundary, liquid vapor interface, viscometry, Krieg (R.D.), Son (J.E.), (et al.), *8500*
- inviscid fluid, velocity profiles, vortex flow, Kida (S.), *8528*
- gravity waves, magneto fluid dynamics, planetary atmospheres, wind, El Mekki (O.M.), *8822*
- turbulence, turbulence (anisotropic), turbulence model, Cambon (C.), Jeandel (D.), (et al.), *9604*
- atmosphere, spectra, stratified flow, turbulence (geophysical), Weinstock (J.), *9607*
- channel flow, dispersion, turbulence, turbulence (transport), Durbin (P.A.), *9609*
- insulation, magneto fluid dynamics, numerical methods, panels (flat), Sastry (S.R.N.), *9789*
- deformation, drops, interface phenomena, Rallison (J.M.), *9882*
- coherent structure, sound flow interaction, turbulence, turbulence (structure), Kleis (S.J.), Hussain (A.K.M.F.), (et al.), *10470*
- boundary layer (turbulent), convection (forced), heat transfer, turbulence, Thomas (L.C.), Ibrahim (M.B.), *10472*
- thermal diffusion, turbulent flow, Sreenivasan (K.R.), Tavoularis (S.), *10475*
- critical flow, films, viscous buckling, viscous flow, Suleiman (S.M.), Munson (B.R.), *11378*
- kelvin-helmholtz instability, numerical methods, vorticity, Shoucri (M.M.), *11391*
- buoyancy, hydrodynamic stability, richardson number, stratified flow, turbulent flow, Kranenburg (C.), *11535*
- channel flow, hydrodynamic stability, stability theory, turbulent flow, velocity profiles, Kovalev (V.A.), Ordanovich (A.E.), *11539*
- eddies, experimental methods, jets, turbulence (structure), turbulent flow, Mumford (J.C.), *11545*
- reynolds number, turbulence (structure), turbulent flow, velocity profiles, Antonia (R.A.), Satyaprakash (B.R.), (et al.), *11546*
- reynolds stresses, stress strain relationships, turbulence model, turbulent flow, So (R.M.C.), Peskin (R.L.), *11559*
- gravity waves, nonlinear analysis, stratified flow, wave trains, Liu (A.K.), *11562*
- granular media, stresses, Savage (S.B.), Jeffrey (D.J.), *12062*

shear lag, beams (prestressed), bending, t-section, Adekola (A.O.), *294*

- cellular structures, elastic behavior, plates (anisotropic), web openings, Evans (H.R.), Shanmugam (N.E.), *3292*
- composite materials, fibers, fracture criteria, Goree (J.G.), Gross (R.S.), *5130*
- bridges (box girder), design criteria, Evans (H.R.), Taherian (A.R.), *5151*
- composite materials, discontinuities, fibers, metallic composites, Fukuda (H.), Chou (T.-W.), *6194*
- beams (box), girders (plate), Kuzmanovic (B.O.), *11110*

shear layer, cylindrical bodies, vortex shedding, Stansby (P.K.), *2676*

- asymptotic methods, hydrodynamic stability, orr sommerfeld equation, stability theory, Monkewitz (P.A.), Monkewitz (M.A.), *2686*
- boundary layer, stability theory, turbulence (structure), wakes, Taneda (S.), *2692*
- measurements (dynamic), shear stress, walls, Tennant (M.H.), Pierce (F.J.), (et al.), *2761*
- blunt bodies, flow measurement, separation, wind tunnels (environmental), Castro (I.P.), *6642*
- gravity waves (internal), hydrodynamic stability, vortex sheets, Grimshaw (R.H.J.), *7745*
- compressible flow, navier stokes equation, reattachment, turbulent flow, Sinha (S.N.), Gupta (A.K.), (et al.), *10431*
- richardson number, turbulence (clear air), turbulence (geophysical), Keller (J.L.), Haines (P.A.), *10478*
- compressible flow, finite element techniques, navier stokes equation, supersonic flow, unsteady flow, Cooke (C.H.), Blanchard (D.K.), *11429*

shear loading, beams (timoshenko), elasticity (three dimensional), shearing coefficient, Kelkel (K.), *295*

- crack propagation, dynamic fracture, elastodynamics, Bui (H.D.), Ehrlacher (A.), *470*
- beams (flexural), dynamic analysis, vibration (nonlinear), Nguyen Xuan Hung, *1263*
- crystals, dynamic plasticity, strain rate, Chiem (C.Y.), Duffy (J.), *2236*
- composite materials, finite element techniques, notch sensitivity, stress analysis, Herakovich (C.T.), Bergner (H.W.) Jr., *2455*
- cracks, stress intensity factor, twinning, Kuliev (V.D.), *2457*
- boundary value problems, half space, punch problems, Hara (T.), Shibuya (T.), (et al.), *3245*
- beams (cantilever), buckling, lateral stability, Reissner (E.), *3330*
- beam columns, beams (cantilever), buckling, Zalka (K.), *3333*
- buckling, numerical methods, shells (anisotropic), Cohen (G.A.), *3336*
- bolts, tension, Shakir-Khalil (H.), Ho (C.M.), *3583*
- adhesives, bonded joints, River (B.H.), Gillespie (R.H.), *3586*
- beams, bending, reinforced concrete, torsion, Rajagopalan (K.S.), *4362*
- beams (thin section), shells (cylindrical), thin walled structures, warping, Kholoptsev (V.V.), *4373*
- girders (plate), plastic behavior, postbuckling behavior, Niinobe (Y.), *6239*
- beams (box), bending, girders (plate), Evans (H.R.), Shanmugam (N.E.), *7320*
- blast effects, cyclic loading, fatigue, panels, plaster panels, vibration, Dowding (C.H.), Beck (W.K.), (et al.), *7568*
- edge cracks, infinite medium, stress intensity factor, Hara (T.), *9404*
- bending, finite element techniques, membrane theory, tanks, Royles (R.), Sofoluwe (A.B.), *11114*

shear strength, joints, rocks, scale effects, Barton (N.), Bandis (S.), *429*

- beams (prestressed), prestressed concrete, Rangan (B.V.), *511*
- cyclic testing, sand, strength, Tatsuoka (F.), Silver (M.L.), (et al.), *1316*
- cyclic testing, sand, strength, stress strain relationships, Tatsuoka (F.), Silver (M.L.), (et al.), *1317*
- beams, weibull statistics, wood structures, Liu (J.Y.), *1433*
- clay, cyclic testing, stress strain relationships, Matsui (T.), Ohara (H.), (et al.), *2378*
- slabs, stress analysis, ultimate strength, Garas (F.K.), Waine (B.R.), (et al.), *2517*
- anisotropic media, clay, Nova (R.), *3396*
- constitutive relations, experimental methods, sand, Vardoulakis (I.), *3398*
- clay, field tests, pressuremeter, Denby (G.M.), Clough (G.W.), *3404*
- correlation, friction, metals, Miyoshi (K.), Buckley (D.H.), *3492*
- bonded joints, welded joints, Bolshakov (A.P.), Novikov (S.A.), (et al.), *3585*
- beams, decay, reinforced concrete, Scribner (C.F.), Wight (J.K.), *4038*
- beams (composite), bending, design (optimum), ultimate strength, Farkas (J.), *4526*
- punch problems, reinforced concrete, slabs, Petcu (V.), Stanculescu (G.), (et al.), *4534*
- dynamic properties, soils, swell, Au (W.-C.), Chae (Y.S.), *5252*
- laminates, material testing, shear rigidity, Polyakov (V.A.), Tanevskii (V.V.), *6193*
- beams, reinforced concrete, ultimate strength, Megahid (A.), Maamoun (A.), (et al.), *10358*

shear stress, finite strain, imperfections, plane strain, shear bands, Abeyaratne (R.), Triantafyllidis (N.), *231*

- beams, Zaslavsky (A.), *296*
- beams (plastic), dynamic behavior, rotary inertia, Gomes De Oliveira (J.), Jones (N.), *407*
- anisotropic media, penny shaped crack, stress intensity factor, Dahan (M.), *459*
- pressure measurement, surface flow, turbulent flow, Pontikos (N.), Bradshaw (P.), *712*
- bottom irregularities, rivers, sediment transport, Todten (H.), Vetter (B.), *1497*
- aortic valve, blood, damage, prosthetic devices, Figliola (R.S.), Mueller (T.J.), *1960*
- bed load, erosion, jets, sediment transport, Chatterjee (S.S.), Ghosh (S.N.), *2591*
- measurements (dynamic), shear layer, walls, Tennant (M.H.), Pierce (F.J.), (et al.), *2761*

- arteries, cell behavior, dynamic response, muscles, Dewey (C.F.) Jr., Bussolari (S.R.), (et al.), *3065*
- aorta, blood flow, finite element methods, navier stokes equation, Gokhale (V.V.), Tanner (R.I.), (et al.), *3067*
- bed load, sediment transport, stability theory, Nakagawa (H.), Tsujimoto (T.), *3604*
- boundary layer (turbulent), channel flow, preston tubes, walls, Kiske (S.), Vasanta Ram (V.), (et al.), *4599*
- boundary layer, convection, friction (skin), laminar flow, plates (vertical), Hunt (R.), Wilks (G.), *4696*
- dynamic response, rods, vibration, wave equations, Kiyasbeili (T.N.), *5207*
- experimental methods, shock waves (normal), Batkov (Yu.V.), Novikov (S.A.), (et al.), *6366*
- cyclic testing, sand, saturation, Ishihara (K.), Yamazaki (F.), *6379*
- entrainment, mixing layers, stratification, wind, Kranenburg (C.), *7652*
- boundary layer, flow reversal, heat tracer, incompressible flow, two dimensional flow, velocity measurement, Westphal (R.V.), Eaton (J.K.), (et al.), *8664*
- earthquake resistant structures, foundations, soil structure interaction, underground, Meade (K.P.), Keer (L.M.), *9346*
- adhesives, bending, composite materials, joints, stress analysis, Yuceoglu (U.), Updike (D.P.), *9488*
- bed load, bottom irregularities, sediment transport, Ranga Raju (K.G.), Garde (R.J.), (et al.), *9519*
- channel flow, heat transfer, non newtonian flow, power law fluids, viscoelastic fluids, Shulman (Z.P.), Khusid (B.M.), (et al.), *9708*
- bending, plates (anisotropic), plates (sandwich), Berar (C.), *10158*
- concentrated loads, large displacement, plates, plates (nonlinear), Banerjee (B.), *10159*
- beams, reinforced concrete, shear, Batchelor (B. De V.), Kwun (M.), *10359*

shear transfer, modeling, reinforced concrete, Buyukozturk (O.), Connor (J.J.), (et al.), *534*

- cracks, reinforced concrete, Bazant (Z.P.), Tsubaki (T.), (et al.), *2519*
- torsion, trusses, Schmidt (L.C.), *2537*

shear walls, finite element methods, structural response, vibration, Li (G.C.), Desai (C.S.), *2344*

- frames, multistory frames, structural analysis, Basu (A.K.), Nagpal (A.K.), *2536*
- multistory frames, plates (folded), walls, Kristek (V.), *2542*
- earthquake effects, slabs, Paulay (T.), Taylor (R.G.), *3010*
- elastoplasticity, structural analysis, Pekau (O.A.), Gocevski (V.), *3513*
- buildings (tall), frames, variational methods, Arvidsson (K.), *3549*
- bending, floors, slabs, stiffness, Coull (A.), Wong (Y.C.), *3553*
- beams (thin section), thin walled structures, Coull (A.), Low (C.K.), *6211*
- structural analysis, walls, Smith (B.S.), Abate (A.), *6527*
- elastoplasticity, structural analysis, torsion, Coull (A.), Tawfik (S.Y.), *8457*

shear waves, clay, elastic constants, field tests, Abbiss (C.P.), *1318*

- solutions (material), surface waves, viscoelastic fluids, De Feijter (J.A.), Benjamins (J.), *1489*
- internal state variables, viscoelastic fluids, viscoelastic waves, Bampi (F.), Morro (A.), *1971*
- random media, seismic waves, Chu (L.), Askar (A.), (et al.), *3005*
- cracks, elastodynamics, electroelasticity, piezoelectrics, scattering, Sabbagh (H.A.), *3240*
- elastic waves, resonance, scattering, spherical bodies, Brill (D.), Gaunaurd (G.), (et al.), *3947*
- continuum mechanics, plastic waves, Druianov (B.A.), *5237*
- ocean bed, reflection, sedimentation, underwater acoustics, Vidmar (P.J.), *6907*
- attenuation, sand, Brunson (B.A.), Johnson (R.K.), *7430*
- diffraction, edge cracks, elastic bodies, Roy (A.), Visalakshi (N.), *8340*
- composite materials, elastic waves, propagation, random media, Kinra (V.K.), Anand (A.), *10235*
- compressional waves, ocean bed, sedimentation, wave interactions, Fryer (G.J.), *10237*
- elastoplasticity, impact, supersonic flow, Freund (L.B.), Douglas (A.S.), *11161*
- dilatancy, magneto fluid dynamics, non newtonian flow, theory, Pavlov (K.B.), *11829*

Sheela (B.V.), mesh generation, optimization, random search, stochastics, *6099*

- algorithms, mathematical programming, numerical methods, optimal control, Ramamoorthy (P.), *6140*

sheet metal, asymptotic behavior, residual stresses, series, Yagoda (H.P.), *54*

- deformation (finite), elasticity (nonlinear), protoelasticity, Kydoniefs (A.D.), *233*
- elasticity (linear), orthotropic materials, winding, Yagoda (H.P.), *236*
- anisotropic media, necking, rate sensitivity, strain rate, Neale (K.W.), Chator (E.), *274*
- folds, plastic behavior, Johnson (W.), Yu (T.X.), *434*
- brittle materials, mixed mode fracture, orthotropic materials, Lemant (F.), Pineau (A.), *454*
- forming, plastic behavior, roughness, surfaces, Yamaguchi (K.), Nishimura (S.), (et al.), *1345*
- plates (anisotropic), stress strain relationships, yield criteria, Ilahi (M.F.), *2275*
- forming, impact, Grieve (R.J.), Wambugu (N.W.), *2398*
- bending (elastic), bending (plastic), finite element methods, plane strain, Oh (S.I.), Kobayashi (S.), *2399*
- drawing, flaws, forming, Ghosh (S.K.), *2400*
- cold working, deformation (plastic), stress strain relationships, Reif (T.), *3422*
- crack propagation, stochastic processes, Borodachev (N.M.), *3440*
- explosive forming, materials processing, tubes, Berman (I.), Schroeder (J.W.), *4473*
- anisotropic media, cold working, deformation (plastic), rolling, Honda (K.), Hosokawa (N.), (et al.), *5271*
- materials properties, rolling, Scrutton (R.F.), Lenard (J.G.), *5276*
- contact problems, elasticity (nonlinear), shells (thin), Wang (C.Y.), *6167*
- elasticity (nonlinear), springs, Wang (C.-Y.), *8234*
- aluminum alloys, brittle fracture, crack growth, fracture toughness, stress intensity factor, Yablonskii (I.S.), *9432*
- inspection, magnetic field, mechanical properties, rolling, Timoshenko (N.N.), Pyatunin (G.A.), (et al.), *10322*

Shefer (L.A.), damage (cumulative), fatigue, random loading, Ezhov (V.G.), (et al.), *3542*

Sheih (C.M.), air pollution, dispersion, plumes, *4057*

Sheikh (A.K.), life expectancy, machine design, optimization, probability, tools, Kendall (L.A.), (et al.), *1346*

Sheinman (V.A.), gases, heat transfer, mass transfer, suspensions, Nikolaichik (L.V.), *10664*

Sheinman (I.), dynamic analysis, numerical analysis, shells (of revolution), Zamir (I.), *4374*

- see Simitses (G.J.), *11124*

Shekriladza (I.G.), boiling, bubble dynamics, film boiling, heat transfer, nucleate boiling, *8691*

Shekriladza (I.G.), capillary surfaces, condensation, evaporation, heat transfer, Rusishvili (D.G.), *10649*

Shelagin (Yu.N.), see Kokorev (L.S.), *3818*

Sheldon (G.P.), cracks, fatigue, fracture mechanics, gas turbines, powder metallurgy, Cook (T.S.), (et al.), *2416*

shells, computing techniques, existence theorems, mathematical methods, Visarion (V.), Migdalovici (M.), *69*

- finite element techniques, plates, structural analysis, survey, variational methods, Pian (T.H.H.), Tong (P.), *83*
- asymptotic behavior, layered media, tubes, Widera (G.E.O.), Johnson (M.W.), (et al.), *289*
- membranes, stress functions, stresses, Simmonds (J.G.), *308*
- displacement, edge effects, Nair (S.), *313*
- buckling, catastrophe theory, elastic stability, elasticity, Hui (D.), Hansen (J.S.), *329*
- casting, cooling, freezing, rupture, stefan problem, Oki (S.), *440*
- cooling towers, wind loads, Harnach (R.), Niemann (H.-J.), *1450*
- bending, finite element techniques, interpolation, locking, matrix methods, mindlin plates, plates, Tsach (U.), *2070*
- panels (curved), Olshanskii (V.P.), *2269*
- plates (orthotropic), theory, Galimov (Sh.K.), *2277*
- submerged bodies, underwater acoustics, Vasudevan (R.), Dimaggio (F.L.), *2961*
- stability theory, variational methods, Valid (R.), *3242*
- plates, theory, Galimov (K.Z.), *3298*
- bending, shells (parabolic velaroidal), Hadid (H.A.), Lynn (P.P.), *3300*
- cooling towers, imperfections, reinforced concrete, stress analysis, Kato (S.), Yokoo (Y.), *3552*
- finite element methods, pressure vessels, stress analysis, Aggarwal (S.K.), Nayak (G.C.), (et al.), *3566*
- acoustic waves, scattering, Kachalov (A.P.), *3937*
- creep, elastoplasticity, finite element techniques, Levy (A.), *4353*
- design (optimum), holes, reinforced openings, Pelekh (B.L.), Gleba (A.Yu.), *4380*
- buckets, experimental mechanics, Angehrn (R.), Schweizer (F.), (et al.), *4383*
- cooling towers, experimental mechanics, wind loads, Niemann (H.-J.), Ruhwedel (J.), *4542*
- design, offshore structures, Furnes (O.), Loset (O.), *4544*
- edge effects, thermoelasticity (steady), Rogacheva (N.N.), *4813*
- membranes, mesh generation, nonlinear characteristics, plates, Jones (R.E.), Vos (R.G.), *5027*
- beams, continuum mechanics, elasticity, solid mechanics, Reismann (H.), Pawlik (P.S.), *5069, book*
- composite materials, elasticity (linear), photoplasticity, viscoelasticity, Kuznetsov (G.B.) eds., Shakirov (N.V.), *5071, book*
- finite difference methods, membrane theory, theory, Csonka (P.), *5156, book*
- developable surfaces, membrane theory, Pina (E.), Campoy (G.), *5158*
- plates, stability theory, stress analysis, vibration, Galimov (K.Z.) eds., Sachenkov (A.V.), *6215, book*
- plates (folded), structural analysis, Srinivasa Rao (P.), Sitapati Rao (P.), *6533*
- continuum mechanics, solid mechanics, variational methods, Mason (J.), *7129, book*
- curved elements, finite element techniques, shells (shallow), slabs, Mohr (G.), *7207*
- dynamic analysis, elastoplasticity, finite amplitude, imperfections, Ishizaki (T.), Bathe (K.-J.), *7216*

- constitutive equations, elasticity (linear), Markov (P.), *7338*
- finite element techniques, penalty function, Mohr (G.A.), *7348*
- plates, stability theory, Khoroshun (L.P.), *7357*
- plates, vibration, Soedel (W.), *7388*
- boundary conditions, composite structures, connected bodies, vibration, Averbukh (A.Z.), Veitsman (R.I.), (et al.), *8222*
- anisotropic structures, plates (sandwich), rayleigh ritz method, vibration (free), Kuznetsov (N.D.), Kartashov (G.G.), (et al.), *8305*
- cracking, fracture, limit analysis, reinforced concrete, Coenen (J.H.), *8439*
- numerical analysis, plates, He (G.-Q.), Zhang (W.-Y.), *9264*
- flexure, shells (long), torsion (plastic), Tikhomirov (V.V.), *9265*
- membrane theory, theory, Pfluger (A.), *9266*
- imperfections, numerical analysis, Aronson (A.Ya.), Gaidaichuk (V.V.), (et al.), *9270*
- buckling, design criteria, Bushnell (D.), *9290*
- elbows, penalty function, pipes, stiffness matrix, Bathe (K.J.), Almeida (C.A.), *10063*
- buckling, elastoplasticity, large displacement, pressurized components, Galletly (G.D.), *10185*
- cosserat solids, micromechanics, plates, Kayuk (Ya.F.), Zhukovskii (A.P.), *11116*
- dynamic analysis, structural response, transient effects, Malyshev (A.P.), *11139*
- compressible flow, eigenvalue problems, fluid-structure interaction, Simonov (I.V.), *11669*

shells (anisotropic), pressure vessels, shells (of revolution), shells (sandwich), underwater structures, Palaninathan (R.), Montague (P.), *320*

- composite materials, polymers, structural stability, Tomashevskii (V.T.), Yakovlev (V.S.), *1257*
- composite materials, fibers, shells (stiffened), structural stability, Ershov (N.P.), *2304*
- finite element methods (hybrid), finite strain, large displacement, shells (sandwich), Chang (T.Y.), Sawamiphaksi (K.), *3311*
- buckling, numerical methods, shear loading, Cohen (G.A.), *3336*
- finite element techniques, laminates, shells (of revolution), Venkatesh (A.), Rao (K.P.), *4194*
- elasticity (linear), shells (cylindrical), Podilchuk (Yu.N.), *6224*
- pressure vessels, shells (of revolution), stress analysis, tanks, wirewound vessels, Timonin (A.M.), *9464*
- shells (cylindrical), stress intensity factor, Kostenko (I.S.), *10157*

shells (axisymmetric), holes, pressure vessels, stress analysis, Reuss (P.), *241*

- axisymmetric loading, elasticity, finite element techniques, Surana (K.S.), *1135*
- shells (shallow), structural stability, Srubshchik (L.S.), *1253*
- elastoplasticity, snap-through, Toi (Y.), Ishinabe (M.), (et al.), *7365*
- membrane theory, shells (of revolution), shells (thin), Hsu (T.C.), Shang (H.M.), *10147*
- design (ultimate strength), numerical methods, plates, strength, Dzygadlo (Z.), Olejnik (A.), *10350*
- acoustic loading, buckling, Kornev (V.M.), Stepanenko (M.V.), *11643*
- hydroelasticity, scale models, submerged bodies, Takeuchi (K.), Desanto (D.F.), *11672*

shells (conical), postbuckling behavior, shells (sandwich), Magnucki (K.), *2289*

- cyclic loading, dynamic loads, dynamic stability, Massalas (C.), Dalamangas (A.), (et al.), *8273*
- thermal stresses, thermoelasticity (steady), Harinath (K.S.), *8873*
- dynamic properties, vibration (torsional), Tomar (J.S.), Gupta (D.C.), (et al.), *9318*
- plasticity, shells (of revolution), Vyshedkevich (I.U.), *10155*
- averaging, eigenvalues, shells (stiffened), vibration (free), Lesnichaya (V.A.), Pisanko (A.N.), *10214*
- elastic waves, impact, Barez (F.), Goldsmith (W.), *11157*

shells (cylindrical), inclusions, pressurized components, Bonde (D.H.), Rao (X.P.), *253*

- deformation, displacement, foundations, tanks, Brandes (K.), *307*
- deformation, elastoplasticity, pressure vessels, shells (plastic), Ohashi (Y.), Okouchi (T.), *312*
- shells (long), Sanders (J.L.) Jr., *314*
- axial loading, bearing capacity, buckling (nonlinear), shells (orthotropic), Steinhardt (O.), Pfeiffer (M.), *318*
- compression, elastoplasticity, Kovalenko (V.A.), Piskun (V.V.), (et al.), *322*
- buckling, Nazarov (V.A.), *348*
- buckling, holes, shells (thin), Toda (S.), *349*
- buckling, Ponomarev (K.K.), *353*
- dynamic stability, shells (stiffened), springs, Palamarchuk (V.G.), *356*
- dynamic response, flexural waves, vibration, wave engines, Fuller (C.R.), *374*
- frequency response, vibration (free), Palchevskii (A.S.), Pryadko (A.A.), (et al.), *375*
- dynamic response, eigenvalues, vibration (free), El Raheb (M.), Babcock (C.D.) Jr., *376*
- nonlinear analysis, vibration (parametric), Bogdanovich (A.E.), Feldmane (E.G.), *377*
- offshore structures, residual stresses, welded joints, White (J.D.), *529*
- equations of motion, shells (thin), Akeju (T.A.I.), *1233*
- contact problems, stress concentration, structural support, Kanaun (S.K.), Elkovskaya (T.M.), *1237*
- bending, bends, pipes, tubes, Kitching (R.), Zarrabi (K.), (et al.), *1241*
- impulsive loading, transient effects, vibration (forced), Ujihashi (S.), Okazaki (T.), (et al.), *1279*
- crack arrest, dynamic fracture, impact, surface flaws, Popelar (C.H.), Gehlen (P.C.), (et al.), *1383*
- containers (partially filled), hydroelasticity, shells (fluid-filled), vibration, Perekhrest (V.I.), Ulitin (G.M.), *1610*
- defects, stress strain relationships, Pobedrya (B.E.), Lavin (V.D.), *2272*
- collapse, compression, postbuckling behavior, Foster (C.G.), *2305*
- buckling, prebuckling behavior, structural stability, Brush (D.O.), *2308*
- asymptotic methods, waves, Protsenko (A.M.), *2360*
- impulsive loading, plastic behavior, Ramu (S.A.), Iyengar (K.J.), *2373*
- constraints, design (optimum), shells (stiffened), Rao (S.S.), Reddy (E.S.), *2511*
- fluid-structure interaction, impact, numerical methods, Belytschko (T.), Mullen (R.), *2711*
- nuclear reactors, ratchetting, thermal effects, thermoplasticity, Goodman (A.M.), *2970*
- anisotropic media, cooling, polymers, shells (thick), thermal stresses, Afanasev (Yu.A.), Ekelchik (V.S.), (et al.), *2971*
- combined loading, creep, pressurized components, Lau (J.H.), Listvinsky (G.K.), *3252*
- flexible bodies, shafts, strength, Mizoguchi (K.), Shirakawa (K.), (et al.), *3285*
- experimental methods, imperfections, shells (stiffened), Yaffe (R.), Singer (J.), (et al.), *3313*
- buckling, compression, imperfections, mode interaction, postbuckling behavior, shells (stiffened), Byskov (E.), Hansen (J.C.), *3323*
- buckling (experimental), buckling (plastic), elastoplasticity, shells (plastic), Croll (J.G.A.), *3337*
- experimental mechanics, vibration (free), Voloshanovskii (Yu.P.), *3371*
- dynamic analysis, vibration (free), wirewound vessels, Greenberg (J.B.), Stavsky (Y.), *3374*
- multiple cracks, stress intensity factor, three dimensional formulation, torsion, Shibuya (T.), Koizumi (T.), (et al.), *3457*
- elastoplasticity, flexure, plastic behavior, shells (shallow), Kolesnik (I.A.), Troshin (V.G.), *4372*
- beams (thin section), shear loading, thin walled structures, warping, Kholoptsev (V.V.), *4373*
- axial loading, elastoplasticity, shells (plastic), torque, Ermakov (S.V.), *4375*
- boundary conditions, variable section, Tawfik (O.M.), *4385*
- buckling, postbuckling behavior, Babenko (V.I.), *4392*
- elliptical bodies, structural stability, torsion, Konoplev (Yu.G.), Kopp (A.V.), *4398*
- buckling (nonlinear), moving loads, shells (orthotropic), Bryukalo (L.A.), Gulyaev (V.I.), *4399*
- experimental results, plastic behavior, steel, Ohashi (Y.), Tanaka (E.), *5113*
- concrete, nonlinear analysis, plastic behavior, Chen (W.F.), Suzuki (H.), (et al.), *5116*
- shells (thin), structural stability, wind loads, Brendel (B.), Ramm (E.), (et al.), *5183*
- dynamic response, shells (shallow), vibration (free), Emmerling (F.A.), Kloss (R.A.), *5218*
- dynamic properties, shells (of revolution), shells (stiffened), vibration, Moshenskii (N.L.), *5219*
- dynamic stresses, vibration (forced), Ujihashi (S.), Itoh (A.), (et al.), *5221*
- dynamic response, shells (stiffened), vibration (free), Amiro (I.Ya.), Palamarchuk (V.G.), *5223*
- anisotropic media, thermoelasticity (steady), Biswas (P.), *5799*
- contact problems, interference fits, Murakami (T.), Yanuki (T.), (et al.), *6169*
- cyclic loading, ductility, plastic behavior, Mozharovskii (N.S.), Bobyr (N.I.), *6186*
- bending (elastic), bends, pressurized pipes, shells (thin), Whatham (J.F.), *6220*
- cracks, failure, pressurized pipes, Kitching (R.), Zarrabi (K.), *6221*
- elasticity (linear), shells (anisotropic), Podilchuk (Yu.N.), *6224*
- pressurized components, shells (stiffened), Hwang (K.C.), Zheng (Z.-C.), *6253*
- bending (elastic), structural stability, thin walled structures, Makoev (E.M.), *6256*
- bifurcation, buckling, shells (sandwich), Hegedus (I.), *6257*
- lyapunov's functions, stability theory, Leipholz (H.H.E.), *6258*
- axial loading, failure, joints, Bushnell (D.), Holmes (A.M.C.), (et al.), *6259*
- buckling, cold working, shells (stiffened), stiffened structures, welding, Bushnell (D.), *6262*
- buckling, shells (stiffened), torsion, Yen (S.-W.), *6263*
- axial loading, collapse, shells (stiffened), Walker (A.C.), Sridharan (S.), *6264*
- bearing capacity, composite materials, plastics, thermal effects, Tretyachenko (G.N.), Dzyuba (V.S.), (et al.), *6265*
- vibration (nonlinear), Nguyen Xuan Hung, *6301*
- buckling, shells (stiffened), vibration (forced), Singer (J.), *6302*
- moving loads, response, underground, Pozhuev (V.I.), *6327*
- dynamic response, moving loads, shells (sandwich), Pozhuev (V.I.), *6344*
- fluid boundaries, impact, Dvorkin (Ya.P.), *6370*
- fluid boundaries, impact, Sagomonyan (A.Ya.), Dvorkin (Ya.P.), *6372*
- modes, noise, Dowell (E.H.), *6925*
- beams (thin section), bending (elastic), thin walled structures, Antonenko (E.V.), *7325*